

Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Governor

Rick Scott

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Herschel T. Vinyard Jr. Secretary

June 7, 2012

Electronically Sent – Received Receipt Requested

Mr. David King, President INEOS New Planet BioEnergy 2600 South Shore Blvd – Suite 500 League City, Texas 77573 david.king@ineos.com

Re: Request for Additional Information

File No. 0610096-003-AC INEOS New Planet BioEnergy, Indian River County Facility

Mr. King:

On April 9, 2012, you submitted an application for an air construction permit via the Permit Submittal Application Process (EPSAP) that is subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code (F.A.C.). This application was for modification of the previously issued Air Construction Permit Nos. 0610096-001-AC and 0610096-002-AC.

On May 29, 2012, Ms. Cynthia Hibbard a representative of CDM the engineering consulting firm for the air construction permit application, submitted by email additional information dealing with the syngas flare. Specifically, the information pertained to sulfur dioxide (SO₂) air emissions from the syngas flare and additional permit language to provide flexibility on the use of the flare during commissioning of the INEOS facility. The primary concern with regard to the flare was to increase its operational hours from the currently allowed 300 hours per year (hr/yr) to 400 hr/yr. This increase in operational hours would correspond to increasing the permitted syngas flow rate to the flare from the currently allowed rate of 232.6 million standard cubic feet per year (mmscf/yr) per **Specific Condition 3.H.3** of the current air construction permit (No. 0610096-002-AC) to 310.2 mmscf/yr.

Per a phone conversation with Ms. Hibbard on June 6, 2012, it was decided that further additional information must be provided to allow the operational hours of the flare to be increase to an amount greater that than the 400 hr/yr previously requested, while at the same time providing reasonable assurance that overall SO_2 emissions from the INEOS facility would not trigger the EPA's Prevention of Significant Deterioration (PSD) program. If the PSD program is triggered due to increasing the operational hours of the syngas flare, a Best Available Control Technology (BACT) determination would have to be conducted for various air pollutant emission units at the facility. Consequently, pursuant to Rule 62-4.055(1), F.A.C., the Department requests the submittal of the information described below to provide reasonable assurance that the SO_2 air emission at the INEOS facility will not trigger the PSD program.

While awaiting this additional information, the Department will stop the permitting clock dealing with the 90 day statutory requirement for issuance or denial of a draft permit. However, so long as the requested additional information if forth coming in a timely manner, the Department does not anticipate any significantly delay in the issuance of the draft permit modification package. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference materials and appropriate revised pages of the application form.

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• Acid Gas Control System Vendor Guarantee: The SO₂ concentration in the flue gas stream from the vent gas boiler must be reduced significantly to allow the operational hours of the syngas flare to be increase to the level desired by INEOS. A reduction in the SO₂ concentration could affect the control efficiency guarantee from the vendor of the sorbent injection system that will be used to control SO₂ emission from the vent gas boiler. Please submitted proof that the original vendor guarantee of 85% removal efficiency is still valid.

[Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C)]

- Syngas Hydrogen Sulfide (H₂S) Sampling Protocol: Please submit a sampling protocol to the Department to measure the syngas H₂S concentration prior to inlet to the fermenter or any another appropriate location. The sampling protocol may be based on quarterly or semiannual samples. The purpose of the protocol is to provide reasonable assurance that the H₂S concentration in the syngas is 500 parts per million (ppm) instead of the 1,000 ppm assumed in previously submitted permit applications. In lieu of a sampling protocol, an H₂S continuous monitor may be installed to provide the reasonable assurance. [Rule 62-4.070, F.A.C]
- <u>Pilot Facility H₂S Feedstock Test Data</u>: Please submit the test data from the pilot facility showing that the H₂S concentration in the syngas when gasifying the feedstocks (vegetative and municipal wastes) that will be used in the INEOS facility is 500 ppm instead of the 1000 ppm that was used in previous permit applications. [Rule 62-4.070, F.A.C.]

The Department will immediately resume processing your permit application after receipt of the requested information. Rule 62-4.050(3), F.A.C., requires that all applications for a construction permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official.

If you have any question please do not hesitate to contact me.

Sincerely,

David Lyle Read, Permitting Engineer Office of Permitting and Compliance Chemicals and Combustion Group

David Tyle Resel

Phone: 1-850-717-9075

Email: david.read@dep.state.fl.us

cc: This letter was sent to the following people by electronic mail with received receipt requested.

Joseph Curro, CDM: currojp@cdm.com
Cynthia Hibbard, CDM: hibbardcs@cdm.com
Gretchen Janssen, CDM: janssenge@cdm.com

Lynn Scearce, DEP (file Copy): lynn.scearce@dep.state.fl.us