



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

**JUL 13 2009**

Mr. Andy Hixon, Project Manager  
Alpine Energy Group  
3333 South Bannock Street, Suite 500  
Englewood, Colorado 80110

Re: Request for a PSD Non-Applicability Determination for  
A New Waste-to-Energy Plant on St. Thomas, U.S. Virgin Islands

Dear Mr. Hixon:

This is in response to your February 24, 2009 request for a PSD non-applicability determination for a new waste-to-energy plant that AEG Bovoni Power, LLC (AEG) is proposing to construct on St. Thomas in the U.S. Virgin Islands. This project is proposed to consist of 2 steam generators firing both municipal solid waste and petroleum coke, to provide both steam and electricity to the plant itself plus electricity to the grid.

Specifically AEG is proposing to construct 2 pelletized refuse-derived fuel (PRDF) and petroleum coke fired steam generators, and steam turbines with nominal 42 megawatt gross output. The PRDF will be processed from municipal solid waste which would otherwise be sent to the Bovoni landfill. At full load, the facility is expected to use approximately 150 tons per day of PRDF and 375 to 475 tons per day of petroleum coke.

Pollution controls at the AEG facility are to include the following: (1) limestone feed to the fluidized bed for sulfur dioxide control; (2) selective non-catalytic reduction for nitrogen oxides control; (3) a multiclone after the heat recovery steam generator for particulate matter control; (4) a dry scrubber with lime injection for acid gas control; (5) a pulse-jet fabric filter for acid gas and particulate matter control; and (6) a wet scrubber system with mist eliminators for the control of condensable particulates, acid gases, and ammonia.

In its February 24, 2009 request, AEG asserted that its project is subject to the 250 ton per year major source threshold of the PSD regulations at 40 CFR part 52.21, and not the 100 ton per year major source threshold. AEG reasoned that the two potentially applicable 100 ton per year major source categories do not apply to this case; that is, municipal incinerators capable of charging more than 50 tons of refuse per day (see CAA §169(1)), and fossil fuel-fired boilers or combinations totaling more than 250 million British thermal units per hour heat input.

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AEG did state that the project's 2 steam generators are subject to the NSPS regulations for large municipal combustors at 40 CFR part 60, subpart Eb, but asserted that the units are not municipal incinerators subject 40 CFR part 60, subpart E because the fuel to be burned does not fall under the definition of "solid waste," a pre-requisite for a unit to be considered a municipal incinerator. Specifically, AEG contends that to be solid waste under subpart E, the material combusted must contain noncombustible items, such as glass and rock, and according to AEG, the PRDF will not contain noncombustible materials. AEG also contends that petroleum coke does not fall under the definition of a fossil fuel for PSD purposes.

As explained below, EPA has determined, based on all of the information submitted, that the PSD regulations of 40 CFR § 52.21 would be applicable to this project because the project constitutes a "municipal incinerator[]" capable of charging more than 50 tons of refuse per day" as specified in CAA §169(1). EPA has further determined that the two steam generating units' projected emissions of nitrogen oxides, sulfur dioxide and carbon monoxide would each exceed 100 tons per year (tpy). Because EPA has determined that the AEG project is a municipal incinerator and thus subject to PSD requirements as a 100 tpy major stationary source, EPA is not addressing the issue of whether petroleum coke is a fossil fuel for the purpose of determining PSD applicability under a different 100 tpy major source category, i.e., fossil fuel-fired boilers or combinations totaling more than 250 million British thermal units per hour heat input.

The term "municipal incinerator" is not defined in either CAA §169 or 40 CFR § 52.21 (b)(1)(i). Accordingly, under 40 CFR § 52.01, EPA looks to the NSPS definitions contained in CFR part 60 to determine the meaning of this term for the purposes of PSD applicability. In its application, AEG goes to great lengths to say that the general definitions for incinerators found in subpart E of the CAA regulations should dictate the outcome of this PSD applicability determination and cites a number of previously-issued EPA determinations in support of its contention that incinerators that burn solid waste that does not include noncombustible materials are not subject to NSPS subpart E. As a general matter, EPA notes that the PRDF that will be used by AEG will in fact contain a small portion of noncombustible matter. *See* AEG Feb. 24, 2009 request at 4-8. Thus, even if EPA agreed that the definition of "solid waste" at 40 CFR 60.51 is controlling and dispositive of the question of whether the project is a "municipal incinerator" (EPA in fact does not agree with this interpretation), AEG's argument fails. Further, regardless of whether there will be noncombustible matter in the PRDF, we find that the distinction is irrelevant. The determinations addressing the applicability of subpart E on which AEG relies were issued in the mid to late 1970's. Since that time, EPA has issued new NSPS regulations in subparts Ea and Eb that provide greater detail in defining municipal solid waste and refuse-derived fuel, and we find that these new regulations are more informative to the PSD applicability determination in this case.

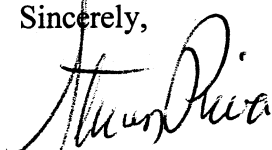
AEG asserts that because its Bovoni project is not subject to the NSPS subpart E requirements for incinerators, it is not subject to the 100 tpy major source threshold for "municipal incinerators." AEG acknowledges, however, that the project's 2 steam

generators are subject to the NSPS regulations for large municipal combustors at subpart Eb. Thus, even if this project was not subject to the specific NSPS subpart E requirements, the project would not necessarily be exempt from PSD. NSPS requirements in subparts E, Ea, Eb, and Ec each apply to a specific category of sources, while the PSD 100 tpy source category for municipal incinerators is more general and could apply to a number of NSPS source categories. EPA's position on this PSD category has evolved over time, especially in light of these new categories of NSPS sources found in subparts Ea, Eb and Ec.

While the names of two of these NSPS subparts (Ea and Eb) note their application to municipal waste "combustors" and not municipal "incinerators," EPA has for some time now equated municipal waste combustors with municipal incinerators for the purposes of PSD applicability. For example, in a May 26, 1992 memorandum from Edward J. Lillis, Chief of the EPA Permits Program to George T. Czerniak, Chief of EPA Region V Air Enforcement Branch, regarding PSD applicability to the Cleveland Electric Plant, EPA found that the PSD requirements would apply to a facility that disposed of municipal waste using combustion. In so doing, EPA made it clear that a municipal waste incinerator "is functionally synonymous with a municipal waste combustor." *Id.* at 2. The letter also found that "EPA has adopted the NSPS definition of municipal waste combustor for determining if a source is subject to the 100 tpy applicability threshold" for PSD municipal incinerators. *Id.* In this case, AEG acknowledges that the project's 2 steam generators are subject to the NSPS regulations for large municipal waste combustors (40 CFR part 60, subpart Eb). Therefore, it is EPA's position that the subject AEG project, as proposed, would be subject to the PSD regulations of 40 CFR § 52.21 because it is classified as a municipal incinerator capable of charging more than 50 tons of refuse per day and will emit more than 100 tpy of an NSR regulated pollutant.

If you have any questions regarding this letter, please call me at (212) 637 - 4074 or Mr. Gerald DeGaetano of my staff at (212) 637 - 4020.

Sincerely,



Steven C. Riva, Chief  
Permitting Section  
Air Programs Branch