

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960 RECEIVED

JUL 25 2011

July 21, 2011

DIVISION OF AIR RESOURCE MANAGEMENT

Ms. Trina Vielhauer, Deputy Director Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road, M.S. 5500 Tallahassee, Florida 32399-2400

DSD# 416

Dear Ms. Vielhauer:

Thank you for sending the Prevention of Significant Deterioration (PSD) permit application for a proposed project at Highlands Envirofuels, LLC - Highlands Ethanol & Cogeneration Plant, LLC in Riverview, Florida. The project consists of a biofuels ethanol refinery and a biomass cogeneration plant.

The Region 4 office of the U.S. Environmental Protection Agency has reviewed the permit application and has the following comments:

- 1. On July 1, 2011, EPA issued its final rule for the Deferral of Carbon Dioxide (CO₂) Emissions from Bioenergy and Other Biogenic Sources under the PSD and Title V Programs. We request that the CO₂ emissions presented in Table 2-29, be reviewed and recalculated consistent with this rule to determine whether this source is subject to PSD review for CO₂.
- 2. In reviewing the calculations in Table 2-29 we noted that the natural gas usage proposed in the 30% natural gas option for permitting the cogeneration plant was not included in the GHG emission total. This should not be considered a deferred biogenic emission.
- 3. We also noted a number of discrepancies from the methodology used in the 40 CFR Part 98 reporting rule. In particular the CO₂ emission factor of 66.83 Kg/mmBtu appears to be that for a biofuel and not that for natural gas, which is 53.02 Kg/mmBtu. Traditionally, the energy content of the pipeline natural gas used is 1020 Btu per scf which is less than the national average of 1028 Btu per scf cited in 40 CFR Part 98 reporting rule. While use of locality specific data is appropriate, it needs to be documented. It is our understanding that pipeline gas standards require an energy content in the range of 1025 to 1150 Btu per scf for pipeline natural gas.
- 4. We also request you clearly specify which production constraints are legally enforceable. In the 30% natural gas option the facility projects using 1021 million scf of natural as an annual allowable total based on 30% of the energy input to the cogeneration unit. Since this quantity of natural gas usage is not an inherently constrained parameter, it needs to be a clear permit limitation or result from limits on hours and firing rates which are legally enforceable.

5. Finally, we note that there appears to be an inconsistency on page 17 of Appendix L, Application for Air Permit Section III.B. Emission Unit Capacity Information. The facility is listed as operating 49 weeks per year and 8,760 hours while most of the emission calculations are based on 8,040 hours, which is nearer to 49 weeks. If less than 8,760 hours per year was used to calculate emissions, this limitation should also be a permit condition.

If you have any questions about these comments or require additional information, please contact Heather Ceron at (404) 562-9185 or John Calcagni at (919) 541-9775.

Sincerely,

Gregg M. Worley

Chief

Air Permits Section

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

016H26523178

\$ 00.440
07/22/2011
Milled From 30303
US POSTAGE

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

> Ms. Trina Vielhauer, Deputy Director Division of Air Resource Management FL Department of Environmental Protection 2600 Blair Stone Road, M.S. 5500 Tallahassee, Florida 32399-2400