Florida Department of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

September 6, 2011

Sent by Electronic Mail – Received Receipt Requested

Mr. David King, President
INEOS New Planet BioEnergy
2600 South Shore Blvd, Suite 500
Marina View Building
League City, TX 77573

Re: Draft Air Permit No. 0610096-002-AC
INEOS New Planet BioEnergy
Biomass-to-Ethanol Production Facility

Dear Mr. King:

On July 23, 2011, you submitted an application for an air construction permit subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code. The purpose of the project is to modify the previously permitted INEOS New Plant BioEnergy (INPB) Indian River County (IRC) facility. The INPB IRC facility will be located near Vero Beach in Indian River County, at the former location of an Ocean Spray citrus processing facility at the intersection of 74th Avenue and Oslo Road (near Interstate 95). The permit modification extends the expiration date of the original construction permit and makes the following major changes to reflect the planned as-built configuration of the facility:

- Modified the materials handling area to reflect four smaller diesel engines instead of one large engine;
- Updated the fermentation and distillation system requirements to reflect two scrubbers instead of a single scrubber and desulfurization unit;
- Granted authority, after a successful trial period, to process municipal solid waste on a routine basis;
- Authorized the installation of a larger vent gas boiler;
- Required installation of post-combustion controls (sorbent injection followed by a fabric filter);
- Increased the authorized capacity (gallons) of the product and denaturant storage tanks;
- Eliminated the desulfurization unit and its associated oxidation tank; and
- Replaced two flares (gasifier flare and syngas flare) with a single, larger flaring system (syngas flare).

Enclosed are the following documents: Written Notice of Intent to Issue Air Permit; Public Notice of Intent to Issue Air Permit; Technical Evaluation and Preliminary Determination; and Draft Permit with Appendices. The Draft Permit shows modifications to the original permit in double-underline (new language) and strikeout (deleted language) format. The Appendices to the Draft Permit contain only the pages that were changed from the original permit. The original Appendices can be viewed on the Department's web site: http://www.dep.state.fl.us/Air/emission/bioenergy/indian_river.htm.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please call the project contact, Greg DeAngelo, at 850/717-9024.

Sincerely,

Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

Enclosures

JK/gpd

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

INEOS New Planet BioEnergy
2600 South Shore Blvd, Suite 500
Marina View Building
League City, TX 77573

Draft Permit No. 0610096-002-AC

Indian River County BioEnergy Facility
Biomass-to-Ethanol Production
Indian River County, Florida

Authorized Representative:
Mr. David King, President

Facility Location: INEOS New Planet BioEnergy (INPB) is constructing the new Indian River County BioEnergy Facility, which will be located near Vero Beach in Indian River County, at the former location of an Ocean Spray citrus processing facility at the intersection of 74th Avenue and Oslo Road (near Interstate 95).

Project: The facility will produce approximately 8 million gallons per year of ethanol from a biomass feedstock consisting of vegetative yard waste, clean woody construction and demolition debris and municipal solid waste. Construction of the facility has commenced, and INPB has requested adjustments to the construction permit to reflect proposed changes in the facility's design. This project consists of modifications to the construction permit to reflect the current plans for how the facility will be built. The project is subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code (F.A.C.). The applicant has requested certain limitations on operation and emission levels so as to avoid Prevention of Significant Deterioration (PSD) applicability under Rule 62-212.400, F.A.C. A determination of best available control technology (BACT) was therefore not required.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's phone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S., and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue

Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the address or phone number listed above. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of this Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 9-6-2011 to the persons listed below.

David King, INEOS: david.king@ineos.com
Daniel Cummings, INEOS: dan.cummings@ineos.com
Dr. Mark Niederschulte, INEOS: mark.niederschulte@ineos.com
Joseph Curro, P.E., Camp Dresser & McKee Inc.: currojp@cdm.com
Cynthia Hibbard, Camp Dresser & McKee Inc.: hibbardcs@cdm.com
Gretchen Janssen, Camp Dresser & McKee Inc.: janssenge@cdm.com
Caroline Shine, DEP Central District Office: caroline.shine@dep.state.fl.us
Heather Abrams, EPA Region 4: abrams.heather@epa.gov
Lynn Scearce, DEP OPC Reading File: lynn.scearce@dep.state.fl.us
Joy Ezell: hopeforcleanwater@yahoo.com

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated agency clerk, receipt of which is hereby acknowledged.

September 6, 2011
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Office of Permitting and Compliance

Draft Air Permit No. 0610096-002-AC
INEOS New Planet BioEnergy, Indian River County Facility
Indian River County, Florida

Applicant: The applicant for this project is INEOS New Planet BioEnergy. The applicant's authorized representative and mailing address is: David King, President, INEOS New Planet BioEnergy, 2600 South Shore Blvd, Suite 500, Marina View Building, League City, Texas, 77573.

Facility Location: INEOS New Planet BioEnergy (INPB) is constructing the new Indian River County BioEnergy Facility, which will be located near Vero Beach in Indian River County, at the former location of an Ocean Spray citrus processing facility at the intersection of 74th Avenue and Oslo Road (near Interstate 95).

Project: The facility will produce approximately 8 million gallons per year of ethanol from a biomass feedstock consisting of vegetative yard waste, clean woody construction and demolition debris and municipal solid waste. Construction of the facility has commenced, and INPB has requested adjustments to the construction permit to reflect proposed changes in the facility's design. This project consists of modifications to the construction permit to reflect the current plans for how the facility will be built. The project is subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code (F.A.C.). The applicant has requested certain limitations on operation and emission levels so as to avoid Prevention of Significant Deterioration (PSD) applicability under Rule 62-212.400, F.A.C. A determination of best available control technology (BACT) was therefore not required.

Based on the air permit application, the project will result in emissions increases of: 50.5 tons per year (TPY) of carbon monoxide (CO); 99.8 TPY of nitrogen oxides (NO_X); 18.7 TPY of particulate matter with a mean diameter of 10 micrometers (μm) or less (PM_{10}); 16.2 TPY of PM with a mean diameter of 2.5 μm or less ($PM_{2.5}$); 97.0 TPY of sulfur dioxide (SO_2); 74.4 TPY of volatile organic compounds (VOC) and 0.07 TPY of lead (Pb).

The Department's preliminary determination is that the project will not constitute a new major stationary source, and that the facility will not be subject to PSD preconstruction review. Emissions at the facility will come from several sources, and the applicant has proposed various control measures and operational limitations so that potential emissions of all pollutants are less than 100 TPY, including the following: follow best management practices for handling feedstock; limit the annual fuel usage for the diesel engines powering the shredders and screens; apply the emissions limitations of Title 40, Code of Federal Regulations (C.F.R.), Part 60, Subpart AAAA to the vent gas boiler exhaust; install post-combustion controls consisting of sorbent injection followed by fabric filtration; and cap the annual vent gas flow to the emergency flares.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's phone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting

(Public Notice to be Published in the Newspaper)

Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available at the following web link:

http://www.dep.state.fl.us/air/emission/bioenergy/indian_river.htm

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of this Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it

in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Florida Department of Environmental Protection

Memorandum

To: Jeff Koerner, Program Administrator, Office of Permitting and Compliance

From: Greg DeAngelo, Office of Permitting and Compliance, Chemicals and Combustion Group

Date: August 31, 2011

Subject: Draft Air Permit No. 0610096-002-AC
INEOS New Planet BioEnergy—Indian River County BioEnergy Facility

Attached for your review is a draft air construction permit package for the planned facility in Indian River County that will produce approximately 8 million gallons per year of ethanol from a biomass feedstock consisting of vegetative yard waste, clean woody construction and demolition debris, and municipal solid waste. Construction of the facility has commenced, and INPB has requested adjustments to the construction permit to reflect proposed changes in the facility's design. This project consists of modifications to the construction permit to reflect the current plans for how the facility will be built.

The attached Technical Evaluation and Preliminary Determination document provides a detailed description of the project and the rationale for permit issuance.

This project is not subject to the rules for the Prevention of Significant Deterioration. Day 90 of the permitting time clock is November 3, 2011. I recommend your approval of the attached draft permit package.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

INEOS New Planet BioEnergy
2600 South Shore Blvd, Suite 500
Marina View Building
League City, TX 77573

Draft Permit No. 0610096-002-AC

Indian River County BioEnergy Facility
Biomass-to-Ethanol Production
Indian River County, Florida

Authorized Representative:
Mr. David King, President

PROJECT DESCRIPTION

The primary feedstock for the facility will be vegetative yard waste and land clearing debris collected by the Indian River County Solid Waste Disposal District curbside collection program, delivered to the county's collection centers, or delivered directly to the facility by the public. The remainder of the biomass feedstock may consist of clean woody construction and demolition debris and municipal solid waste. The INEOS bio ethanol technology process will gasify the biomass feedstock. The organic material will not be directly combusted; instead, oxygen will be supplied to the gasifier which converts the feed material into a synthetic gas (syngas) consisting of carbon monoxide, carbon dioxide, hydrogen and other hydrocarbons.

This syngas will not be directly combusted either. It will be cleaned and cooled and then fed into a fermentation system where proprietary bacterial metabolic action converts the syngas into ethanol. The ethanol will then be distilled, dehydrated, denatured, stored and loaded into dedicated ethanol tanker trucks. Off gases from the fermentation process will be routed to a boiler for combustion. Steam from the fermentation vent gas boiler—as well as steam from waste heat recovery at the gasifiers—will be routed to a turbine to generate electricity. Vent gas boiler emissions will be controlled through sorbent injection and fabric filtration.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code. The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination. The Department reviewed an air quality analysis prepared by the applicant. The Department has concluded that emissions from the project will not cause or contribute to a violation of any ambient air quality standards.

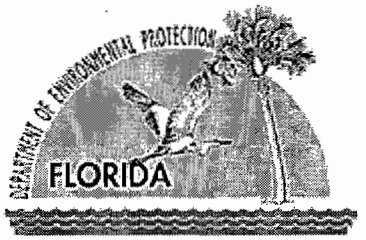
The Department's preliminary determination is that the project will not constitute a new major stationary source, and that the facility will not be subject to PSD preconstruction review. Emissions at the facility will come from several sources, and the applicant has proposed various control measures and operational limitations so that potential emissions of all pollutants are less than 100 TPY, including the following: follow best management practices for handling feedstock; limit the annual fuel usage for the diesel engines powering the shredders and screens; apply the emissions limitations of Title 40, Code of Federal Regulations, Part 60, Subpart AAAA to the vent gas boiler exhaust; install post-combustion controls consisting of sorbent injection followed by fabric filtration; and cap the annual vent gas flow to the emergency flares.

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. I have not evaluated and I do not certify, however, any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, bacteriological and meteorological features).*

Gregory P. DeAngelo, P.E. (Date) 1 AUG 2011
Registration Number 58591

GREGORY P. DeANGELO LICENSE NO. 58591 STATE OF FLORIDA PROFESSIONAL ENGINEER

Florida Department of Environmental Protection
Division of Air Resource Management • Office of Permitting and Compliance
2600 Blair Stone Road, MS #5505 • Tallahassee, Florida 32399-2400



TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

***** DRAFT *****

APPLICANT
INEOS New Planet BioEnergy
3030 Warrenville Road, Suite 650
Lisle, Illinois 60532

Indian River County BioEnergy Facility
ARMS Facility ID No. 0610096

PROJECT
Draft Permit No. 0610096-002-AC
Biomass to Ethanol Production

COUNTY
Indian River County, Florida

PERMITTING AUTHORITY
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, MS#5500
Tallahassee, Florida 32399-2400

August 31, 2011

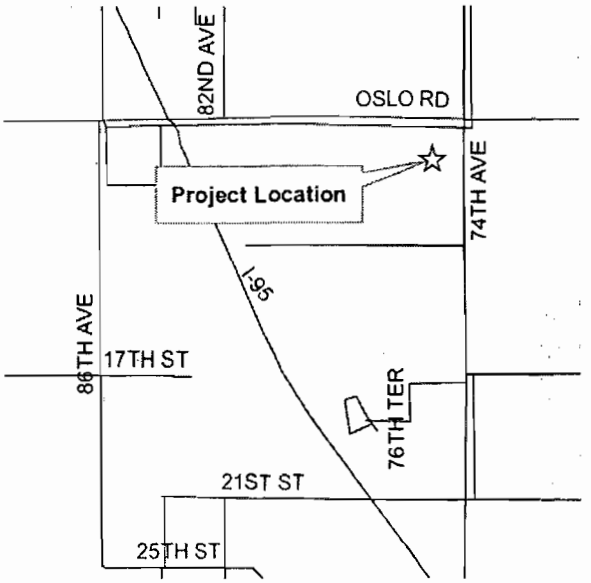
1. GENERAL PROJECT INFORMATION

1.1 Facility Description and Location

INEOS is a large petrochemical and specialty chemical manufacturer headquartered in the United Kingdom. It consists of 17 businesses with 64 manufacturing facilities in 14 countries, and with annual sales of around $47 billion, it is the third largest chemical company in the world.[1] INEOS New Planet BioEnergy, LLC (INPB) is constructing a facility in Indian River County (IRC) to produce ethanol from a biomass feedstock consisting of mostly vegetative yard waste and clean woody construction and demolition (C&D) debris. The INPB IRC facility is located near Vero Beach, Florida, at the former location of an Ocean Spray citrus processing facility at the intersection of 74th Avenue and Oslo Road near Interstate 95. The UTM coordinates are Zone 17, 550.7 km East and 3,051.3 km North.

Figure 1 - Indian River County, Florida, and Proposed Location of Facility

Source: http://quickfacts.census.gov/qfd/maps/florida_map.html



Source: CDM (permit application for project 0610096-001-AC)

The facility is expected to produce up to 8 million gallons of ethanol per year, and although it will generate a small amount of electricity available for commercial use (about 2 megawatts), it will be categorized under Standard Industrial Classification (SIC) Code No. 2869—Industrial Organic Chemicals, Not Elsewhere Classified. The Florida Department of Environmental Protection (DEP) previously authorized construction of the facility pursuant to air construction permit 0610096-001-AC.

1.2 Process Description

The primary feedstock for the facility will be vegetative yard waste and land clearing debris collected by the IRC Solid Waste Disposal District (SWDD) curbside collection program, delivered to the county's collection centers, or delivered directly to the facility by the public. On an annual average, yard waste will make up approximately 90 percent of the feedstock. The remainder of the biomass feedstock may consist of clean woody C&D debris and municipal solid waste (MSW).

The INEOS bio ethanol technology process will gasify the biomass feedstock. The organic material will not be directly combusted; instead, oxygen will be supplied to the gasifier which converts the feed material into a synthetic gas (syngas) consisting of carbon monoxide (CO), carbon dioxide (CO_2), hydrogen (H_2) and other hydrocarbons.

This syngas will not be directly combusted either. It will be cleaned and cooled and then fed into a fermentation system where proprietary bacterial metabolic action converts the syngas into ethanol. The ethanol will then be distilled, dehydrated, denatured, stored and loaded into dedicated ethanol tanker trucks. Off gases from the fermentation process will be routed to a boiler for combustion. Steam from

the fermentation vent gas boiler—as well as steam from waste heat recovery at the gasifiers—will be routed to a turbine to generate electricity. Vent gas boiler emissions will be controlled through sorbent injection and fabric filtration.

1.3 Primary Regulatory Categories

The facility is a major source of hazardous air pollutants (HAP). The facility has no units subject to the acid rain provisions of the Clean Air Act. The facility is not a major stationary source. The facility is a major source of air pollution (Title V source).

1.4 Project Description

On August 25, 2010, DEP issued a minor source construction permit to INPB to build the IRC facility to convert waste biomass to ethanol. The construction permit established various federally enforceable limitations on the facility's potential to emit certain pollutants. The permit's emissions limitations ensure that the facility emits air pollutants at annual rates less than the emissions thresholds for the prevention of significant deterioration (PSD) pre-construction permitting program. Without the limitations in place, the facility would have been subject to the PSD program.

Construction has commenced on the INPB IRC facility, and as the engineering and construction progresses, INPB is contemplating some changes to the design as submitted in the original permit application. Some changes are minor and will not require modifying the construction permit, but other changes triggered a need to modify the permit, assess the impact on emissions, and reexamine applicability determinations. On July 23, 2011, INPB submitted an application to modify the air construction permit for the following major changes:

- Modified the materials handling area to reflect four smaller diesel engines instead of one large engine.
- Updated the fermentation and distillation system requirements to reflect two scrubbers instead of a single scrubber and desulfurization unit.
- Altered the MSW trial period so that instead of requiring a follow-on permit application to authorize routine processing of MSW, the permit will grant authority to process MSW on a routine basis at feed rates for which compliance has been demonstrated.
- Authorized the installation of a larger vent gas boiler and required installation of post-combustion controls (sorbent injection followed by a fabric filter).
- Increased the authorized capacity (gallons) of the product and denaturant storage tanks.
- Eliminated the desulfurization unit and its associated oxidation tank, and replaced two flares (gasifier flare and syngas flare) with a single, larger flaring system (syngas flare).

Other minor changes from the original construction permit consist of typographical and administrative corrections in addition to the following:

- Updated contents and due date for the monthly operations summary.
- Added explicit definition of standard conditions (temperature and pressure).
- Clarified roadway sweeping requirement from "monthly" to "as required."
- Clarified that compliance tests for the feedstock dryers are required prior to operation permit renewal (i.e., not annually).
- Modified sorbent from lime to sodium bicarbonate for the dry gas cleaning and vent gas boiler systems.
- Modified the specifications and recordkeeping requirements for the loadout and syngas flares.

Table 1 – List of Emission Units.

Emission Unit (EU) No.	Emission Unit Description
001	*Materials Handling Area*
002	Feedstock Dryers No. 1 and No. 2
003	Gasification, Fermentation and Distillation Systems
004	Distillation Unit Fugitive Emissions
006	Vent Gas Boiler
007	Tank Farm
008	Loadout Flare
010	Syngas Flare

1.5 Changes to the Original Permit

Figures 2 and 3 show process flow diagrams for the INPB IRC facility. Figure 2 is the process flow diagram for the facility configuration as originally permitted. Figure 3 shows the amended process flow diagram as authorized by this permit modification. Details of the industrial process and descriptions of each emissions unit can be found in the technical evaluation for the original permit. The discussion below describes only the major changes from the original permit.

(001) Materials Handling Area

Trucks will deliver vegetative waste and clean woody construction debris to the tipping floor of the materials handling area. Vegetative waste will consist primarily of yard waste from the county's curbside collection program or yard waste or land clearing debris delivered to the county's collection centers or delivered to the facility directly from the public. Construction debris will be material diverted from the landfill or delivered by the public. The materials handling area will include equipment for storage, handling, grinding and screening of the feedstock.

Public access to the facility to drop-off vegetative waste is a change from the original permit. The applicant has provided additional calculations related to fugitive particulate matter (PM) emissions from the additional traffic, and the permit will continue to require robust best management practices to control fugitive dust.

Instead of the single tub grinder powered by a large diesel engine as originally envisioned, the facility will employ four smaller pieces of diesel-fired equipment (two slow speed shredders and two feedstock screeners). INPB included the emissions from operation of these engines in the calculations submitted with the application. The permit will limit annual fuel usage to 82,368 gallons per year combined for the two shredders and 16,848 gallons per year combined for the two screens. In addition, fuel use is restricted to ultra low sulfur diesel fuel, which contains a maximum of 15 parts per million sulfur by weight. The fuel usage limitations, alongside the other limitations of the permit, keep the facility's potential to emit below the PSD thresholds.

In addition, the facility plans to store the shredded feedstock in windrows to allow for drying of the vegetative material prior to introducing it to the dryers. This "biodrying" will reduce the drying load on the dryers and potentially help reduce emissions. The applicant adequately accommodated potential volatile organic compound (VOC) emissions in the calculations and PSD applicability analysis.

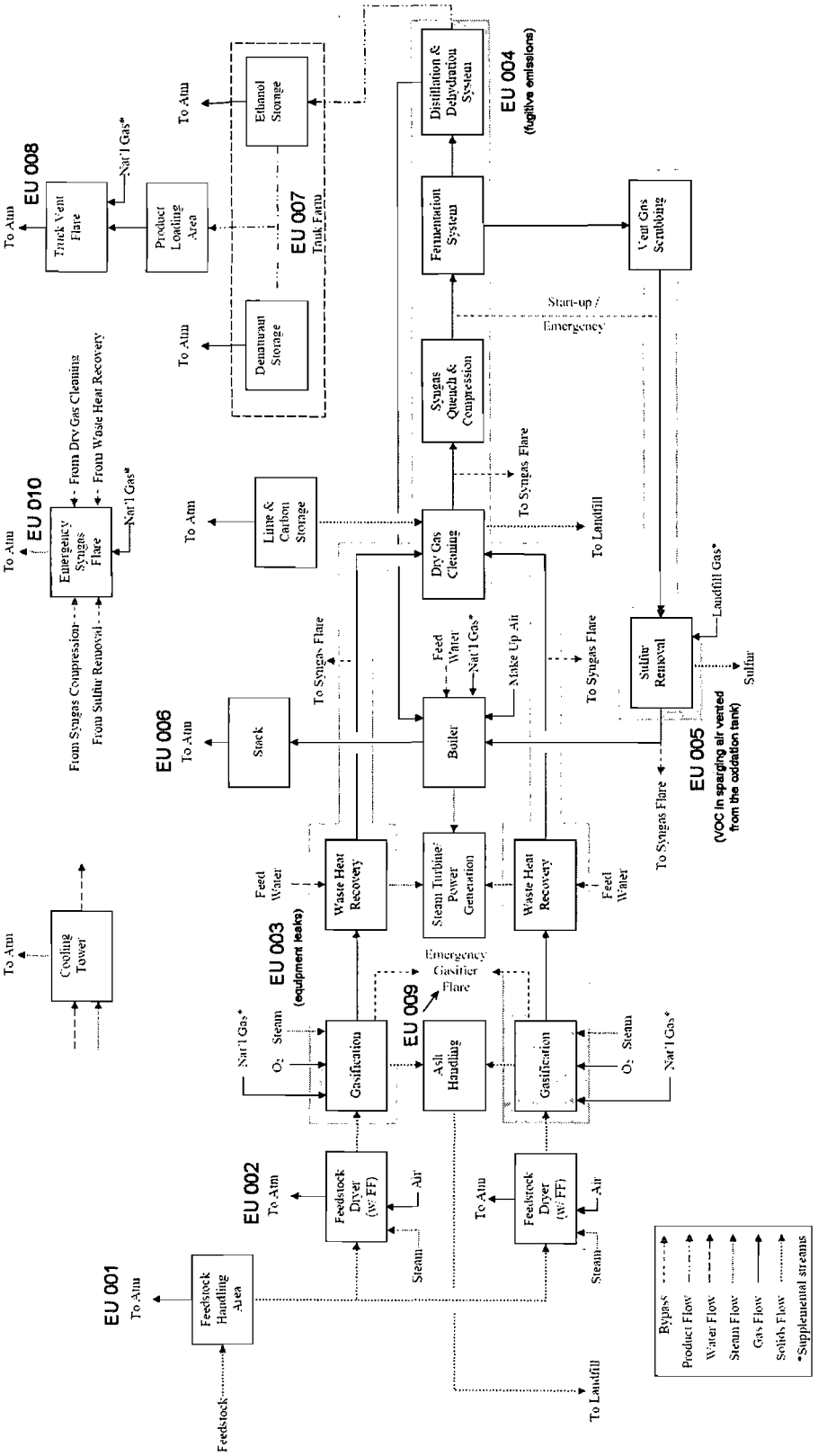
(002) Feedstock Dryers No. 1 and No. 2

No major changes.

(003) Gasification, Fermentation and Distillation Systems

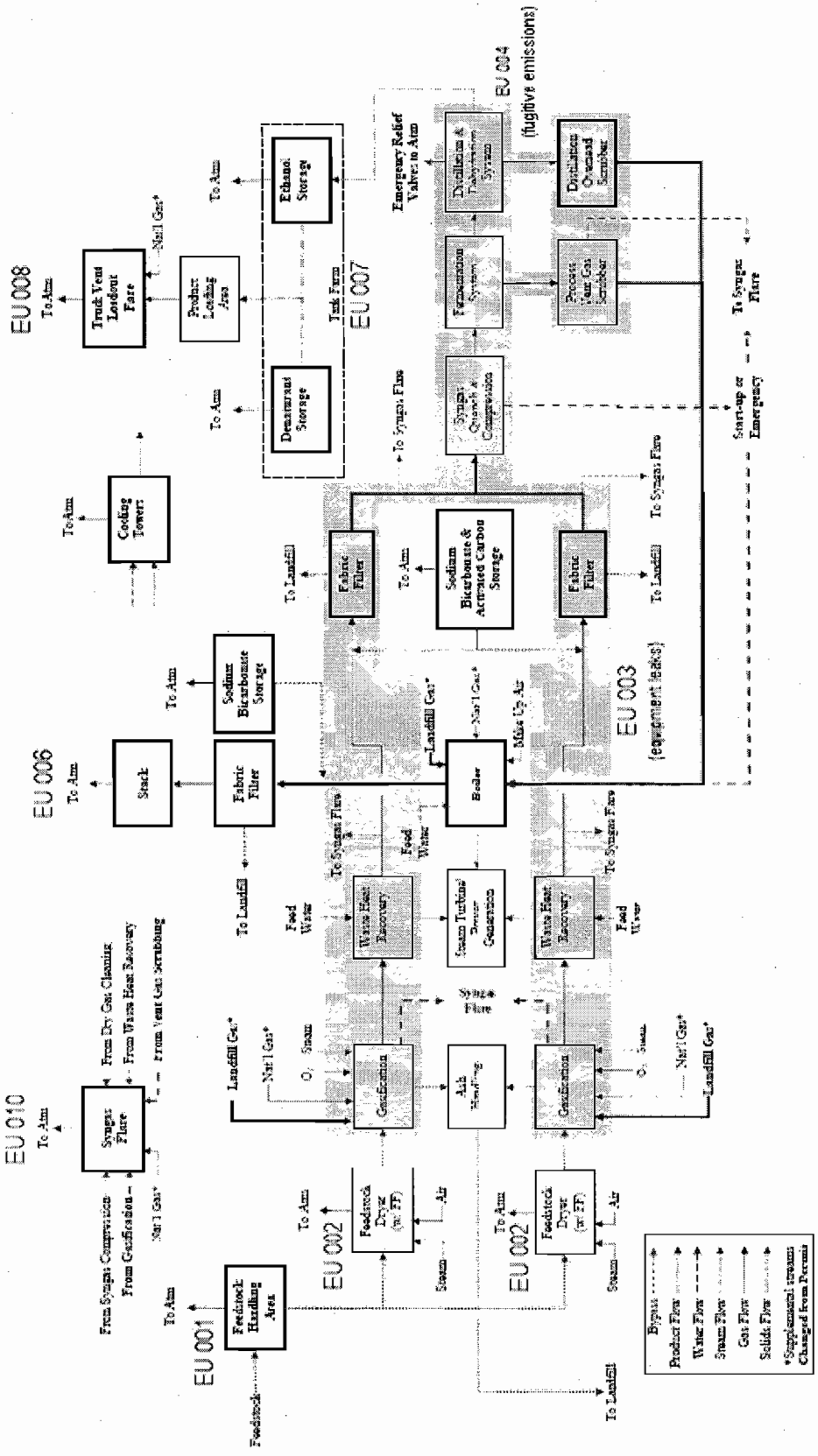
Several changes to the permit for this EU are made to reflect the current planned configuration. The sorbent material to be injected into the system for dry gas cleanup is changed from lime and activated

Figure 2 – INPB IRC Facility Process Flow Diagram (as originally permitted).



Source: CDM (permit application for project 0610096-001-AC)

Figure 3 – INPB IRC Facility Process Flow Diagram (as modified by this permit).



Source: CDM (permit application for project 0610096-002-AC)

carbon to activated carbon and sodium bicarbonate. In addition, each of the two gasifiers will have a separate dry gas cleanup package (sorbent injection followed by fabric filtration). The modified permit authorizes two scrubbers in the fermentation and distillation area of the facility instead of a single scrubber. In addition, the permit no longer requires the desulfurization unit prior to the vent gas boiler. (Sulfur dioxide, SO_2, emissions will be controlled following vent gas combustion through newly required sorbent injection and fabric filtration—see EU-006.)

More significantly, the modified permit provides for the permanent, routine authorization of MSW as a feedstock following successful completion of a trial burn period. The original permit required a report summarizing the impact of MSW on emissions as part of the application for an additional permit. As a burden reducing step, the modified permit provides for authorization of MSW at the maximum feed rate for which the facility has demonstrated compliance. During the trial burn period, MSW is limited to 365 dry tons per day for both gasifiers combined (daily total). Once MSW begins to be used on a routine basis, the feed rate is limited to a rolling 12-month total of no more than 110 percent of the feed rate achieved during compliance testing.

(004) Distillation Unit Fugitive Emissions

No major changes.

(005) Desulfurization Unit Oxidation Tank

The modified permit revokes the authority to construct this EU. It will be marked as "inactive" in the DEP database.

(006) Vent Gas Boiler

The vent gas boiler will accept natural gas, landfill gas, vent gas from the desulfurization unit, off-gas from the distillation feed tank and off-gas from the distillation column reflux drum. The original permit specified a nominal 50 million British thermal units (MMBTU) per hour boiler—equipped with low nitrogen oxide (NO_X) burners—to combust these gases to provide steam for use in the plant and to generate a small amount of electricity. The modified permit authorizes a large boiler (nominal 84.5 MMBtu per hour).

To address emissions concerns, the applicant has proposed adding air pollution controls to the flue gas stream from the vent gas boiler. Controls will consist of sodium bicarbonate injection followed by fabric filtration. The applicant provided vendor guarantees for boiler and control device performance and included relevant calculations showing reasonable assurance for compliance with limits for SO_2, hydrochloric acid (HCl), and PM. The limits in place in the modified permit will continue to keep total facility emissions below the threshold levels for PSD applicability.

(007) Tank Farm

The applicant requested permit modifications to authorize the installation of storage tanks with larger capacities. The product storage tank is increased in size from 65,455 to 94,000 gallons. And the denaturant storage tank is increased in size from 18,006 to 19,800 gallons. The total amount of ethanol allowed to be produced per year is not increased by the permit modification, so the impact on emissions is not significant. The applicant provided updated calculations showing the minor changes in emission rates resulting from increasing the storage tanks' capacities.

(008) Loadout Flare and (010) Syngas Flare

Instead of three flaring systems, the applicant's plans now call for two flares, one for the loadout area and one for the remainder of the plant—the syngas flare—to control emissions from the remainder of the plant whenever there are process upsets or system malfunctions and the vent gas boiler is unavailable. The physical design of the flares has been updated through the permit modification, and the permit now provides for measuring and limiting the amount of flow (standard cubic feet per year) diverted to the flare instead of the hours of operation. The previously permitted hours of operation have not been altered, but the applicant has requested the restriction on flow to provide easier recordkeeping.

(009) Gasifier Flare

The modified permit revokes the authority to construct this EU. It will be marked as "inactive" in the DEP database.

1.6 Processing Schedule

July 23, 2011: DEP received the application for an air pollution construction permit.

August 31: DEP distributed written Intent to Issue Air Permit and posted documents.

2. APPLICABLE REGULATIONS

2.1 State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes. The statutes authorize DEP to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following chapters of the F.A.C.

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments and Federal Regulations Adopted by Reference
62-210	Permits Required, Public Notice, Emissions Computation and Reporting, Stack Height Policy, Circumvention, Excess Emissions and Forms
62-212	Stationary Sources Preconstruction Review
	Rule 62-212.300—General Preconstruction Review Requirements
	Rule 62-212.400—PSD (PSD applicability review only)
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Stationary Sources Emission Standards
62-297	Stationary Sources Emissions Monitoring

Section 3 of this report includes a discussion of PSD applicability and the preconstruction review requirements of Rule 62-212.400, F.A.C. Section 4 contains additional details for the other applicable state regulations.

2.2 Federal Regulations

The U.S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (C.F.R.). Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies National Emissions Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP provisions based on the Maximum Achievable Control Technology (MACT) for given source categories. Florida adopts these federal regulations in Rule 62-204.800, F.A.C., and stationary sources in Florida are required to comply with the adopted federal regulations as per Subsection 62-296.100(3), F.A.C. Section 4 of this report contains additional details for the applicable federal regulations.

3. PSD APPLICABILITY REVIEW

3.1 General PSD Applicability

Florida's PSD program, codified at Rule 62-212.400, F.A.C., applies to major stationary sources in areas that are currently in attainment with the Ambient Air Quality Standards (AAQS) for criteria pollutants (or in areas that are designated as unclassifiable for these pollutants). As defined in Rule 62-210.200, F.A.C.,

a facility is considered a major stationary source if it emits or has the potential to emit 250 tons per year (TPY) or more of any PSD pollutant, or 100 TPY or more of any PSD pollutant if the facility belongs to one of 28 listed categories of stationary sources.

PSD pollutants consist of the following: CO; NO_X; SO_2; PM with an aerodynamic diameter of 10 microns or less (PM_{10}); PM with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$); VOC; lead (Pb); fluorides (F); sulfuric acid mist (SAM); H_2S; total reduced sulfur (TRS); reduced sulfur compounds; municipal waste combustor organics, metals and acid gases; MSW landfills emissions; mercury (Hg); and non-HAP, non-VOC ozone depleting substances (ODS).

The PSD rules apply to the construction of any new major stationary source or the major modification of an existing major stationary source. A new major stationary source is one not currently in existence and that will, when built, emit or have the potential to emit 250 TPY of *any* PSD pollutant (or 100 TPY of *any* PSD pollutant for facilities on the list of 28 categories of stationary sources). Best Available Control Technology (BACT) must then be employed to minimize emissions of *each* PSD pollutant for which the new major stationary source emits or has the potential to emit above emissions thresholds known as significant emission rates. Significant emission rates vary by pollutant, and they are defined in Rule 62-212.200, F.A.C.

For existing major stationary sources, the procedures in Subsection 62-212.400(2), F.A.C., determine whether a project is a major modification. The first step is to calculate the baseline actual emissions, which are, essentially, the annual average emissions prior to the project. The procedure then compares pre-project baseline actual emissions to post-project emissions (either projected actual emissions or potential emissions). Different recordkeeping and permitting requirements apply depending on the applicability test. Regardless, the project is a major modification if the net emissions increase exceeds the significant emission rates. An existing major stationary source may be major because of the emissions of one PSD pollutant, but the permit for a major modification must include BACT level controls for *each* PSD pollutant that will experience a significant net emissions increase. (Netting is important, because eligible contemporaneous emissions increases and decreases can be taken into account when determining if a significant net emissions increase will occur.)

Rule 62-210.200, F.A.C., defines BACT as:

> *An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account:*
>
> 1. *Energy, environmental and economic impacts, and other costs;*
> 2. *All scientific, engineering, and technical material and other information available to the Department; and*
> 3. *The emission limiting standards or BACT determinations of Florida and any other state;*
>
> *determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.*
>
> *If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.*

> *Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63.*

In addition, for new major stationary sources or major modifications to existing major stationary sources, applicants must provide an air quality analysis that evaluates the predicted air quality impacts resulting from the project. The air quality analysis must be performed for each PSD pollutant for which the new major stationary source is considered major, or for each PSD pollutant for which the major modification will cause a significant net emissions increase.

3.2 PSD Applicability for the Project

Applicant's Analysis. The INPB project is to be located in Indian River County, which is currently in attainment (or otherwise designated as unclassifiable) with respect to the AAQS. The facility is a chemical process plant, which is one of the 28 listed categories of stationary sources, so the threshold of 100 TPY applies. The applicant has proposed certain operation and emissions limitations to limit the facility's potential to emit to less than 100 TPY for the PSD pollutants expected to be emitted above *de minimis* amounts. Therefore, the facility is not a new major stationary source, and the facility is not subject to PSD preconstruction review.

Table 2 contains the applicant's emissions estimates for PSD pollutants, taking into account not only the requested limits on operation and emissions, but also the modifications to operation requested in this permit application. Major changes from the previous calculations include diesel engine and truck traffic emissions from EU-001 and emissions from the larger vent gas boiler (EU-006). As shown in Table 2, the project will have potential emissions less than 100 TPY for all of the following: NO_X, CO, SO_2, VOC, PM_{10}, $PM_{2.5}$ and Pb.

DEP Review. The applicant provided updated calculations to reflect the requested changes in operation at the facility. The technical evaluation for the original permit details the DEP review of the calculation approaches. For the permit modification, DEP focused on reviewing the updated and revised portions of the calculations. Based on this review and upon discussions with the applicant and the consultant for the project, DEP is satisfied that the revised calculations demonstrate reasonable assurance that the facility can comply with the specified emissions limits and operate below the PSD emissions thresholds.

One important difference in the estimated facility-wide emissions rates concerns HCl. Emissions of this pollutant are now estimated to be 13.43 TPY. This changes the regulatory classification of the INPB IRC facility from an area (minor) source of HAP to a major source of HAP. A major source of HAP is a facility that emits or has the potential to emit any single HAP species at 10 TPY or more or total HAP at 25 TPY or more.

The facility is already classified a Title V facility because it is subject to 40 C.F.R. part 60, subpart AAAA—the NSPS for small municipal waste combustors (MWC). It is now also classified a Title V facility because it is a major source of HAP. Section 4 of this report discusses the other implications of the facility being a major source of HAP and contains applicability reviews for various NESHAP standards that were not addressed in the original technical evaluation.

Table 2 – Summary of the Applicant's PSD Applicability Analysis.

Emission Unit	Equipment or Process	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Sulfur Oxides (SOx)	Volatile Organic Compounds (VOC)	Particulate Matter < 10 Microns (PM10)	Particulate Matter < 2.5 Microns (PM2.5)	Lead (Pb)	Hazardous Air Pollutants (HAP)
EU 001	Feedstock Handling Area								
	Paved Road	---	---	---	---	2.87	0.43	---	---
	Materials Handling Operations	---	---	---	---	1.20E-02	1.82E-03	---	---
	Shredding and Screening	---	---	---	---	4.72	4.72	---	---
	Shredder and Screen Engines	13.07	12.37	0.80	---	0.72	0.72	---	---
	Feedstock Windrows	---	---	---	33.38	---	---	---	---
EU 002	Feedstock Dryers	---	---	---	33.38	3.79	3.79	---	5.45
EU 003	Gasification, Fermentation and Distillation Systems	---	---	---	---	---	---	---	---
EU 004	Distillation Unit Fugitive Emissions	---	---	---	0.46	---	---	---	0.18
EU 005	Desulfurization Unit Oxidation Tank	---	---	---	---	---	---	---	---
EU 006	Vent Gas Boiler	84.6	17.2	81.5	8.8	7.1	7.08	5.9E-02	11.3
EU 007	Tank Farm	---	---	---	1.7	---	---	---	5.3E-02
EU 008	Loading Area Flare	0.07	1.4	---	1.7	2.0E-02	2.0E-02	---	5.4E-04
EU 009	Gasifier Flare								
EU 010	Syngas Flare	1.0	19.4	14.7	1.2	0.44	0.44	9.6E-03	2.3
IEU	Insignificant Emissions Units								
	Emergency Engines	1.0	0.12	1.9E-02	---	2.9E-02	2.9E-02	---	---
	Dry Chemical Storage	---	---	---	---	0.66	0.66	---	---
	Cooling Towers	---	---	---	---	2.11	2.11	---	---
	Miscellaneous Tanks	---	---	---	0.25	---	---	---	4.3E-03
TOTAL[1]		99.8	50.5	97.0	74.4	18.7	16.2	0.07	18.7
Major Source Threshold[2,3]		100	100	100	100	100	100	100	25

[1] See supporting calculations in Attachment 3

[2] For all of the criteria pollutants (non-HAPs), the PSD "Major Stationary Source" thresholds are from Rule 62-210.200(195), Florida Administrative Code (F.A.C.) and applied in the PSD requirements in Rule 62-212.400, F.A.C.

[3] For the HAPs, the "Major Source of Air Pollution" thresholds are from Rule 62-210.200(194(a)), F.A.C. and applied in the Title V requirements in Rule 62-213, F.A.C.

Source: CDM (permit application for project 0610096-002-AC)

4. PROJECT REVIEW

4.1 State Regulations Review

Chapter 62-213, F.A.C. Operation Permits for Major Sources of Air Pollution (Title V). As discussed in section 3 of this technical evaluation, facility wide emissions of NO_X, CO, SO_2, VOC, PM_{10} and $PM_{2.5}$ will each be below 100 TPY, and Pb emissions will be below 5 TPY. Emissions of HAP from the vent gas boiler (EU-006) will consist primarily of HCl (11.18 TPY). Some additional HAP may also be emitted from the syngas flare (EU-010), tank farm (EU-007) and other areas of the facility.

The potential emissions of HCl are above the relevant Title V permitting program applicability threshold (10 TPY), so the facility is subject to the Title V air permitting program at Chapter 62-213, F.A.C. The facility is also subject to the Title V program because it is subject to 40 C.F.R. part 60, subpart AAAA—the NSPS for small MWC. Section 129(e) of the Clean Air Act requires Title V permits for all sources subject to one of the NSPS rules for solid waste combustion (which includes subpart AAAA).

Several pieces of equipment that are exempt from air construction permitting will likely be required to be listed as insignificant emissions units on the eventual Title V air operation permit, including the following: backup emergency power generator; sodium bicarbonate storage silos; activated carbon storage silo; cooling towers; three temporary ethanol holding tanks; nine other miscellaneous storage tanks (e.g., the nutrient and vitamin mixture storage tanks); cold storage refrigeration equipment; laboratory equipment; brazing, soldering or welding equipment; fire suppression systems; petroleum lubrication systems; and use of fungicides, herbicides or pesticides.

Subsection 62-296.320(1), F.A.C. VOC Emissions. This rule forbids the storage, pumping, handling, processing, loading, unloading or use of VOC without applying vapor emission control devices or systems. At the INPB IRC facility, this rule could potentially apply to the gasification, fermentation and distillation systems (including EU-003 and EU-004) as well as the tank farm (EU-007). The equipment included in these emissions units will be subject to either 40 C.F.R. part 60, subpart VVa or Kb, which will require control of VOC emissions and will therefore satisfy Subsection 62-296.320(1), F.A.C.

Subsection 62-296.320(2), F.A.C. Objectionable Odor Prohibited. This rule prohibits any person from discharging air pollutants which cause or contribute to objectionable odors. At the INPB IRC facility, with the exception of the raw material storage areas, all of the pollutant-laden streams will be combusted or controlled. This should eliminate the possibility of objectionable odors. No odors are expected from the vegetative waste or C&D debris, and odors will be controlled from MSW by limiting on-site storage to a maximum of 48 hours.

Paragraph 62-296.320(4)(b), F.A.C. General Visible Emissions Standard. This rule applies a visible emissions limit of 20 percent opacity for equipment that does not otherwise have limits for visible emissions or for PM. At the proposed facility, it will apply to the exhaust from the feedstock dryers.

Paragraph 62-296.320(4)(c), F.A.C. Unconfined Emissions of PM. This rule prohibits industrial facilities from emitting unconfined PM (such as dust from unpaved roads) without taking reasonable precautions. The activities and equipment that are considered reasonable precautions are included in the facility's permit. The facility's application includes a detailed best management practices plan that will be included in the permit. It includes practices such as paving roads and parking areas; street sweeping; landscaping; and covering the conveyor system for the dried feedstock material leaving the dryers.

Rule 62-296.416, F.A.C. Waste-to-Energy Facilities. The gasifiers at the INPB IRC facility will not combust or incinerate the feedstock. Instead, a starved-air pyrolysis heating in each gasifier will produce the syngas stream. Regardless, the applicant and DEP have agreed that the rules for small MSW combustors will apply as the best regulatory fit for this process. This includes Rule 62-296.416, F.A.C., which limits Hg emissions from waste-to-energy facilities. Rule 62-296.414, F.A.C., says, in part, that:

> *The requirements of this rule apply to all waste-to-energy facilities with charging rates of 40 tons per day or more. For those facilities subject to this rule and paragraph 62-204.800(8)(b), F.A.C., the mercury emissions limiting standards in this rule shall*

apply in place of the less restrictive mercury emission limiting standard set forth at paragraph 62-204.800(8)(b), F.A.C. However, the mercury percent reduction standard (85 percent) in paragraph 62-204.800(8)(b), F.A.C., shall apply in place of the less restrictive mercury percent reduction standard (80 percent) set forth in this rule.

There was some understandable confusion when DEP was processing the original permit regarding these requirements, because the rule citations are out of date. As it reads, it appears to indirectly reference 40 C.F.R. part 60, subpart AAAA—the applicable federal NSPS for small MWC—through a citation to paragraph 62-204.800(8)(b), F.A.C., which is where DEP adopts the federal NSPS rules by reference. The language would then imply that the state rule supersedes and replaces the federal NSPS. The state rules, however, cannot simply waive a federal requirement in this manner.

The citations in Rule 62-296.416, F.A.C., should be to paragraph 62-204.800(9)(b), F.A.C., which is another state rule (the emission guidelines for large MWC). The language cited above regards the interaction between two state rules: 62-296.416, F.A.C., which limits Hg emissions from waste-to-energy facilities and 62-204.800(9)(b), F.A.C., which is the emission guidelines for large MWC. The above-cited language is not intended to address the interaction between the state waste-to-energy facility Hg rule and the federal NSPS for small MWC (40 C.F.R. part 60, subpart AAAA). Both rules (Rule 62-296.416, F.A.C., and 40 C.F.R. part 60, subpart AAAA) apply independently to the proposed INPB IRC facility.

And, as an aside on a related topic, the facility is subject to the federal NSPS for small MWC (40 C.F.R. part 60, subpart AAAA), so it is not subject to the state emission guidelines for large MWC at Rule 62-296.800(9)(b), F.A.C., nor those for small MWC at Rule 62-296.800(9)(e), F.A.C. Therefore, the language cited above regarding the interaction between Rule 62-296.414, F.A.C. and the state emissions guidelines is irrelevant for this permitting action because this facility is not subject to any state emissions guidelines.

4.2 Federal Regulations Review (NSPS and NESHAP)

The following federal regulations are applicable to this project:

40 C.F.R. part 60, subpart A—NSPS General Provisions. The general provisions apply to all emissions units that are subject to one or more of the NSPS rules. They include common requirements that address compliance testing, monitoring, reporting and recordkeeping. They also include requirements for different types of control devices such as flares, which are applicable to EU-008 and EU-010.

40 C.F.R. part 60, subpart AAAA—NSPS for Small MWC. As previously discussed, DEP and the applicant have agreed that subpart AAAA will apply to the gasification units/biological reactor/vent gas boiler train, with the point of comparison to the federal emission limits at the exit of the vent gas boiler stack and after the post-combustion air pollution controls (EU-006). The NSPS sets emissions standards for the following pollutants: PM, cadmium, Pb, Hg, SO_2, HCl, NO_X, municipal waste combustor organics and CO. The NSPS also requires operation and work practice standards, such as following good combustion practices, obtaining operator training and certification, handling fugitive emissions and implementing a materials separation plan. The applicant has prepared a materials separation and quality control plan, which will be attached as part of the draft permit for public notice and review.

Note that subpart AAAA requires the monitoring of the temperature of the flue gases at the inlet to the PM control device. Along with the activated carbon injection rate, the temperature recorded during a successful compliance test for dioxin/furan emissions becomes a monitored parameter for continuous compliance with the dioxin/furan emissions limit. In a typical small MWC, the PM control device would follow the combustion step, but for the INPB IRC facility, the syngas will be cleaned prior to fermentation, removing much of the chlorine from the syngas. The fermentation off-gases will then be combusted in the vent gas boiler, followed by additional sorbent injection and fabric filtration.

Dioxin/furan can only form if there is chloride present in the flue gases and the temperature is within a certain range (i.e., between a minimum and maximum temperature window). The point of monitoring temperature is to ensure that the flue gas temperature quickly passes through the dioxin/furan temperature

formation window and remains below the minimum temperature required for dioxin/furan formation. After reviewing the applicant's submitted information, DEP believes that monitoring the temperature at the inlet to the fabric filters in the dry gas sorbent injection area will satisfy these conditions and the NSPS monitoring requirement.

40 C.F.R. part 60, subpart Kb—NSPS for Volatile Organic Liquid Storage Vessels. This rule establishes design and emissions control criteria for certain storage tanks, as a function of their size and the vapor pressure of the organic liquid being stored. At the proposed facility, only the product storage tank and the denaturant storage tank will be subject to subpart Kb (EU-007). The applicant intends to construct internal floating roofs for both tanks.

40 C.F.R. part 60, subpart IIII—NSPS for Stationary Compression Ignition Internal Combustion Engines.

40 C.F.R. part 63, subpart ZZZZ—NESHAP for Stationary Reciprocating Internal Combustion Engines.

There will be five diesel engines at the facility. One is an older model that was previously installed on the site by the Ocean Spray citrus processing facility. This engine, an emergency power generator rated at 500 kilowatts, is a 1989 model year Caterpillar engine that has not been modified or reconstructed since that time. (A change in ownership does not constitute a modification for this purpose.) As such, it will not be subject to subpart IIII, although it will be subject to subpart ZZZZ. The other diesel engines will power the shredders and screens in the materials handling area (EU-001). These will be new engines, and they will be subject to subpart IIII and subpart ZZZZ.

The specific requirements for these engines will not be known until after construction is complete (or at least not until the design for their capacity is finalized). As such, this permit (like the original construction permit) only refers to the text of subparts IIII and ZZZZ instead of listing the specific requirements of the rules. The Title V permit will contain the actual provisions specific to the engines chosen by the applicant to be installed.

40 C.F.R. part 60, subpart VVa—NSPS for Equipment Leaks of VOC. This rule limits fugitive emissions of VOC from leaking equipment (such as pumps, valves, flanges and connectors) through the implementation of a site-specific leak detection and repair (LDAR) plan. The permit will require the applicant to submit a final LDAR plan once the facility is constructed. Until then, the facility will implement their temporary plan, attached to and made part of the permit.

The following federal regulations are not applicable to this project:

40 C.F.R. part 60, subpart NNN and RRR—NSPS for Distillation Operations and Reactor Processes. These rules are potentially applicable, because they address some common practices (distillation and reactors) in the synthetic organic chemical manufacturing industry (SOCMI). Ethanol production in general is considered part of SOCMI. The EPA, however, has for many years taken the position that these two NSPS do not apply to ethanol totally produced through biological synthesis. The EPA recently made a relevant, case-by-case decision for another DEP permitting project and confirmed this position.[2] And while EPA has not weighed in on this specific project, it seems consistent that subparts NNN and RRR would not apply to the biological production of ethanol at the proposed INPB IRC facility.

40 C.F.R. part 63, subpart F—Hazardous Organic NESHAP (HON). This rule is potentially applicable because the INPB IRC facility is a major source of HAP in the SOCMI. The HON only applies, however, to facilities that manufacture as a primary product one or more chemicals specifically listed in the rule. Ethanol is not included on the chemical lists, so the INPB IRC facility is not subject to the HON.

40 C.F.R. part 63, subpart FFFF—Miscellaneous Organic NESHAP (MON). This rule is potentially applicable because the INPB IRC facility is a miscellaneous organic chemical manufacturing process unit located at a major source of HAP emissions. A miscellaneous organic chemical manufacturing process unit is the collection of equipment that meets all of the following.

- Produces material or family of materials in SIC 286—the INPB IRC facility is classified under SIC 2869, Industrial Organic Chemicals, Not Elsewhere Classified—Ethanol, industrial.

- Processes, uses or generates any organic HAP—the INPB IRC facility generates (emits or can emit) the following organic HAP: benzene, acetonytrile, naphthalene, carbonyl sulfide, ethylbenzene, hexane, toluene, xylene and 2,2,4-trimethylpentane.
- Is not an affected source or part of an affected source under another subpart of this part 63.

The vent gas boiler at INPB IRC (EU-006) is subject to the NSPS for small MWC at 40 C.F.R. part 60, subpart AAAA. While not subject to a "part 63 standard," the vent gas boiler is an affected source in a standard established under section 129 of the Clean Air Act. It is therefore subject to emissions standards set according to the same MACT procedures used to set the "part 63 standards." This is explicitly spelled out in the federal rules as equivalent to being subject to a part 63 standard for the analogous applicability determination for the industrial boilers NESHAP (see subpart DDDDD discussion, below).

40 C.F.R. part 63, subpart DDDDD—Industrial, Commercial and Institutional (ICI) Boilers NESHAP. This rule is potentially applicable to the vent gas boiler at the INPB IRC facility because the facility is a major source of HAP. The ICI boilers NESHAP, however, explicitly exempts certain types of boilers, including "any boiler...subject to another subpart of [part 63]" and "any boiler specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act." The INPB IRC vent gas boiler is subject to 40 C.F.R. part 60, subpart AAAA—the NSPS for small MWC—which is a standard established under section 129 of the Clean Air Act. Therefore, the vent gas boiler is exempt from the ICI boilers NESHAP.

The reason that boilers subject to a "section 129 NSPS" are exempt from part 63 requirements is that for this subset of NSPS, the emissions limitations are set according to the same procedures (i.e., MACT) used to set the part 63 requirements. Essentially, if a source is subject to one of these NSPS, it is already complying with MACT and there is no need to comply with MACT as established under a subpart of part 63. This is spelled out in the Clean Air Act itself: "no solid waste incineration unit subject to performance standards under this section and section 111 shall be subject to standards under section 112(d) of this Act."[3] The part 63 NESHAP are standards under section 112(d) of the Clean Air Act.

(So, revisiting the MON, although there is not an explicit exemption in 40 C.F.R. part 63, subpart FFFF for chemical manufacturing process units subject to a section 129 NSPS, it is clear from the Clean Air Act itself and from more current NESHAP standards that such process units are not subject to subpart FFFF.)

40 C.F.R. part 63, subpart JJJJJJ—ICI Boilers Area Source NESHAP. This rule does not apply to the INPB IRC facility because the facility is a major, not an area (minor) source of HAP.

40 C.F.R. part 63, subpart B—Case-by-Case MACT under Section 112(g). This rule is potentially applicable to the INPB IRC facility because it is a major source of HAP that is not subject to another NESHAP under part 63. The case-by-case MACT rule, however, does not apply to major sources that are specifically exempted from regulation under a standard issues pursuant to section 112(d) of the Clean Air Act. The vent gas boiler at the INPB IRC facility is specifically exempted from regulation under 40 C.F.R. part 63, subpart DDDDD, which is a standard issued pursuant to section 112(d). Therefore, this rule does not apply.

40 C.F.R. part 97, subpart BBBBB—Transport Rule (TR) NO_X Ozone Season Trading Program. This rule is known as the Cross-State Air Pollution Rule (CSAPR), which is a replacement rule for the federal Clean Air Interstate Rule (CAIR). It applies to electric generating units in Florida, but only to fossil-fuel-fired boilers or combustion turbines serving a generator with a nameplate capacity of more than 25 megawatts that is producing electricity for sale. The boiler at the INPB IRC facility will be exporting electricity for sale, and it may be considered "fossil-fuel-fired," since that is a defined term that means "combusting any amount of fossil fuel" and some portion of MSW (e.g., plastics content) might be considered a "solid fuel derived from petroleum."[4] The generator nameplate rating, however, will be far below 25 megawatts, so the boiler will not be subject to CSAPR.

5. PRELIMINARY DETERMINATION

DEP makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant and the conditions specified in the draft permit. Greg DeAngelo is the primary processor for reviewing the application and drafting the permit. He may be contacted at (850)717-9000.

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[1] INEOS. Fact File 2010. Accessed May 11, 2010. http://www.ineos.com/pdf/INE_FF_2009_01_web.pdf

[2] Correspondence dated March 26, 2009. From Carol Kemker, Acting Director, Air, Pesticides, and Toxics Management Division, U.S. Environmental Protection Agency, Region 4. To Joseph Kahn, Director, Division of Air Resource Management, Florida Department of Environmental Protection.

[3] Section 129(h)(2) of the Clean Air Act.

[4] 40 C.F.R. 97.502, definitions of "fossil fuel" and "fossil-fuel-fired."

*** DRAFT PERMIT ***

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

INEOS New Planet BioEnergy
2600 South Shore Blvd, Suite 500
Marina View Building
League City, TX 77573

Air Permit No. 0610096-002-AC
Permit Expires: September 30, 2014

Indian River County BioEnergy Facility
Minor Source Air Construction Permit
Biomass to Ethanol Production

Authorized Representative:
Mr. David King, President

Changes to Permit 0610096-001-AC are indicated by double-underline (additions) and strikethrough (~~deletions~~) formatting.

PROJECT

This is the final air construction permit, which authorizes construction of a waste-to-ethanol production facility using biomass feedstock made up of vegetative yard waste and construction and demolition (C&D) debris. The new facility will be located at 925 74th Avenue in Vero Beach, Florida in Indian River County (IRC). The proposed facility is expected to produce up to 8 million gallons of ethanol per year, and although it will generate a small amount of electricity available for commercial use (about 6 megawatts gross, with 2 megawatts net exported), it will be categorized under Standard Industrial Classification ~~(SIC)~~ Code No. 2869—Industrial Organic Chemicals, Not Elsewhere Classified. The UTM coordinates are Zone 17, 550.7 km East and 3,051.3 km North. As noted in the Final Determination provided with this final permit, ~~no comments were received and~~ only minor changes and clarifications ~~corrections~~ were made to the draft permit.

This permit is organized into the following sections: Section 1 (General Information), Section 2 (Administrative Requirements), Section 3 (Emissions Unit Specific Conditions) and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix CF of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes ~~(F.S.)~~ and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C., ~~and~~ but it is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection (Department) in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

(DRAFT)

(Printed Name of Above Designee) (Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on _____ to the persons listed below.

David King, INEOS: david.king@ineos.com
Daniel Cummings, INEOS: dan.cummings@ineos.com
Dr. Mark Niederschulte, INEOS: mark.niederschulte@ineos.com
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Heather Abrams, EPA Region 4: abrams.heather@epa.gov
Lynn Scearce, DEP DARM OPC Reading File: lynn.scearce@dep.state.fl.us
Joy Ezell: hopeforcleanwater@yahoo.com

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(DRAFT)

_____ _____
(Clerk) (Date)

PROPOSED PROJECT

The project is for the construction of a waste biomass-to-ethanol production facility. The primary feedstock will be biomass ~~collected by~~ from the ~~IRC~~ county's curbside collection program, delivered to the county's collection centers, or delivered directly to the facility by the public ~~to one of the IRC collection centers~~. On an annual average, ~~yard waste~~ vegetative matter will make up approximately 90 percent of the feedstock. The remainder of the biomass feedstock will consist of clean woody C&D debris~~, currently collected by IRC in a dedicated cell at the sanitary landfill,~~ and ~~small amounts of~~ municipal solid waste (MSW) ~~used on a trial basis~~. In this permit, "MSW" refers to solid waste other than yard trash and clean debris, as those terms are defined at Rule 62-210.200, F.A.C. (see Appendix BMP).

The INEOS bio ethanol technology process will gasify the biomass feedstock. The organic material will not be directly combusted; instead, oxygen will be supplied to the gasifier which converts the feed material into a synthetic gas (syngas) consisting of carbon monoxide (CO), carbon dioxide (CO_2), hydrogen (H_2) and other hydrocarbons.

This syngas will not be directly combusted either. It will be cleaned and cooled and then fed into a fermentation system where proprietary bacterial metabolic action converts the syngas into ethanol. The ethanol will then be distilled, dehydrated, stored and loaded into dedicated ethanol tanker trucks. Off gases from the fermentation processes~~, however,~~ will be ~~treated~~ scrubbed and then routed to a vent gas boiler for combustion. Steam from the fermentation and distillation vent gas boiler—as well as steam from waste heat recovery at the gasifiers—will be routed to a turbine to generate electricity.

This project will consist of the following emissions units (EU).

EU ID No.	Emission Unit Description
001	Materials Handling Area
002	Feedstock Dryers No. 1 and No. 2
003	Gasification, Fermentation and Distillation Systems
004	Distillation Unit Fugitive Emissions
~~005~~	~~Desulfurization Unit Oxidation Tank~~
006	Vent Gas Boiler
007	Tank Farm
008	Loadout Flare
~~009~~	~~Gasifier Flare~~
010	Syngas Flare

This permit (0610096-002-AC) supersedes and replaces the previous construction permit issued for this project (0610096-001-AC). Major changes from the original construction permit consist of the following:

- Modified materials handling area (EU-001) to reflect four smaller diesel engines instead of one large engine.
- Updated fermentation and distillation system requirements (EU-003) to reflect two scrubbers instead of a single scrubber and desulfurization unit.
- Altered the MSW trial period (EU-003) so that instead of requiring a follow-on permit application to authorize routine processing of MSW, this permit will grant authority to process MSW on a routine basis—but only at feed rates for which compliance has been demonstrated.
- Authorized installation of a larger vent gas boiler (EU-006) and required installation of post-combustion controls (sorbent injection followed by a fabric filter).

- Increased the authorized capacity (gallons) of the product and denaturant storage tanks (EU-007).

Other minor changes from the original construction permit consist of typographical and administrative corrections in addition to the following:

- Updated contents and due date for the monthly operations summary.
- Added explicit definition of standard conditions (temperature and pressure).
- Clarified roadway sweeping requirement from "monthly" to "as required" (EU-001).
- Clarified that compliance tests for the feedstock dryers (EU-002) are required prior to operation permit renewal (i.e., not annually).
- Modified sorbent from lime to sodium bicarbonate for the dry gas cleaning (EU-003) and vent gas boiler (EU-006) systems.
- Modified the specifications and record keeping requirements for the loadout and syngas flares (EU-008 and EU-010).

This permit revokes the authority to construct the following EU:

(Former) EU ID No.	(Inactive) Emission Unit Description
005	Desulfurization Unit Oxidation Tank
009	Gasifier Flare

FACILITY REGULATORY CLASSIFICATION

- The facility is ~~not~~ a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act ~~(CAA)~~.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. (PSD).

1. Permitting Authority: The Permitting Authority for this project is the ~~Bureau of Air Regulation~~ Office of Permitting and Compliance in the Division of Air Resource Management of the Department (2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400). ~~The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's Central District Office at: 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767.~~ The Permitting Authority for permits to operate this facility is the Air Resource Section of the Department's Central District Office (3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767).

2. Compliance Authority: The Compliance Authority for this project is the Air Resource Section of the Department's Central District Office (3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767). All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Compliance Authority ~~Air Resource Section of the Department's Central District Office at: 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767~~.

3. Appendices: The following Appendices are attached as a part of this permit and must be complied with by the permittee:

   a. Appendix CF: Citation Formats, Acronyms and Glossary of Common Terms;
   b. Appendix GC: General Conditions;
   c. Appendix CC: Common Conditions;
   d. Appendix CTR: Common Testing Requirements;
   e. Appendix BMP: Best Management Practices;
   f. Appendix LDAR: Preliminary Leak Detection and Repair (LDAR) Program;
   g. Appendix GP: Identification of Applicable General Provisions from Title 40, Part 60 of the Code of Federal Regulation (C.F.R.) ~~40 C.F.R. 60~~;
   h. Appendix Kb: New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels, 40 C.F.R. 60, subpart Kb;
   i. Appendix VVa: NSPS for Equipment Leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI), 40 C.F.R. 60, Subpart VVa;
   j. Appendix AAAA: NSPS for Small Municipal Waste Combustion Units, 40 C.F.R. 60, subpart AAAA;
   k. Appendix IIII: NSPS for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. 60, subpart IIII; and
   l. Appendix ZZZZ: National Emission Standards for HAP (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 C.F.R. 63, subpart ZZZZ.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, ~~F.S.~~ Florida Statutes; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
[Rule 62-212.400(12), F.A.C.]

8. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority.
[Rules 62-4.030, 62-4.050 and 62-4.220, F.A.C. and Chapter 62-213, F.A.C.]

9. Monthly Operations Summary: By the last ~~tenth~~ calendar day of each month, the permittee shall record the following parameters in a written or electronic log for the previous month of operation. (For example, the monthly operations summary for June must be recorded by July 31.) The monthly operations summary shall be kept and made available to the Compliance Authority upon request.

~~a. Hours of operation and total heat input (MMBtu) for the vent gas boiler;~~

~~b. Tons of feedstock processed in the gasifier by type of material (biomass and MSW);~~

~~c. Cubic feet of syngas, natural gas and landfill gas fired in the vent gas boiler;~~

~~d. Ethanol production and final (denatured) ethanol product loadout (gallons); and~~

~~e. Updated 12-month rolling totals for each of these operating parameters.~~

~~The Monthly Operations Summary shall be kept and made available to the Compliance Authority upon request.~~

a. Gallons of ultra low sulfur diesel fuel used in the shredder and screen engines (see Condition 3.A.11);
b. Total combined dry tons of biomass and MSW feedstock processed in both dryers (see Condition 3.B.11);
c. Gallons of ethanol produced (see Condition 3.C.18);
d. Hours of operation and million British thermal units (MMBtu) of total heat input for the vent gas boiler (see Condition 3.E.13);
e. Standard cubic feet of syngas, natural gas and landfill gas fired in the vent gas boiler (see Condition 3.E.13);
f. Gallons of final (denatured) ethanol product loadout (see Condition 3.F.7);
g. Standard cubic feet of displaced vapors to the loadout flare and the duration of each flare event during the month (see Condition 3.G.7);
h. Standard cubic feet of displaced vapors to the syngas flare, the duration of each flare event during the month and the reason for flaring (see Condition 3.H.5); and

i. Updated 12-month rolling totals for each of these operating parameters.

[Rule 62-4.070(3), F.A.C.]

10. Annual Operating Report: The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year and submitted to the ~~appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office~~ Compliance Authority by April 1 of the following year.
[Rule 62-210.370(3), F.A.C.]
11. Reasonable Precautions to Prevent Emissions of Unconfined Particulate Matter (PM): The facility shall take the following reasonable precautions to prevent emissions of unconfined PM:
    a. All normally traveled roads on the site shall be paved.
    b. Access paths used exclusively for maintenance purposes may be unpaved.
    c. Speed limit signs will be posted.
    d. The unpaved areas of the facility shall be maintained and either sodded or landscaped as necessary.
    e. The conveyor systems outside of the materials handling area shall be fully enclosed.
    f. Hoods, fans, filters or similar equipment shall be used to contain, capture or vent particulate matter.
    g. The ash shall be wetted before being stored in the ash handling roll-off bins.

    [Rule 62-296(4)(c), F.A.C.]
12. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. Prior to the MSW trial period outlined in Condition ~~C.10~~ 3.C.11 of this permit, the permittee shall submit an odor control plan to the Compliance Authority that addresses how the facility will control MSW odors, such as through implementing a "first in/first out" material handling practice; storing MSW in an enclosed area; limiting on-site storage of MSW to 48 hours or less; or other procedures. After the conclusion of the MSW trial period, the permittee shall revise and resubmit the odor control plan to the Compliance Authority along with the results of any repeat testing as per Condition 3.C.11.c.
[Rule 62-296.320(2), F.A.C. and Rule 62-4.070, F.A.C. Reasonable Assurance]
13. Standard Conditions: As used in this permit, standard conditions refers to a temperature of 68 °F and a pressure of 14.7 pounds per square inch absolute (psia).
[Rule 62-210.200, F.A.C. Definition of "Standard Conditions"]
14. Dried Tons: As used in this permit, "dried tons" refers to solid material with 15 percent moisture content.
[Rule 62-4.070, F.A.C. Reasonable Assurance]

A. Materials Handling Area (EU-001)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
001	Materials Handling Area: Trucks deliver vegetative waste and clean woody construction debris to the tipping floor of the materials handling area. Vegetative waste is primarily yard waste or land clearing debris from the county's curbside collection program, ~~or yard waste or land clearing debris~~ delivered to the county's collection centers, or delivered directly to the facility by the public. The C&D debris is material diverted from a dedicated cell of the county landfill. MSW will be stored in accordance with the submitted odor control plan ~~an enclosed area~~. Vegetative waste and C&D debris will be stored outdoors on a hard-packed gravel area in windrows to provide for drying. ~~The grinder is powered by a Caterpillar C18 ACERT industrial diesel engine rated for 765 brake horsepower at 2100 revolutions per minute, or equivalent.~~ Feedstock preparation machinery will include two slow speed shredders (or grinders, referred to as shredders throughout this permit and associated documents) and two trommel screens.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS for Stationary Compression Ignition Internal Combustion Engines (Appendix IIII): 40 C.F.R. part 60, subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines—applies to the diesel engines powering the ~~grinder~~ shredders and screens. The permittee shall comply with the requirements of the NSPS, included as Appendix IIII. [Application No. 0610096-00~~1~~2-AC and ~~Rule 62-4.070(3), F.A.C. Reasonable Assurance~~ Rule 62-296.100(3), F.A.C.]

2. NESHAP for Stationary RICE (Appendix ZZZZ): 40 C.F.R. part 63, subpart ZZZZ—National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines—applies to the diesel engines powering the ~~grinder~~ shredders and screens. The permittee shall comply with the requirements of the NESHAP, included as Appendix ZZZZ. [~~Rule 62-4.070(3), F.A.C. Reasonable Assurance~~ Rule 62-296.100(3), F.A.C.]

EQUIPMENT

3. Feedstock System: The permittee is authorized to install the following major pieces of equipment for feedstock delivery, handling and processing:
   a. Tipping floor;
   b. Front-end loaders;
   c. Hard-packed gravel storage area for biomass (authorized feedstock other than MSW, see Condition ~~A.4~~ 3.A.4 of this permit);
   d. Paved storage area for MSW inside a building;
   e. Conveyer systems; and
   f. Relocateable shredding/~~grinding equipment including a stationary diesel engine~~ and screening equipment.~~; and~~
   ~~g. Screening equipment.~~

   [Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

4. Authorized Feedstock: Vegetative matter, yard waste, land clearing debris, untreated wood and MSW is authorized to be stored in the materials handling area. For purposes of this permit, "biomass" refers to authorized feedstock other than MSW. [Application No. 0610096-001-AC; Rule 62-210.200, F.A.C. Definitions of "Yard Waste," "Land

Clearing Debris," "Untreated Wood" and "Solid Waste"; and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

5. Restricted Operation: The hours of operation of this emissions unit are not limited (8,760 hours per year).
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

6. Restricted Fuel Use: The diesel engines ~~associated with the shredder/grinder is limited to using no more than 58,980 gallons of ultra low sulfur diesel fuel (maximum 15 ppm sulfur by weight) per year on a rolling 12-month basis~~ powering the shredders and screens shall be fired only with ultra low sulfur diesel fuel (maximum 15 ppm sulfur by weight). Fuel use for the two shredder engines is limited to no more than a combined total of 82,368 gallons per year on a rolling 12-month basis. Fuel use for the two screen engines is limited to no more than a combined total of 16,848 gallons per year on a rolling 12-month basis.
[Application No. 0610096-00~~1~~2-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

WORK PRACTICE STANDARDS

7. Feedstock Storage:
   a. Biomass shall be delivered directly to the tipping floor unless the tipping floor cannot accommodate additional material. The tipping floor shall be designed to accommodate feedstock for up to two days (48-hour period) of operation.
   b. Additional biomass shall be delivered to the hard-packed gravel storage area.
   c. Storage of MSW shall be in accordance with the submitted odor control plan ~~limited to an enclosed building~~.
   ~~d. Any MSW which has been at the facility for more than 48 hours shall be returned to the county landfill.~~

   [Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

8. Roadways: The plant roadways shall be paved and during dry conditions wetted sufficiently to maintain surface moisture to minimize fugitive dust emissions. Roadways shall be swept ~~at least monthly~~ as required with a vacuum sweeper in good working order to prevent the buildup of dirt and silt on the roadway surfaces. ~~A record of the sweeping shall be kept and made available to the Compliance Authority upon request.~~
[Application No. 0610096-001-AC; Rule 62-296(4)(c), F.A.C. Unconfined Emissions of Particulate Matter; and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

9. Traffic Control: The feedstock delivery vehicles shall be accepted at the site on a 12 hours per day (7:00 AM to 7:00 PM), seven days per week basis. Speed limit signs shall be posted. The feedstock delivery vehicles shall be weighed on entry and exit from the site.
[Application No. 0610096-001-AC; Rule 62-296(4)(c), F.A.C. Unconfined Emissions of Particulate Matter; and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

10. Treated Wood Management Plan: To ensure that wood treated with chromated copper arsenate is not included with the C&D debris delivered to the facility for use as feedstock, the permittee shall only accept shredded or mulched C&D debris from a source complying with a treated wood management plan meeting the requirements of Rule 62-701.730(20), F.A.C. The permittee shall implement the treated wood management plan in Appendix BMP to screen any C&D debris that is to be shredded or mulched at the facility, unless the delivered C&D debris has been screened at its source as per a treated wood management plan meeting the requirements of Rule 62-701.730(20), F.A.C.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

RECORDS AND REPORTS

11. Recordkeeping Requirements: The permittee shall maintain monthly records of ~~the amount of biomass and MSW feedstock delivered, on a tons per day, as-received basis and an annual average tons per day average. The permittee shall maintain monthly records of~~ ultra low sulfur diesel fuel use ~~in the grinder~~, and the permittee shall maintain fuel delivery receipts identifying the sulfur content of the delivered diesel fuel. These records shall be shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

B. Feedstock Dryers No. 1 and No. 2 (EU-002)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
002	Feedstock Dryers No. 1 and No. 2: The two feedstock dryers (Carrier Model QAD-3660S-20'-6"-5 HP or equivalent) receive feedstock from the storage piles and use low-pressure steam, provided by the boiler and heat recovery systems, to reduce the feedstock moisture to around 15 percent. The dryers use 8,960 pounds per hour of the steam to heat the inlet to about 250 °F. Flue gas from the dryers is vented to the atmosphere through a dust control system. PM emissions from the dryer exhaust are controlled with a baghouse. The dried feedstock is then sent to the gasifiers by way of a covered conveyor system.

EQUIPMENT

1. Feedstock dryers: The permittee is authorized to install two vibrating fluidized bed dryers that use low-pressure steam to reduce the feedstock moisture to approximately 15 percent.
   [Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

2. Air Pollution Control Equipment: To comply with the emission standards of this permit, the permittee shall install the following air pollution control equipment on each feedstock dryer.

   a. Baghouse: The permittee shall install a baghouse to remove PM emissions from the dryer exhaust. The baghouse shall be designed to achieve a PM emissions rate of 0.005 grains per dry standard cubic meter ~~(gr/dscm)~~.

   b. VOC control: The permittee is authorized to vent the dryer exhaust to a VOC control device, if necessary, to meet the VOC emission limit in ~~B.7~~ Condition 3.B.7. The choice and design of the control device, if needed, will be made after the initial compliance test data are available. The permittee shall submit the recommended design for a VOC control device to the Permitting Authority prior to installation.

   [Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

3. Enclosed Conveyor System: The permittee shall install an enclosed conveyor system to transport dried feedstock from the dryers to the gasification system.
   [Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

4. Permitted Capacity: ~~The total maximum permitted capacity for both dryers combined is 365 dried tons per day (15% moisture content) on an annual average basis.~~ Feedstock drying for both dryers combined is limited to an annual average throughput of no more than 425 tons per day (27 percent moisture content) on a rolling 12-month basis.
   [Application No. 0610096-00~~1~~2-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

   {Permitting Note: 425 tons per day at 27 percent moisture is equivalent to 365 tons per day at 15 percent moisture.}

5. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
   [Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

B. Feedstock Dryers No. 1 and No. 2 (EU-002)

EMISSIONS STANDARDS

6. Visible Emission ~~PM~~ Standard: Visible ~~PM~~ emissions from each feedstock dryer shall not exceed 5 percent opacity ~~0.005 gr/dscm~~.
[Application No. 0610096-001-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

7. VOC Standard: VOC emissions from each feedstock dryer shall not exceed 3.8 pounds per hour (lbs/hr).
[Application No. 0610096-001-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

TESTING REQUIREMENTS

8. Initial Compliance Tests: Each feedstock dryer stack shall be tested to demonstrate initial compliance with the ~~emissions~~ standards for visible emissions ~~PM~~ and VOC. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3), F.A.C. Reasonable Assurance and Rule 62-297.310(7)(a)1., F.A.C.]

~~9. Annual Compliance Tests: Prior to obtaining a renewed operation permit, each feedstock dryer stack shall be tested to demonstrate compliance for PM and VOC.~~
~~[Rule 62-4.070(3), F.A.C. Reasonable Assurance and Rule 62-297.310(7)(a)3., F.A.C.]~~

~~10. Waiver of Annual PM Test: The requirement to conduct an annual PM test is waived provided each feedstock dryer meets an alternative visible emissions standard of 5% opacity. In place of the annual PM test, the permittee shall conduct a visible emissions evaluation for each feedstock dryer stack.~~
~~[Rule 62-297.620(4), F.A.C.]~~

9. Compliance Tests Prior to Permit Renewal: Prior to obtaining a renewed operation permit, each feedstock dryer stack shall be tested to demonstrate compliance with the visible emissions and VOC emission limits in Conditions 3.B.6 and 3.B.7.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance and Rule 62-297.310(7)(a)3., F.A.C.]

10. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
~~5~~	~~Determination of Particulate Emissions~~
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in Appendix A of 40 C.F.R. 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other method may be used unless prior written approval is received from the Department.
[Rules 62-204.800 and 62-297.100, F.A.C. and Appendix A of 40 C.F.R. 60]

RECORDS AND REPORTS

11. Recordkeeping Requirements: The permittee shall maintain records of the amount of total combined biomass and MSW feedstock processed in both dryers on a ~~dry~~ tons per day basis and an annual average ~~dry~~ tons per day, rolling 12-month basis (27 percent ~~15%~~ moisture content). These records shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

C. Gasification, Fermentation and Distillation Systems (EU-003)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
003	Gasification, Fermentation and Distillation Systems: Two gasifiers heat feedstock through starved-air pyrolysis to produce syngas, a mixture of CO, CO_2, H_2 and other hydrocarbons. The syngas is cleaned and bubbled through the fermentation system. The distillation system extracts ethanol from the filtered fermentation broth. This emissions unit also includes equipment to accomplish waste heat recovery; dry gas cleaning; syngas quench and compression; and vent gas scrubbing ~~and sulfur removal~~.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS for Equipment Leaks of VOC (Appendix VVa): 40 C.F.R. part 60, subpart VVa—Standards of Performance for Equipment Leaks of VOC in the ~~Synthetic Organic Chemicals Manufacturing Industry~~ SOCMI for Which Construction, Reconstruction or Modification Commenced After November 7, 2006—applies to each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange or other connector that contains or contacts a process fluid that is at least 10 percent VOC by weight. It also applies to any devices or systems that it requires to be installed. The permittee shall comply with the requirements of the NSPS, included as Appendix VVa, for all subject equipment.
[Application No. 0610096-001-AC and Rule 62-296.100(3), F.A.C.]

2. Closed Vent Systems and Control Devices: During normal operation, off-gas from the fermentation and distillation systems shall be collected and routed via closed vent systems to ~~vent gas scrubbing and sulfur removal~~ scrubbers (the process vent gas scrubber or distillation overhead scrubber, respectively) prior to being routed to a control device. The control device for these streams shall be the vent gas boiler (EU-006).
[Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

3. ~~Temporary~~ Preliminary LDAR Program: Because the final list of subject equipment will not be known until the facility's design is complete, the permittee shall implement the preliminary LDAR program contained in Appendix LDAR until a final LDAR program is submitted to the Compliance Authority. The permittee shall submit the final LDAR plan and otherwise demonstrate compliance with the NSPS, included as Appendix VVa, within 180 days of initial startup.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

EQUIPMENT

4. Gasifiers: The permittee is authorized to install two gasifiers, each consisting of a two-stage, upper and lower gasification zone with a dedicated ram feeder to feed the dried feedstock. The gasifiers shall be equipped with emergency vent valves that can route syngas to the syngas flare (EU-010) in the event of emergencies such as a failure of the electrical supply to the plant or high pressure in the system caused by the blockage of downstream equipment. The permittee is authorized to install ancillary equipment to cool the syngas and to recover waste heat through the boiler feed water preheater.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

5. Dry Gas Cleanup Packages: The permittee is authorized to install ~~a~~ two dry gas cleanup packages, each of which consists of ~~lime and~~ activated carbon and sodium bicarbonate injection followed immediately by a fabric filter. Exhaust from the fabric filter is not emitted to the atmosphere, but is routed to syngas quench and compression.
[Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

6. Syngas Quench and Compression: The permittee is authorized to install a quench tower to further cool the cleaned and filtered syngas, an electrical driven gas compression system and ancillary equipment including a cooled water heat exchanger and a knock-out drum.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

7. Fermentation and Distillation System: The permittee is authorized to install a fermentation and distillation system consisting of fermentation vessels, distillation feed tank, distillation tower, reflux drum and dehydration system.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

8. Vent Gas Scrubbing: The permittee is required to install a ~~vent scrubber column to remove residual ethanol from the fermentation off-gas~~ process vent gas scrubber for the fermentation off-gases. Emergency release from the process vent gas scrubber shall be routed to the syngas flare (EU-010).
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

9. ~~Desulfurization Unit~~ Distillation Overhead Scrubbing: The permittee is required to install a ~~desulfurization unit that uses an iron chelate solution to remove hydrogen sulfide (H_2S) from the vent gas prior to combustion in the vent gas boiler~~ distillation overhead scrubber for the distillation and dehydration system off-gases. Emergency release from the process distillation area overhead scrubber shall be routed to the syngas flare (EU-010). Emergency release from the distillation system emergency relief valves may be vented to the atmosphere.
[Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

10. Primary Authorized Feedstock: Vegetative matter, yard waste, land clearing debris and untreated wood is authorized to be used as feedstock to the gasification system. Feedstock processing for both gasifiers combined is limited to an annual average throughput of no more than ~~183 dry~~ 365 dried tons per day ~~(15% moisture content) per gasifier, 365 dry tons per day (15% moisture content) total~~ on a rolling 12-month basis.
[Application No. 0610096-001-AC; Rule 62-210.200, F.A.C. Definitions of "Biomass," "Yard Waste," "Untreated Wood" and "Solid Waste"; and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

11. MSW Trial Period: During an MSW trial period not to exceed 120 continuous days, MSW is authorized to be used as a feedstock, alone or in combination with biomass, subject to the following requirements:

    a. Feedstock: The permittee may fire MSW alone or in combination with the biomass feedstock. MSW processing is limited to no more than ~~183~~ 365 dry tons per day for both gasifiers combined ~~(15% moisture content) per gasifier~~. A maximum of 10,950 dry tons of MSW ~~(15% moisture content)~~ is authorized to be processed during the MSW trial period.

    b. Notification: The permittee shall notify the Compliance Authority at least 30 days prior to commencement of the MSW trial period.

    c. Testing: The permittee shall conduct stack tests at the vent gas boiler stack (EU-006), ~~following~~ using the methods and procedures specified in Appendix AAAA, for the following pollutants: PM, lead, mercury, hydrogen chloride (HCl) and cadmium. ~~These tests shall be conducted while processing MSW in the gasifiers at the maximum anticipated rate for the trial period. If the MSW processing rate later exceeds the rate during the testing, the stack tests do not have to be repeated.~~ The permittee may repeat this testing during or after the MSW trial period so as to demonstrate compliance at different MSW feed rates.

    d. Report: ~~As part of any permit application to authorize the routine processing of MSW in the gasifiers, the permittee shall include a report that uses available monitor and stack test data to evaluate the impact of processing MSW on emissions of the following pollutants: NO_x, CO, SO_2, PM, lead, mercury, HCl and cadmium.~~ Prior to initiating routine processing of MSW in the

gasifiers as authorized by Condition 3.C.12, the permittee shall submit a report to the Compliance Authority that uses available monitor and stack test data to evaluate the impact of processing MSW on emissions of the following pollutants: nitrogen oxides (NO_X), CO, sulfur dioxide (SO_2), PM, lead, mercury, HCl and cadmium.

[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

12. MSW Feedstock: After submitting the report specified in Condition 3.C.11.d, MSW is authorized to be used as feedstock to the gasification system. MSW processing for both gasifiers combined is limited to a 12-month rolling annual average throughput of no more than 110 percent of the dried tons per day achieved for both gasifiers combined during the most recent testing conducted pursuant to Condition 3.C.11.c.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

13. Authorized Fuels: Natural gas and landfill gas are authorized to be fed to the gasifier bottom chamber start-up burners in order to bring the system up to temperature until the solid feed is started. During normal operation, butanol from the distillation system is authorized to be fed to the gasifier burners.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

14. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

15. Ethanol Production Rate: Ethanol production is limited to 8.00 million gallons per year on a rolling 12-month basis.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

{Permitting Note: The final product with the addition of a denaturant is limited to 8.42 million gallons per year.}

16. Ethanol Capture, Fermentation System: The process vent gas scrubber shall be designed to remove 95 percent of the residual ethanol from the ~~gas stream~~ fermentation system off-gases.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

~~16. Sulfur Removal: The desulfurization unit shall be designed to reduce H_2S to 50 parts per million by volume (ppmv) or less at the desulfurization unit exit.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]~~

17. Ethanol Capture, Distillation and Dehydration System: The distillation overhead scrubber shall be designed to remove 95 percent of the residual ethanol from the distillation and dehydration system off-gases.
[Application No. 0610096-002-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

RECORDS AND REPORTS

18. Recordkeeping Requirements: The permittee shall maintain records of the amount of ethanol produced (gallons per year) on a rolling 12-month basis. These records shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

19. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR of this permit.
[Rule 62-297.310(8), F.A.C.]

D. Distillation Unit Fugitive Emissions (EU-004)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
004	Distillation Unit Fugitive Emissions: Process vents from the fermentation, distillation and dehydration system are collected, and emissions are routed through closed vent systems to a control device (the vent gas boiler, EU-006). There will be some fugitive VOC emissions from the distillation unit, however, that are not captured and routed to control.

EQUIPMENT

1. Fermentation and Distillation System: The permittee is authorized to install a fermentation and distillation system (EU-003) as specified in Section 3.C of this permit ~~for EU-003~~.
   [Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
   [Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

3. Ethanol Production Rate: Ethanol production is limited to 8.00 million gallons per year on a rolling 12-month basis.
   [Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

   {Permitting Note: The final product with the addition of a denaturant is limited to 8.42 million gallons per year. Controlled VOC emissions from distillation are assumed to be 0.1161 lb VOC per 1000 gallons of ethanol produced. At 95 percent control and 8 million gallons per year of ethanol, this equates to 0.46 tons of fugitive VOC—primarily ethanol and butanol.}

E. Desulfurization Unit Oxidation Tank (EU-005)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
005	Desulfurization Unit Oxidation Tank: The iron chelate solution used to capture H_2S in the syngas stream may also capture VOC and then release those VOC from the oxidation tank during the air sparging process.

EQUIPMENT

1. Desulfurization Unit: The permittee is required to install a desulfurization unit that uses an iron chelate solution to remove H_2S from the vent gas prior to combustion in the vent gas boiler, as specified in Section 3.C of this permit for EU-003.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

3. Ethanol Production Rate: Ethanol production is limited to 8.00 million gallons per year.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

{Permitting Note: The final product with the addition of a denaturant will be limited to 8.42 million gallons per year. The VOC anticipated in the process gas stream will be mostly ethanol and butanol. The vent gas scrubber, which precedes the desulfurization unit, is designed to capture 95 percent of the ethanol from the vent gas streams from the fermentation and distillation processes. Though not designed to capture butanol, the scrubber is expected to remove at least 95 percent of butanol and other heavier compounds. In the worst case scenario, all VOC following the vent gas scrubber would be captured in the iron chelate catalyst medium of the desulfurization unit and would be subsequently released with the air used to sparge the oxidation tank. In this case, the ethanol production rate limitation would limit potential emissions of VOC from the desulfurization unit oxidation tank to 33.9 tons per year.}

E. ~~F.~~ Vent Gas Boiler (EU-006)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
006	Vent Gas Boiler: ~~The vent gas boiler is a CB Nebraska D Type industrial watertube boiler, Model NB-301D-65, or equivalent boiler with a nominal maximum heat input rate of 53.2 million British thermal units per hour (MMBtu/hr).~~ *Fuels*: During startup, the vent gas boiler fires landfill gas supplemented with natural gas. During normal operation, the boiler fires the vent gases collected from fermentation, distillation and dehydration. Vent gases are scrubbed ~~and sent through desulfurization~~ prior to combustion in the vent gas boiler. The vent gases may be supplemented with ~~desulfurized~~ landfill gases during normal operation. *Control Devices*: The vent gas boiler is equipped with low ~~nitrogen oxide~~ (NO_X) burners ~~and flue gas recirculation~~. ~~The vent gases and landfill gases routed to the boiler undergo significant cleaning prior to being combusted. There are no add-on air pollution control devices on the boiler exhaust.~~ Following combustion, sodium bicarbonate is injected into the flue gas immediately prior to a fabric filter. *Stack Parameters*: The vent gas boiler exhaust stack is ~~150~~ 80 feet tall and 2.5 feet in diameter. Flow rate at the vent gas boiler stack exit is approximately 18,000 ~~15,500~~ dry standard cubic feet per minute ~~(dscfm)~~ at ~~7%~~ percent oxygen (O_2). Exit velocity corresponding to this flow rate at the vent gas boiler stack is estimated to be 61 ~~52.5~~ feet per second ~~(ft/sec)~~.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS for Small Municipal Waste Combustion Units (Appendix AAAA): Each ~~gasification to vent gas boiler equipment train~~ equipment train (from gasifier to vent gas boiler) is a separate new municipal waste combustion unit for purposes of 40 C.F.R. part 60, subpart AAAA—Standards of Performance for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 31, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001. The permittee shall comply with the requirements of the NSPS, included as Appendix AAAA. The following requirements and specifications are relevant to NSPS applicability.
   a. The word "combust" in reference to the NSPS refers to the pyrolysis reaction in the gasifiers.
   b. Each municipal waste combustion unit (gasifier-to-vent gas boiler equipment train) has a capacity of greater than 35 but less than 250 tons per day of MSW.
   c. The municipal waste combustion units are "Class I Units" because the aggregate plant combustion capacity is 365 tons per day of MSW, which is greater than 250 tons per day.
   d. The municipal waste combustion units use activated carbon (in the dry gas cleanup packages) to control emissions of dioxin/furan and mercury.
   e. The NSPS emissions limits will apply at the vent gas boiler exhaust stack.
   f. Continuous monitors required by the NSPS will be located at the vent gas boiler exhaust stack.
   g. The municipal waste combustion units generate steam.
   h. With respect to NSPS-required monitoring of flue gas temperature, the inlets to the dry gas cleaning fabric filters are deemed to be the inlets to the PM air pollution control device.
   i. The municipal waste combustion units are deemed to be modular starved-air and excess air units.

   [Application No. 0610096-001-AC; Rule 62-296.100(3), F.A.C.; and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

2. NSPS for Equipment Leaks of VOC (Appendix VVa): The vent gas boiler is an enclosed combustion device for purposes of 40 C.F.R. part 60, subpart VVa—Standards of Performance for Equipment Leaks of VOC in the ~~Synthetic Organic Chemicals Manufacturing Industry~~ SOCMI for Which Construction, Reconstruction or Modification Commenced After November 7, 2006. The permittee shall comply with the requirements of the NSPS, included as Appendix VVa.
[Application No. 0610096-001-AC and ~~Rule 62-4.070(3), F.A.C. Reasonable Assurance~~ Rule 62-296.100(3), F.A.C.]

EQUIPMENT

3. Vent Gas Boiler: The permittee is authorized to construct a nominal ~~53.2~~ 84.5 MMBtu~~/hr~~ per hour watertube boiler for steam generation. The boiler will include low NO_X burners ~~and flue gas recirculation technology,~~ as well as a feed water heat exchanger, steam drum, turbine, stack and other ancillary equipment. The vent gas boiler shall be designed and operated to one of the following specifications:

   a. Reduce VOC emissions vented to the boiler with an efficiency of 95 percent or greater. ~~For the fermentation system vent gas, the uncontrolled inlet is specified to be upstream of the vent gas scrubber.~~ The uncontrolled inlets are specified to be upstream of the process vent gas scrubber for the fermentation off-gases and upstream of the distillation overhead scrubber for the distillation and dehydration system off-gases.

   b. Reduce VOC emissions vented to the boiler to an exit concentration of 20 ~~ppmv~~ parts per million by volume (ppmv) on a dry basis corrected to 3~~%~~ percent O_2.

   c. Provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

   [Application No. 0610096-00~~1~~2-AC; Appendix VVa; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

4. Sorbent Injection and Fabric Filter: The permittee is required to install a system to inject sodium bicarbonate into the flue gas. The permittee is required to install a fabric filter to collect PM and spent bicarbonate.
[Application No. 0610096-002-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

PERFORMANCE RESTRICTIONS

5. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

6. Authorized Fuels: The vent gas boiler is authorized to fire the following fuels: syngas, natural gas and landfill gas ~~that has been treated in the sulfur removal equipment~~. For purposes of this section of the permit (Section 3.~~F~~E), the term "syngas" includes the mixture of CO, CO_2, H_2 and other hydrocarbons resulting from the starved-air pyrolysis in the gasifiers as well as the off-gases from the fermentation and distillation systems.
[Application No. 0610096-001-AC]

7. Circumvention of Air Pollution Control Equipment: The permittee shall not circumvent any air pollution control equipment or allow the emission of air pollutants without the applicable air pollution equipment operating properly. Syngas shall not be routed to the vent gas boiler for combustion except through the gasifier-to-vent gas boiler equipment train, including dry gas cleaning (~~lime~~ sodium bicarbonate and activated carbon injection followed by fabric filtration)~~,~~ and vent gas scrubbing~~, and sulfur removal~~. If all or part of the gasifier-to-vent gas boiler equipment train is

inoperative, then syngas shall be routed to the syngas flare (EU-010) instead of the vent gas boiler. [Rule 62-210.650, F.A.C.]

8. Operation and Maintenance: The permittee shall monitor the vent gas boiler to ensure that it is operated and maintained in conformance with its design. [Paragraph 60.482-10a(e), Appendix VVa]

EMISSIONS STANDARDS

9. Emissions Standards: The NSPS for small municipal waste combustion units (Appendix AAAA) specifies emissions standards for the following pollutants: dioxins/furans, cadmium, lead, mercury, PM, HCl, NO_X, ~~sulfur dioxide (SO_2)~~ and CO. This NSPS also limits visible emissions. The permittee shall comply with the NSPS limits when the vent gas boiler is combusting any authorized fuel, including syngas generated from the gasification of C&D debris. [Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]
10. Continuous Monitoring Requirements: The permittee shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS), a continuous opacity monitoring system (COMS) and a diluent monitor (either O_2 or CO_2 monitor) to measure and record the emissions of SO_2, NO_X, CO and opacity from the vent gas boiler stack in the manner prescribed by the NSPS for small municipal waste combustion units (Appendix AAAA). Within one working day of discovering emissions in excess of a SO_2, NO_X or CO standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority. [Rule 62-4.070(3), F.A.C. Reasonable Assurance]

TESTING REQUIREMENTS

11. Initial and Annual Stack Tests: The permittee shall conduct initial and annual stack testing as specified by the NSPS for small municipal waste combustion units (Appendix AAAA). [Rule 62-4.070(3), F.A.C. Reasonable Assurance]
12. Initial and Annual VOC Performance Check: No later than 180 days after initial operation and annually during each federal fiscal year (October 1 to September 30) thereafter, the permittee shall determine compliance with Condition ~~F.3.a, F.3.b or F.3.c~~ 3.E.3.a, 3.E.3.b or 3.E.3.c. Any VOC stack testing performed pursuant to this condition shall be performed in accordance with the following reference test method.

Method	Description of Method and Comments
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above method is described in Appendix A of 40 C.F.R. 60 and is adopted by reference in Rule 62-204.800, F.A.C. No other method may be used unless prior written approval is received from the Department. [Rules 62-4.070(3), 62-204.800, 62-297.100 and 62-297.310(7)(a)3., F.A.C. and Appendix A of 40 C.F.R. 60]

RECORDS AND REPORTS

13. Recordkeeping Requirements: The permittee shall record the hours of operation and MMBtu of total heat input for the vent gas boiler. The permittee shall record the standard cubic feet of syngas, natural gas and landfill gas fired in the vent gas boiler. These records shall be kept and made available to the Compliance Authority upon request. [Rule 62-4.070(3), F.A.C. Reasonable Assurance]

14. Stack Test Reports: In addition to the information required in Appendix CTR, each stack test report shall also include the following information: heat input rate (MMBtu/hour), calculated authorized fuels firing rate by fuel type (cubic feet per minute), emissions rate (in the units of the applicable standard) and approximate gasifier feed rates by feedstock type, in dry tons per hour ~~(15% moisture content)~~.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

F. ~~G.~~ Tank Farm (EU-007)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
007	Tank Farm: • Product Storage Tank: ~~65,455~~ 94,755-gallon ethanol storage tank. The maximum true vapor pressure of ethanol at 32.4 °C (maximum monthly average temperature for Vero Beach) is 1.72 ~~pounds per square inch, absolute~~ (psia~~)~~. • Denaturant Storage Tank: ~~18,006~~ 19,800-gallon denaturant storage tank. The denaturant is gasoline with a nominal Reid vapor pressure of 9 psia.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS for Volatile Organic Liquid Storage Vessels (Appendix Kb): The product storage tank and the denaturant storage tank are subject to 40 C.F.R. part 60, subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984. The permittee shall comply with the requirements of the NSPS, included as Appendix Kb.
[Application No. 0610096-001-AC and Rule 62-296.100(3), F.A.C.]

EQUIPMENT

2. Storage Tanks: The permittee is authorized to install a nominal ~~18,006~~ 19,800-gallon denaturant storage tank and a nominal ~~65,455~~ 94,755-gallon tank to store the final ethanol product. The final ethanol product shall be a mixture of ethanol and 2 to 5 percent denaturant. The denaturant shall be gasoline with a nominal Reid vapor pressure of 9 psia.
[Application No. 0610096-002-AC]

3. Internal Floating Roofs: The storage tanks shall be equipped with fixed roofs in combination with internal floating roofs meeting the requirements of the NSPS, included as Appendix Kb.
[Application No. 0610096-001-AC]

PERFORMANCE RESTRICTIONS

4. Ethanol Throughput: Throughput of final ethanol product is limited to 8.42 million gallons per year on a rolling 12-month basis.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

5. Denaturant Throughput: Throughput of denaturant is limited to 0.42 million gallons per year on a rolling 12-month basis.
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

6. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year).
[Application No. 0610096-001-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

RECORDS AND REPORTS

7. Recordkeeping Requirements: The permittee shall maintain records of the amount of final (denatured) ethanol product throughput (gallons per year) on a rolling 12-month basis. These records shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

G. ~~H.~~ Loadout Flare (EU-008)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
008	Loadout Flare: Up to ~~128~~ 200 gallons of denatured ethanol per minute will be transferred to ethanol tanker trucks. Displaced vapor from the 8,000 gallon, dedicated ethanol tank trucks will be routed to the loadout flare.

EQUIPMENT

1. Loading Rack: The permittee is authorized to construct a product loading and metering system equipped with a loading rack designed to transfer ~~128~~ a nominal 200 gallons per minute of denatured ethanol product to nominal 8,000 gallon, ethanol-dedicated tank trucks.
   [Application No. 0610096-00~~1~~2-AC; Rule 62-4.070(3), F.A.C. Reasonable Assurance; and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

2. Loadout Flare: The permittee is required to construct an enclosed flare system ~~to capture and destroy vapors displaced during truck loadout~~ with a continuous natural gas pilot flame. The loadout flare shall be used to capture and destroy vapors displaced during truck loadout. The ~~flare used to comply with this permit shall comply~~ loadout flare shall comply with the requirements of 40 C.F.R. 60.18, included in Appendix GP.
   [Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

3. Restricted Operation: The hours of operation of the pilot flame for the flare system are not limited (8,760 hours per year). ~~Operation of the flare is limited to 3,120 hours per year.~~ Air flow routed to the flare is limited to 1.123 million standard cubic feet per year on a rolling 12-month basis. The flare shall be operated at all times when truck loading operations are taking place.
   [Application No. 0610096-00~~1~~2-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

   {Permitting Note: 1.123 million standard cubic feet of displaced vapors per year result from the loading of 8.42 million gallons per year of ethanol product into the tank trucks. With the loadout flare design provided by the permittee, the flare will operate at maximum loading less than 700 hours per year at the maximum design flow rate. The truck loading and gas flow rates to the flare may vary.}

4. Approximate Capacities: The flare system shall be designed to combust vapors displaced from the trucks during the loading of the denatured ethanol product. The trucks are assumed to be in dedicated denatured ethanol product service (i.e., only denatured ethanol product vapors will be displaced). The product loadout flare shall have a nominal rated capacity of ~~6~~ 3.4 MMBtu per hour. Natural gas will be used as the fuel for the pilot, which shall have a nominal rated capacity of 0.17 MMBtu per hour.
   [Application No. 0610096-00~~1~~2-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

TESTING AND MONITORING REQUIREMENTS

5. Visible Emission Compliance Tests: The flare system exhaust shall be tested to demonstrate initial compliance with the visible emission standard specified in 40 C.F.R. 60.18 no later than 180 days after initial operation and during each federal fiscal year (October 1 to September 30) thereafter. Testing shall be conducted as specified in 40 C.F.R. 60.18(f). Testing shall be conducted while tank trucks are being loaded.
   [Rule 62-4.070(3), F.A.C. Reasonable Assurance]

6. Operation and Maintenance: The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design. The permittee shall monitor the flow rate of displaced vapors to the flare.
[Application No. 0610096-002-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

RECORDS AND REPORTS

7. Records: The permittee shall record in a written or electronic log the monthly flow rate of displaced vapors to the flare, the duration of each flare event and the reason for flaring. These records shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

I. Gasifier Flare (EU-009)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
009	Gasifier Flare: The emergency gasifier flare is an enclosed flare with a natural gas fueled pilot light. Crude syngas is sent to the flare through an emergency vent valve when there is downstream blockage in the gasifier or when the power supply to the plant fails.

EQUIPMENT

1. Gasifier Flare: The permittee is authorized to construct an enclosed flare system with a continuous natural gas pilot flame. The flare used to comply with this permit shall comply with the requirements of 40 C.F.R. 60.18, included in Appendix GP.
[Application No. 0610096-001-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: The emergency gasifier flare is limited to 100 hours of operation per year.
[Application No. 0610096-001-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

TESTING AND MONITORING REQUIREMENTS

3. Visible Emission Compliance Tests: The flare system exhaust shall be tested to demonstrate initial compliance with the visible emission standard specified in 40 C.F.R. 60.18 no later than 180 days after initial operation and during each federal fiscal year (October 1 to September 30) thereafter. Testing shall be conducted as specified in 40 C.F.R. 60.18(f). Testing shall be conducted while venting syngas to the flare, if practical.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

4. Operation and Maintenance: The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

RECORDS AND REPORTS

5. Records: The permittee shall record in a written or electronic log the duration of each flare event and the reason for flaring. These records shall be shall be kept and made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C. Reasonable Assurance]

H. ~~J.~~ Syngas Flare (EU-010)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
010	Syngas Flare: The ~~emergency~~ syngas flare is ~~only~~ used to control vent gas emissions during system malfunctions when the vent gas boiler is unavailable. It has a natural gas fueled pilot light that operates continuously. ~~The largest streams that are routed to the flare are from syngas exiting the waste heat recovery, dry gas cleaning and desulfurization systems. The fermentation, distillation and dehydration systems also have emergency valves that can route to the flare.~~ The syngas flare also accepts vent gases from the gasifiers, syngas compression, dry gas cleaning, waste heat recovery and vent gas scrubbing.

EQUIPMENT

1. Syngas Flare: The permittee is authorized to construct an enclosed ground flare system with a continuous natural gas pilot flame. The syngas flare ~~used to comply with this permit~~ shall comply with the requirements of 40 C.F.R. 60.18, included in Appendix GP.
   [Application No. 0610096-00~~1~~2-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: ~~The emergency syngas flare is limited to 300 hours of operation per year.~~ Air flow routed to the syngas flare shall not exceed 232.6 million standard cubic feet per year on a rolling 12-month basis.
   [Application No. 0610096-00~~1~~2-AC and Rule 62-210.200, F.A.C. Definition of "Potential to Emit"]

   {Permitting Note: 232.6 million standard cubic feet per year flow corresponds to approximately 300 hours per year of operation at the design maximum flow rate.}

TESTING AND MONITORING REQUIREMENTS

3. Visible Emission Compliance Tests: The flare system exhaust shall be tested to demonstrate initial compliance with the visible emission standard specified in 40 C.F.R. 60.18 no later than 180 days after initial operation and during each federal fiscal year (October 1 to September 30) thereafter. Testing shall be conducted as specified in 40 C.F.R. 60.18(f). Testing shall be conducted while venting syngas to the flare, if practical.
   [Rule 62-4.070(3), F.A.C. Reasonable Assurance]

4. Operation and Maintenance: The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design. The permittee shall monitor the flow rate of displaced vapors to the flare.
   [Application No. 0610096-002-AC and Rule 62-4.070(3), F.A.C. Reasonable Assurance]

RECORDS AND REPORTS

5. Records: The permittee shall record in a written or electronic log the monthly flow rate of displaced vapors to the flare, the duration of each flare event and the reason for flaring. These records shall be shall be kept and made available to the Compliance Authority upon request.
   [Rule 62-4.070(3), F.A.C. Reasonable Assurance]

SECTION 4. APPENDIX BMP

BEST MANAGEMENT PRACTICES

Introduction

As per Condition A.4 of the permit, authorized feedstock for the INEOS New Planet BioEnergy (INPB) facility in Indian River County (IRC) consists of vegetative matter, yard waste, land clearing debris, untreated wood and municipal solid waste (MSW). These terms are defined in Rule 62-210.200, F.A.C.

- "Biomass" – Vegetative matter and untreated wood.
- "Yard Waste" – Vegetative matter resulting from landscaping and yard maintenance operations and other such routine property clean-up activities. It includes materials such as leaves, shrub trimmings, grass clippings, palm fronds, and brush.
- "Land Clearing Debris" – Uprooted or cleared vegetation resulting from a land clearing operation, including any untreated wood generated by the land clearing operation (e.g., untreated fence posts).
- "Untreated Wood" – Wood (including lighter pine, tree trunks, limbs and stumps, shrubs, and lumber) which is free of paint, glue, filler, pentachlorophenol, creosote, tar, asphalt, chromated copper arsenate (CCA), and other wood preservatives or treatments.
- "Solid Waste" – Includes garbage, refuse, yard trash, clean debris, white goods, special waste, ashes, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations.

This Appendix BMP contains best management practices related to materials separation, quality control and dust minimization. In this Appendix BMP, "feedstock" refers to any authorized feedstock at the facility; "vegetative matter" refers to yard waste and land clearing debris other than untreated wood; "construction and demolition (C&D) debris" refers to untreated wood other than yard waste and land clearing debris; and "MSW" refers to solid waste other than yard trash and clean debris. As such, the three non-overlapping categories of authorized feedstock are vegetative matter, C&D debris and MSW.

~~**Limited Use of MSW**~~

~~The routine feedstock for the INPB IRC facility consists of vegetative matter and C&D debris, blended together in varying ratios depending upon availability. On an annual average basis, the blend is approximately 90 percent vegetative matter with the remainder made up of C&D debris or MSW. The permit authorizes up to 100 percent use of MSW, but limits total MSW use to a maximum of 10,950 dry tons of MSW (15 percent moisture content). This represents the equivalent of 30 days of 100 percent MSW use.~~

Any material delivered to the facility that is not authorized by the permit as feedstock shall be collected and delivered to IRC Solid Waste Disposal District (SWDD) or to another disposal facility.

Vegetative Matter

Source: The vegetative matter is primarily yard waste from the IRC SWDD curbside collection program, supplemented by additional yard waste and land clearing debris delivered by the public directly to the county's customer convenience centers. Some vegetative matter may be delivered by the public to the INPB IRC facility.

Screening Prior to Shredding: Shredding may be performed either by the county before the vegetative matter is delivered to the facility or by the facility following delivery. Vegetative matter shall not be processed at the INPB IRC facility, however, unless it was collected under the following conditions:

- Personnel at scale houses or other receiving areas have been trained to prevent significant quantities of undesirable waste (more than 1 percent plastic, metal or other non-vegetative matter) from being disposed of in the vegetative matter stream.
- The public providing the yard waste have been educated in reducing the amount of plastic and garbage that is discarded with the yard waste through outreach activities such as posting signs at drop off areas.

Alternate Disposal: The permit authorizes a tipping floor, designed to accommodate a 48-hour period of operation (730 tons), with an additional hard-packed gravel overflow storage area for vegetative matter and C&D debris. The INPB IRC facility shall have the necessary agreements, logistics and procedures in place for at least one alternative disposal location should the storage capacity of the site be exceeded.

C&D Debris

Source: The C&D debris is primarily waste accepted by the IRC SWDD for disposal ~~in a dedicated cell in their landfill~~. Some C&D debris may be delivered by the public to the INPB IRC facility.

Screening Prior to Shredding: Shredding may be performed either by the county before the C&D debris is delivered to the facility or by the facility following delivery. To ensure that wood treated with chromated copper arsenate (CCA) is not included in the feedstock, C&D debris shall be processed at the facility under the following conditions:

- The C&D debris delivered from the county landfill shall be pre-screened under a wood management plan in compliance with Rule 62-701.730, F.A.C.
- Prior to on-site shredding, the C&D debris delivered directly to the INPB IRC facility shall be pre-screened under the Florida DEP "Guidance for the Management and Disposal of CCA-Treated Wood," August 10, 2005 draft or subsequent final version (attached).

Alternate Disposal: The permit authorizes a tipping floor, designed to accommodate a 48-hour period of operation (730 tons), with an additional hard-packed gravel overflow storage area for vegetative matter and C&D debris. The INPB IRC facility shall have the necessary agreements, logistics and procedures in place for at least one alternative disposal location should the storage capacity of the site be exceeded.

Municipal Solid Waste

Source: MSW to be used as feedstock will be waste diverted from the IRC SWDD Class I landfill or material delivered pre-shredded from a waste-to-energy facility. No MSW shall be delivered by the public to the INPB IRC facility.

Screening Prior to Shredding: Shredding may be performed either before the MSW is delivered to the facility or by the facility following delivery. Prior to on-site shredding, the INPB IRC facility shall develop and implement a detailed feedstock management plan to ensure removal of hazardous materials such as propane tanks from the waste.

~~Alternate Disposal: The permit authorizes a tipping floor, designed to accommodate a 48-hour period of operation (730 tons), with an additional enclosed, paved storage area for MSW, designed to accommodate two days of operation (730 tons). MSW shall be stored in the enclosed paved area, and any MSW which has been at the INPB IRC facility for more than 48 hours shall be returned to the county landfill.~~

Best Management Practices

In addition to the reasonable precautions to prevent emissions of unconfined particulate matter (PM) specified in the permit, the facility shall implement the following best management practices:

- The feedstock shall be delivered directly to the tipping floor.
- The feedstock shall not be sprayed with water to control dust emissions, unless water-spraying proves necessary to prevent emissions of unconfined PM.
- The feedstock piles shall be managed by front end loaders.
- Unnecessary movement of the piles shall be avoided to minimize fugitive emissions.
- The front end loaders shall feed the biomass or MSW to a conveyor system connected to the dryers.

NSPS, SUBPART KB – STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC LIQUID STORAGE VESSELS

~~Two tanks at the facility are subject to 40 C.F.R. part 60, subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. The NSPS applies to any storage tank with a capacity greater than or equal to 10,300 gallons that is used to store volatile organic liquids. The two tanks have a capacity greater than or equal to 40,000 gallons (nominal 72,727 gallons each) and store a liquid with a maximum true vapor pressure greater than 3.5 kilopascals (kPa). Consequently, the two tanks (product storage tank and denaturant storage tank) are subject to 40 C.F.R. part 60, subpart A (general provisions) as well as subpart Kb (storage vessels).~~

40 C.F.R. part 60, subpart Kb applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) (19,800 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction or modification is commenced after July 23, 1984. This subpart does not apply, however, to the following:

- Storage vessels with a capacity greater than or equal to 151 m^3 (39,900 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) (0.51 pounds per square inch absolute, psia), or
- with a capacity greater than or equal to 75 m^3 (19,800 gallons) but less than 151 m^3 (39,900 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psia).

The product storage tank will have a capacity of 94,755 gallons, and it will store material with vapor pressure greater than 0.51 psia, so it is subject to subpart Kb. The denaturant storage tank will have a capacity of 19,800 gallons, and it will store material with a vapor pressure greater than 2.18 psia, so it is also subject to subpart Kb. The other storage tanks at the INPB IRC facility are not subject to subpart Kb.

The complete provisions of subparts A and Kb may be provided in full upon request and are also available from the following links:

Link to Subpart A

Link to Subpart Kb

~~The feedstock grinder/shredder will be powered by a new Caterpillar C18 ACERT industrial diesel engine rated for 765 brake horsepower at 2100 revolutions per minute, or an equivalent engine from another manufacturer.~~

In the materials handling area (EU-001), the two shredders will be powered by model year 2011 Mercedes Benz OM 460 LA diesel-fired engines, or equivalent engines with respect to engine power output rating and emission rates. The two trammel screens will be powered by model year 2011 Daimler-Chrysler OM 904 LA diesel-fired engines, or equivalent engines with respect to engine power output rating and emission rates.

~~This engine is~~ These new engines are subject to the applicable requirements of 40 C.F.R. part 60, subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The provisions of this subpart may be provided in full upon request and are also available at the following link:

Link to Subpart IIII

~~The feedstock grinder/shredder will be powered by a new Caterpillar C18 ACERT industrial diesel engine rated for 765 brake horsepower at 2100 revolutions per minute, or an equivalent engine from another manufacturer.~~

In the materials handling area (EU-001), the two shredders will be powered by model year 2011 Mercedes Benz OM 460 LA diesel-fired engines, or equivalent engines with respect to engine power output rating and emission rates. The two trammel screens will be powered by model year 2011 Daimler-Chrysler OM 904 LA diesel-fired engines, or equivalent engines with respect to engine power output rating and emission rates. The emergency generator for the facility is an existing (1989 model year) Caterpillar 3412 diesel-powered unit, rated for approximately 500 kilowatts at about 750 horsepower.

These engines are subject to the applicable requirements of 40 C.F.R. part 63, subpart ZZZZ—National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The complete provisions of subpart ZZZZ may be provided in full upon request and are also available at the following link:

Link to Subpart ZZZZ

Scearce, Lynn

From: Scearce, Lynn
Sent: Tuesday, September 06, 2011 3:22 PM
To: 'david.king@ineos.com'
Cc: 'dan.cummings@ineos.com'; 'mark.niederschulte@ineos.com'; 'currojp@cdm.com'; 'hibbardcs@cdm.com'; 'hibbardcs@cdm.com'; 'janssenge@cdm.com'; 'Shine, Caroline'; 'abrams.heather@epa.gov'; Scearce, Lynn; Friday, Barbara; 'hopeforcleanwater@yahoo.com'
Subject: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit
Attachments: 0610096-002-AC, INEOS New Planet BioEnergy signature page 9-6-2011.pdf

Tracking:

Recipient	Delivery	Read
'david.king@ineos.com'		
'dan.cummings@ineos.com'		
'mark.niederschulte@ineos.com'		
'currojp@cdm.com'		
'hibbardcs@cdm.com'		
'hibbardcs@cdm.com'		
'janssenge@cdm.com'		
'Shine, Caroline'	Delivered: 9/6/2011 3:23 PM	
'abrams.heather@epa.gov'		
Scearce, Lynn	Delivered: 9/6/2011 3:22 PM	Read: 9/6/2011 3:46 PM
Friday, Barbara	Delivered: 9/6/2011 3:23 PM	Read: 9/6/2011 3:23 PM
'hopeforcleanwater@yahoo.com'		

Dear Mr. King:

Attached is the official **Notice of Draft Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention:

Owner/Company Name: INEOS NEW PLANET BIOENERGY
Facility Name: INPB IRC FACILITY
Project Number: 0610096-002-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: INDIAN RIVER

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0610096.002.AC.D_pdf.zip

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above,

or search for other project documents using the "*Air Permit Documents Search*" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .

Regards,

Lynn Scearce
Office of Permitting and Compliance (OPC)
Division of Air Resources Management
850-717-9025

Scearce, Lynn

From: Hibbard, Cynthia [HibbardCS@cdm.com]
Sent: Wednesday, September 07, 2011 12:55 PM
To: DeAngelo, Gregory
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill; Lanh, Tiffany; Scearce, Lynn
Subject: RE: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Greg –

Thank you VERY much.

- Cynthia

From: DeAngelo, Gregory [mailto:Gregory.DeAngelo@dep.state.fl.us]
Sent: Wednesday, September 07, 2011 12:24 PM
To: Hibbard, Cynthia
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill; Lanh, Tiffany; Scearce, Lynn; DeAngelo, Gregory
Subject: RE: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Cynthia, attached, please find an updated public notice of intent to issue air permit, with the typographical errors corrected (address and numbers for VOC, PM10 and PM2.5).

(Lynn, please replace the previous notice with this corrected version. Thanks!)

Please take a few minutes to share your comments on the service you received from the department by clicking on this link. DEP Customer Survey.

Greg DeAngelo
DARM // Office of Permitting & Compliance //
Administrator, Chemicals & Combustion Key Industry Group
Gregory.DeAngelo@dep.state.fl.us
(850) 717-9024 phone
(850) 717-9097 fax

From: Hibbard, Cynthia [mailto:HibbardCS@cdm.com]
Sent: Wednesday, September 07, 2011 11:32 AM
To: Lanh, Tiffany; DeAngelo, Gregory
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill
Subject: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Tiffany –

As we discussed, we would greatly appreciate it if we could change the applicant's authorized representative and mailing address (first paragraph) to: David King, President, INEOS New Planet BioEnergy, 925 74th Avenue
Vero Beach, FL 32968. (This is an update to the Texas address.)

We also have a question about the project description. The second paragraph lists tpy totals. We noticed that the totals for VOC, PM10 and PM 2.5 are different from the application values. The application had facility-wide totals of 80.8 TPY of VOC, 22.4 TPY of

PM10 and 20.0 TPY of PM2.5 (Attachment 3). I'll go through the Technical Evaluation, but we thought we would double-check on these.

Thanks in advance for sending a revised Public Notice with the new address.

- Cynthia

Cynthia Strong Hibbard
CDM | Vice President, Air & Climate Discipline Leader | 50 Hampshire Street | Cambridge, MA 02139 | Tel: 617.452.6244 | Cell: 617.797.2462 | hibbardcs@cdm.com

Scearce, Lynn

From: Scearce, Lynn
Sent: Wednesday, September 07, 2011 1:25 PM
To: Hibbard, Cynthia; DeAngelo, Gregory
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill; Lanh, Tiffany; dan.cummings@ineos.com; mark.niederschulte@ineos.com; currojp@cdm.com; Shine, Caroline; Scearce, Lynn; Friday, Barbara
Subject: RE: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections (0610096-002-AC, Draft Permit)

Click on the following link to access the revised public notice document:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0610096.002.AC.D_pdf.zip

Lynn

From: Hibbard, Cynthia [mailto:HibbardCS@cdm.com]
Sent: Wednesday, September 07, 2011 12:55 PM
To: DeAngelo, Gregory
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill; Lanh, Tiffany; Scearce, Lynn
Subject: RE: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Greg –

Thank you VERY much.

- Cynthia

From: DeAngelo, Gregory [mailto:Gregory.DeAngelo@dep.state.fl.us]
Sent: Wednesday, September 07, 2011 12:24 PM
To: Hibbard, Cynthia
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill; Lanh, Tiffany; Scearce, Lynn; DeAngelo, Gregory
Subject: RE: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Cynthia, attached, please find an updated public notice of intent to issue air permit, with the typographical errors corrected (address and numbers for VOC, PM10 and PM2.5).

(Lynn, please replace the previous notice with this corrected version. Thanks!)

Please take a few minutes to share your comments on the service you received from the department by clicking on this link. DEP Customer Survey.

Greg DeAngelo
DARM // Office of Permitting & Compliance //
Administrator, Chemicals & Combustion Key Industry Group
Gregory.DeAngelo@dep.state.fl.us
(850) 717-9024 phone
(850) 717-9097 fax

From: Hibbard, Cynthia [mailto:HibbardCS@cdm.com]
Sent: Wednesday, September 07, 2011 11:32 AM
To: Lanh, Tiffany; DeAngelo, Gregory
Cc: david.king@ineos.com; nigel.falcon@ineos.com; Janssen, Gretchen E.; Grimaldi, Jill
Subject: INEOS - Public Notice of Intent to Issue Air Permit - minor corrections

Tiffany –

As we discussed, we would greatly appreciate it if we could change the applicant's authorized representative and mailing address (first paragraph) to: David King, President, INEOS New Planet BioEnergy, 925 74th Avenue
Vero Beach, FL 32968. (This is an update to the Texas address.)

We also have a question about the project description. The second paragraph lists tpy totals. We noticed that the totals for VOC, PM10 and PM 2.5 are different from the application values. The application had facility-wide totals of 80.8 TPY of VOC, 22.4 TPY of PM10 and 20.0 TPY of PM2.5 (Attachment 3). I'll go through the Technical Evaluation, but we thought we would double-check on these.

Thanks in advance for sending a revised Public Notice with the new address.

- Cynthia

Cynthia Strong Hibbard
CDM | Vice President, Air & Climate Discipline Leader | 50 Hampshire Street | Cambridge, MA 02139 | Tel: 617.452.6244 | Cell: 617.797.2462 | hibbardcs@cdm.com

Scearce, Lynn

From: Hibbard, Cynthia [HibbardCS@cdm.com]
To: Scearce, Lynn
Sent: Wednesday, September 07, 2011 10:40 AM
Subject: Read: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

Your message was read on Wednesday, September 07, 2011 10:40:17 AM (GMT-05:00) Eastern Time (US & Canada).

Scearce, Lynn

From: Abrams.Heather@epamail.epa.gov
Sent: Tuesday, September 06, 2011 3:28 PM
To: Scearce, Lynn
Subject: Re: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

Got it

Heather Ceron
Air Permits Section
U.S. EPA - Region 4
61 Forsyth St. SW
Atlanta, Georgia 30303

Phone: 404-562-9185
Fax: 404-562-9019

From: "Scearce, Lynn" <Lynn.Scearce@dep.state.fl.us>
To: "david.king@ineos.com" <david.king@ineos.com>
Cc: "dan.cummings@ineos.com" <dan.cummings@ineos.com>, "mark.niederschulte@ineos.com" <mark.niederschulte@ineos.com>, "currojp@cdm.com" <currojp@cdm.com>, "hibbardcs@cdm.com" <hibbardcs@cdm.com>, "hibbardcs@cdm.com" <hibbardcs@cdm.com>, "janssenge@cdm.com" <janssenge@cdm.com>, "Shine, Caroline" <Caroline.Shine@dep.state.fl.us>, Heather Abrams/R4/USEPA/US@EPA, "Scearce, Lynn" <Lynn.Scearce@dep.state.fl.us>, "Friday, Barbara" <Barbara.Friday@dep.state.fl.us>, "hopeforcleanwater@yahoo.com" <hopeforcleanwater@yahoo.com>
Date: 09/06/2011 03:22 PM
Subject: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

Dear Mr. King:

Attached is the official Notice of Draft Permit for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt

of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention:

Owner/Company Name: INEOS NEW PLANET BIOENERGY Facility Name: INPB IRC FACILITY Project Number: 0610096-002-AC Permit Status: DRAFT Permit Activity: CONSTRUCTION Facility County: INDIAN RIVER

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0610096.002.AC.D_pdf.zip

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the
document(s) as soon as possible, and verify that they are accessible.
Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf).
Adobe Acrobat Reader can be downloaded for free at the following internet site:
<http://www.adobe.com/products/acrobat/readstep.html> .
Regards,
Lynn Scearce
Office of Permitting and Compliance (OPC) Division of Air Resources Management
850-717-9025

Scearce, Lynn

From: Microsoft Exchange
To: currojp@cdm.com; hibbardcs@cdm.com; janssenge@cdm.com
Sent: Tuesday, September 06, 2011 3:24 PM
Subject: Relayed: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

currojp@cdm.com

hibbardcs@cdm.com

janssenge@cdm.com

Subject: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

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Sent by Microsoft Exchange Server 2007

Scearce, Lynn

From: Microsoft Exchange
To: hopeforcleanwater@yahoo.com
Sent: Tuesday, September 06, 2011 3:23 PM
Subject: Relayed: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

hopeforcleanwater@yahoo.com

Subject: 0610096-002-AC, INEOS New Planet BioEnergy, Draft Permit

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Sent by Microsoft Exchange Server 2007