

P.E. CERTIFICATION STATEMENT

PERMITTEE

U.S. EcoGen Polk, LLC
1000 US 1, No. 807
Jupiter, Florida 33477
Authorized Representative: Mr. William F. Quinn, President

Draft Permit No. 1050444-001-AC
U.S. EcoGen Polk Biomass Generating Facility
63 MW Bubbling Fluidized Bed Boiler
Polk County, Florida

PROJECT DESCRIPTION

Project: US EcoGen proposes to construct a 63 MW biomass-fueled power plant. The project includes: fuel receiving, handling, storage and processing systems; a power island consisting of a woody biomass-fueled boiler and steam turbine-generator; and fly ash handling, storage and shipment systems.

A review pursuant to the rules for Prevention of Significant Deterioration (PSD) and a determination of best available control technology (BACT) pursuant to Rule 62-212.400, F.A.C. were not required. US EcoGen will initially rely on woody biomass including but not limited to forest residue, commercial tree trimmings, whole tree chips and clean waste wood until eucalyptus tree plantations are capable of producing all of the fuel supply for the Plant. Pre-processed chips will be brought to the site in trucks.

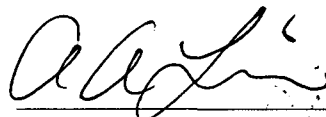
Natural gas will be used for startup, shutdown and bed stabilization of the boiler. Diesel fuel with a sulfur content of 0.0015 percent by weight, or less, will be used in the emergency generator and fire water pump engine.

Emissions from the boiler will be reduced by the following measures. Nitrogen oxides (NO_x), Carbon monoxide (CO), volatile organic compounds (VOC) and organic hazardous air pollutants (HAP) formation will be minimized by the very efficient and good combustion practices in the bubbling fluidized bed boiler. Particulate matter will be removed in a baghouse (fabric filter). Acid gases will be removed by a spray dryer absorber or a dry sorbent injection system and captured in particulate form by the baghouse. NO_x leaving the furnace will be destroyed by a selective catalytic reduction (SCR) system. The same SCR system will also reduce VOC and organic HAP. Reasonable precautions and best management practices will be implemented to minimize fugitive dust emissions from biomass and ash handling, storage, processing and conveyance.

US EcoGen estimates that the project (including fugitive emissions) will result in emissions of each PSD pollutants at levels less than the applicable major stationary source threshold of 250 tons/year. Emissions of individual HAP will be less than 10 tons/year. Combined total HAP emissions will be less than 25 tons/year. Therefore, the facility will not be a major source of HAP. Continuous emissions monitoring systems will be required for SO₂, NO_x and CO. A continuous opacity monitor system will be required for visible emissions.

The Department reviewed an air quality analysis prepared by the applicant. The analysis demonstrated that the sum of ground-level concentrations of nitrogen dioxide (NO₂), PM₁₀, CO and SO₂ caused by the project and background concentrations will be much less than the respective National or Florida ambient air quality standards (AAQS).

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features).



A. A. Linero, P.E.
Registration Number 26032

6/13/2012

(Date)