



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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ATLANTA FEDERAL CENTER
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4APT-ARB

Mr. Clair H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental
Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

NOV 23 1998

BUREAU OF
AIR REGULATION

SUBJ: PSD Permit from Santa Rosa Energy Center,
Sterling Fibers Manufacturing Facility, Pace, Florida
(PSD-FL-253)

Dear Mr. Fancy:

Thank you for your letter of October 9, 1998, submitting a preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the above referenced facility. The draft permit is for the installation of a combustion turbine combined cycle cogeneration facility which will be located within the Sterling Fibers Inc. plant boundary. The facility will provide steam and electricity to Sterling Fibers and electricity to the electric utility grid. The proposed cogeneration facility will consist of a 167 MW combustion turbine (CT) generator, a heat recovery steam generator (HRSG) equipped with a 585 mmBtu/hr duct burner, a 74 MW (gross output) steam turbine generator, and associated auxiliary equipment. The combustion turbine and duct burner will only fire natural gas. The CT will be a General Electric (GE) Frame 7F design or equivalent.

The proposed best available control technology (BACT) for NO_x emissions consists of the use of dry low NO_x (DLN) combustors on the CT and the use of low NO_x burners in the duct burner. The proposed NO_x emission limit is 9.8 ppmvd at 15% O₂ (106 lb/hr), with the CT operating and the duct burner on. The proposed NO_x emission limit is 9 ppmvd at 15% O₂ (64.1 lb/hr), with the CT operating and the duct burner turned off. If a different CT is selected or if the NO_x limits cannot be met with low NO_x technology with the duct burner on, a selective catalytic reduction (SCR) or a selective non-catalytic reduction (SNCR) system must be installed to meet an

emission limit of 6 ppmvd at 15% O₂. If the combined unit can meet applicable limits by using DLN on the CT with the duct burner off but not with the duct burner on, SNCR may be utilized with the duct burner on. The proposed BACT emission limits for PM/PM₁₀, CO, and volatile organic compounds (VOCs) are based on the use of good combustion practices and clean burning fuels. Based on our review of the preliminary determination and draft permit, we do not have any adverse comments.

As indicated in the draft permit, the regulations at 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines will be applicable to the new combustion turbine. 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units will apply to the duct burner.

Thank you for the opportunity to review and comment on the draft permit and supporting information. If you have any questions, please contact Keith Goff of my staff at (404)562-9137.

Sincerely,

Paul Shagney
for

R. Douglas Neeley
Chief

Air and Radiation Technology Branch
Air, Pesticides, and Toxics
Management Division

CC: NWD
J. Newton, BAR
NPS