May 1, 2013

ELECTRONIC CORRESPONDENCE
bneff@ctsengines.com

Apogee Investment Partners LLC
3060 SW 2nd Ave.
Ft. Lauderdale, Fl 33315

Authorized Representative:
Brian Neff, CEO/Owner

Re: Project No. 0990700-001-AC
Apogee Investment Partners LLC
Aircraft Jet Engine Test Facility
DRAFT Air Construction Permit

Dear Mr Neff:

On February 13, 2013, you submitted an application requesting air construction permit for the construction of Aircraft Jet Engine Test Facility. The facility will consist of a jet engine test stand and two 20,000-gallons fuel storage tanks. This facility will be located in Palm Beach County at 18855 Bee Line Highway in Jupiter, Florida. Enclosed are the following documents: the Technical Evaluation and Preliminary Determination; the Draft Permit and Appendices; the Written Notice of Intent to Issue Air Permit; and the Public Notice of Intent to Issue Air Permit. 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 contact the project engineer, Laxmana Tallam, P.E., at (561) 837-5900.

Sincerely,

James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

Apogee Investment Partners LLC
3060 SW 2nd Ave.
Ft. Lauderdale, Fl 33315

Authorized Representative:
Brian Neff, CEO/Owner

Project No. 0990700-001-AC
DRAFT Air Construction Permit
Palm Beach County, Florida

Aircraft Jet Engine Test Facility
Project: To construction of a jet engine test stand and two 20,000-gallons storage tanks

Facility Location: Apogee Investment Partners LLC proposes to construct a new Aircraft Jet Engine Test Facility to be located at 18855 Bee Line Highway in Jupiter, Florida in Palm Beach County.

Project: The Aircraft Jet Engine Test Facility will consist of a jet engine test stand and two 20,000-gallons above ground storage tanks. The facility plans to conduct several jet engine tests at the test stand and the two storage tanks will be used for storing Jet-A distillate fuel that will be used for the testing activities. The primary purpose of the tests is to ensure the airworthiness of the engine at test.

The emissions of nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) are calculated by using the emissions rates provided by the original equipments manufacturers prior to the testing of each engine. The emissions of particulate matters (PM_{10}), sulfur dioxides (SO_2) and hazardous air pollutants (HAPs) are calculated by using the emissions factor provided in US EPA AP-42 for combustion turbines. No external control equipment will be installed. According to the facility, no external control equipment beyond within the engine itself can be employed and meet air worthiness test criteria.

The facility proposes to limit the emissions of nitrogen oxides (NOx) to 171.20 tons per consecutive 12-months period (rolling total) to escape the Prevention of Significant Deterioration (PSD) review under Rule 62-212.400, F.A.C. The facility proposes to use 1,501,943 gallons to be used in the facility per consecutive 12-months period. The sulfur content of the Jet-A distillate fuel stored in the storage tanks and used for the tests will be equal or less than 0.3% by weight. Other pollutants associated with the engine tests are also indirectly capped at levels less than 50% of the PSD major source threshold.

Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

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, 62-212 and 62-213 of the Florida Administrative Code (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 Permitting Authority responsible for making a permit determination for this project is the Florida Department of Health Palm Beach County (Health Department). The Permitting Authority's physical address is: 800 Clematis Street, West Palm Beach, Florida 33402. The Permitting Authority's mailing address is: P.O. Box 29, West Palm Beach, Florida 33402. The Permitting Authority's telephone number is (561) 837-5900.

The Florida Department of Environmental Protection (DEP) has permitting jurisdiction for this project pursuant to Section 403.087 of the Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the DEP recognizes the Health Department as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County. Accordingly, the Health Department issues this permit under the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.).

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 Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue 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 appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 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 above address or phone number. 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 the 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 Permitting Authority's Legal Office, located at 800 Clematis Street in West Palm Beach, Florida, 33402 (Telephone: (561) 837-5900). 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. If there are none, the petition must so state; (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 West Palm Beach, Florida
For the Division Director
Environmental Public Health
Department of Health Palm Beach County

James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health

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) 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 5·1·13 to the persons listed below.

Brian Neff, Apogee Investment Partners LLC (bneff@ctsengines.com)
Stephen Green, P.E., EDF, Inc. (sgreen@edfinc.com)
Joe Lurix, FDEP/SED (Joe.Lurix@dep.state.fl.us)

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.

Ernestine L Watkins 5·1·13
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Health Palm Beach County
DRAFT Air Construction Permit
Project No. 0990700-001-AC
Apogee Investment Partners LLC
Aircraft Jet Engine Test Facility
Palm Beach County, Florida

Applicant: The applicant for this project is Apogee Investment Partners LLC. The applicant's authorized representative and mailing address is: Brian Neff, CEO/Owner, Apogee Investment Partners LLC, Aircraft Jet Engine Test Facility, 3060 SW 2nd Avenue, Ft. Lauderdale, FL, 33315.

Facility Location: Apogee Investment Partners LLC proposes to construct a new Aircraft Jet Engine Test Facility to be located in Palm Beach County at 18855 Bee Line Highway in Jupiter, Florida.

Project: The Aircraft Jet Engine Test Facility will consist of a jet engine test stand and two 20,000-gallons above ground storage tanks. The facility plans to conduct several jet engine tests at the test stand and the two storage tanks will be used for storing Jet-A distillate fuel that will be used for the testing activities. The primary purpose of the tests is to ensure the airworthiness of the engine at test.

The emissions of nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) are calculated by using the emissions rates provided by the original equipments manufacturers prior to the testing of each engine. The emissions of particulate matters (PM_{10}), sulfur dioxides (SO_2) and hazardous air pollutants (HAPs) are calculated by using the emissions factor provided in US EPA AP-42 for combustion turbines. No external control equipment will be installed. According to the facility, no external control equipment beyond within the engine itself can be employed and meet air worthiness test criteria.

The facility proposes to limit the emissions of nitrogen oxides (NOx) to 171.20 tons per consecutive 12-months period (rolling total) to escape the Prevention of Significant Deterioration (PSD) review under Rule 62-212.400, F.A.C. The facility proposes to use 1,501,943 gallons to be used in the facility per consecutive 12-months period. The sulfur content of the Jet-A distillate fuel stored in the storage tanks and used for the tests will be equal or less than 0.3% by weight. Other pollutants associated with the engine tests are also indirectly capped at levels less than 50% of the PSD major source threshold.

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, 62-212 and 62-213 of the Florida Administrative Code (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 Permitting Authority responsible for making a permit determination for this project is the Florida Department of Health Palm Beach County (Health Department). The Permitting Authority's physical address is: 800 Clematis Street, West Palm Beach, Florida 33402. The Permitting Authority's mailing address is: P.O. Box 29, West Palm Beach, Florida 33402. The Permitting Authority's telephone number is (561) 837-5900.

The Florida Department of Environmental Protection (DEP) has permitting jurisdiction for this project pursuant to Section 403.087 of the Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the DEP recognizes the Health Department as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County. Accordingly, the Health Department issues this permit under the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.).

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 physical address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and information submitted by the applicant (exclusive of confidential records under Section 403.111, F.S.). Interested persons may contact the Permitting Authority's project engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/emission/apds/default.asp.

(Public Notice to be Published in the Newspaper)

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 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 Permitting Authority's Legal Office, located at 800 Clematis Street in West Palm Beach, Florida, 33402 (Telephone: (561) 837-5900). 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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 for this proceeding.

(Public Notice to be Published in the Newspaper)

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Apogee Investment Partners LLC
3060 SW 2nd Ave.
Ft. Lauderdale, FL 33315

Aircraft Jet Engine Test Facility
Facility ID No. 0990700

PROJECT

Project No. 0990700-001-AC
Application for Initial Air Construction Permit
Aircraft Jet Engine Test Facility

COUNTY

Palm Beach, Florida

PERMITTING AUTHORITY

Florida Department of Health Palm Beach County
Division of Environmental Public Health
Air & Waste Section
800 Clematis Street, P.O. Box 29
West Palm Beach, FL 33402

May 1, 2013

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (DEP) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

In accordance with Section 403.182, F.S., the Florida Department of Environmental Protection (DEP) recognizes the Florida Department of Health Palm Beach County (Health Department) as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

Apogee Investment Partners LLC proposes to construct a new Aircraft Jet Engine Test Facility, which is categorized under Standard Industrial Classification Code No. 8734. The facility will be located in Palm Beach County at 18855 Bee Line Highway in Jupiter, Florida. The UTM coordinates of the new facility are Zone 17, 567.761 km East, and 2978.127 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- 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.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The Aircraft Jet Engine Test Facility (facility), owned by Apogee Investment Partners LLC, will be located within a zoned Industrial area, adjacent and northwest of existing Matheson Tri-Gas Facility, at 18855 Bee Line Highway, Jupiter, FL 33478 in Palm Beach County. The site is accessible by Bee Line Highway.

The facility was initially determined to be exempt from air permit requirements based upon the expected low fuel consumption of 7,200 gallons in a year. A generic facility exemption from air permit requirement was issued by Department of Health Palm Beach County on September 26, 2012. The construction of infrastructure and support service began after the issuance of the permit exemption. Since beginning design and construction of the project, the facility realized the potential demands and planned to increase the fuel consumption. The facility has now applied for air construction permit application.

In this air construction permit application, the facility has proposed to construct the testing facility that will consist of one Jet Engine Test Stand and two above ground 20,000 gallons horizontal fuel tanks. The test stand is designed to support different types of testing of different jet engines. Fuel tanks are used for storage of Jet-A distillate fuel to support aircraft jet engine testing. All the tests conducted at the test stand will use Jet-A distillate fuel with sulfur content equal or less than 0.3% by weight.

Nitrogen oxides (NOx) emissions, along with other products of combustion are generated during the jet engine testing conducted at the test stand. The test engines are fired on Jet-A distillate fuel.

The facility is classified as a new synthetic-minor source under the Federal and State preconstruction review regulations (40 CFR 52.21, Chapters 62-210.300, 62-212.300, and 62-212.400, F.A.C.) based on potential emissions of nitrogen oxides more than 100 tons per year, but less than 250 tons per year. The facility has requested the emissions cap for Nitrogen oxides (NOx) limited to 171.20 tons per consecutive 12-month period. The facility is classified as a major source under the Title V operating permit program (40 CFR Part 70 and Chapter 62-210.200, F.A.C.), and a minor source under the Title III or hazardous air pollutant program (Title III of the 1990 CAAA). The facility is further classified as a synthetic-minor source of the Hazardous Air Pollutants (HAPs) with maximum individual HAP emissions less than 10 tons per year and total HAPs emissions of less than 25 tons per year. The emissions of Hazardous Air Pollutants (HAPs) are based on the maximum expected fuel usage of 1,501,943 gallons in any consecutive 12-month period.

Processing Schedule

02-10-2013:	Health Department received application for Air construction permit
02-11-2013:	Health Department received EPSAP P.E. Signature Document
02-12-2013:	Health Department received revised application for Air construction permit
02-13-2013:	Health Department received the processing fees for an emissions unit having potential emissions of 100 or more tons per year of any single pollutant
02-28-2013:	Health Department issued a Request for Additional Information
04-04-2013:	Health Department received the response of the Request for Additional Information

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if

it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The Florida Department of Environmental Protection regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as approved by EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required only in areas currently in attainment with the National Ambient Air Quality Standards (NAAQS) or areas designated as "unclassifiable" for a given pollutant. A facility is considered "major" with respect to PSD if it emits or has the potential to emit:

$\geq$ 250 tons per year of any regulated pollutant, or
$\geq$ 100 tons per year of any regulated pollutant and belonging to one of 28 PSD Major Facility Categories, or
$\geq$ 5 tons per year of lead

Emissions of nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) are calculated by using the emissions rates provided by the original equipment manufacturer to the facility before the engines are tested. The emissions rates for each engine are dependent on its specific fuel flow rate and the ambient temperature during the test. Other criteria pollutants such as particulate matters (PM_{10}), sulfur dioxide (SO_2) and hazardous air pollutants (HAPs) are calculated using the emissions rates from AP-42. The facility proposes to cap the emissions limit of nitrogen oxides (NOx) to 171.20 tons per consecutive 12-month period (rolling total) to escape PSD requirements.

Summary of Potential-to-Emit (PTE):

Pollutant	**Proposed Potential Emissions (TPY)**	PSD Major Source Threshold **(TPY)**	**PSD Major Source?**	**Subject to PSD?**
Nitrogen Oxide	171.20	250	No	No
Carbon Monoxide	31.83	250	No	No
PM 10	2.12	250	No	No
Volatile Organic Compounds (VOC)*	0.687	250	No	No
Sulfur Dioxide	3.44	250	No	No
Hydrocarbons	2.03	NA	No	No
PAH	0.004	NA	No	No
Total HAPs	0.162	NA	No	No

** The proposed potential emissions of VOC is the sum of VOC emissions from jet engine test stand (0.65 tons/year) and storage tanks (0.037 tons/year).*

State Requirements

The proposed project is subject to preconstruction review under the applicable provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). This facility is located in Palm Beach County, an area designated as "maintenance" for the pollutant ozone and attainment for all other criteria pollutants in accordance with Rule 62-204.340, F.A.C. The proposed project is exempt from review under Rule 62-212.400 F.A.C., Prevention of Significant Deterioration (PSD). The proposed facility shall comply with all applicable provisions of the Florida Administrative Code and, specifically, the following chapters and rules:

F.A.C. Chapter 62-4	- Permitting Requirements.
F.A.C. Chapter 62-204	- Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
F.A.C. Chapter 62-210	- Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
F.A.C. Chapter 62-212	- General Preconstruction Review Requirements, PSD Requirements
F.A.C. Chapter 62-213	- Operation Permits for Major Sources of Air Pollution
F.A.C. Chapter 62-256	- Open Burning and Frost Protection Fires
F.A.C. Chapter 62-257	- Asbestos Program
F.A.C. Chapter 62-296	- General Pollutant Emission Limiting Standards.
F.A.C. Chapter 62-297	- Test Methods

Federal NESHAP Provisions

The proposed project shall comply with all applicable provisions of the following National Emission Standards for Hazardous Air Pollutants (NESHAP) rule:

40 CFR 61, Subpart M	- Asbestos

3. APPLICATION REVIEW

Discussion of Emissions

The facility will consist of a jet engine test stand and two 20,000-gallons above ground storage tanks. The test stand will support different jet engines' testing and the two storage tanks will be used for storing Jet-A distillate fuels that will be used for the testing.

Jet engine test stand

The primary purpose of the testing to be performed in the test stand is to ensure the airworthiness of the engine. Different tests, each with its own cycle definition and cycle count, will be performed at the test stand. The emissions from the facility are generated from the burning of Jet-A distillate fuel during these tests at the test stand. Emissions of nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) from the jet engine tests are calculated by using the emissions rates provided by the original equipment (testing engine) manufacturers (OEM). These emissions rates are obtained by the facility before the tests are conducted.

Each jet engine has its own emissions rates for specific fuel flow rate and the ambient air temperature during the test performed. The OEM performs specific tests at their facilities to collect extensive data detailing these emissions rates. A typical emissions rates data set will contain 20-40 points of fuel flow and measured emissions across the operating range of the engine for different ambient temperature. This type of data is proprietary for each equipment manufacturer. The OEM provides these emissions rates to the facility for each engine before the test is performed. The facility will utilize the emissions rates to calculate the actual emissions during the test. Emissions rates between measured data points are approximated by linear interpolation. The facility informed that due to the nature of these testing the use of traditional emissions measurement equipment will adversely affect the test goals.

The emissions of nitrogen oxides (NOx), carbon monoxide (CO) and hydrocarbons (HC) resulting from each cycle is calculated using the following formula:

$$Total_{cycle} = \sum_{n=1}^{k} rate_n \times duration_n$$

Where:

N = current step in the cycle
K = total number of steps in the cycle
$rate_n$ = emission rate at the fuel flow of step n and ambient temperature
$duration_n$ = scheduled length of time of step n

Other emissions such as particulate matters (PM_{10}), sulfur dioxides (SO_2) and hazardous air pollutants are calculated by using the emissions factor for stationary gas turbines from US EPA AP-42.

Two 20,000-gallons fuel tanks

The emissions of VOC are also generated from the breathing losses and working losses at the two 20,000-gallons above ground storage tanks. The emissions calculation provided by the facility shows that the total VOC emissions from these two tanks would be 73.68 lbs per year. The emissions unit emits less than 1,000 pounds per year of single hazardous air pollutant and it is not subject to any unit-specific requirements. Therefore, pursuant to Rule 62-210.300(b)1.,F.A.C., this emissions unit is exempt from any requirement to obtain air construction permit.

Emissions Calculations

Table 1, below details the total fuel consumption and total emissions for a single cycle for each of the possible expected engine/cycle combinations for ambient temperature of 59 degree Fahrenheit. The adjustments to the emissions per a change of 1 degree Fahrenheit are also provided in the table below.

Table 1 - Emissions per cycle								
		Total per cycle (std temp)				adjustment / deg F		
	Temp	Fuel	NOx	CO	HC	NOx	CO	HC
Model/Cycle	deg F	gallons	lbs	lbs	lbs	lb/deg	lb/deg	lb/deg
Engine 1 (small)	59.0	**100.4**	16.589	**2.237**	0.228	0.029	-0.033	-0.005
Engine 2 (small)	59.0	93.5	**19.335**	2.039	**0.375**	0.106	-0.012	-0.003
Engine 3 (large)	59.0	**144.6**	**27.766**	6.197	0.219	0.320	-0.080	-0.003
Engine 4 (large)	59.0	141.3	19.026	**9.327**	**0.461**	0.301	-0.092	-0.004
MRO Cycle	59.0	1,314.4	237.489	33.592	7.776	1.431	-0.158	-0.044

Engine 1 – 4 require multiple cycles per test. Cycle length and facility logistical limitations allow for the completion of up to 1,000 cycles per month (running 2 shifts per day during the standard work week). The largest emissions per cycle for small engines and large engines are shown in **bold**.

MRO tests require 1 cycle per test. Table 1 includes the highest expected emission MRO engine/cycle combination. The volume of MRO testing is dependent upon workflow within the MRO business unit. Over the next 3 years this is expected to be well less than 2 MRO tests per month. Logistical limitations, largely the time required to exchange engines on the test stand, prevents the ability to perform any more MRO tests without corresponding significant decrease in the number of cycles run for Engines 1-4.

Table 2 below details projected maximum monthly emissions based upon the possible scenarios of the planned testing and average daily temperatures for the month that testing take place.

Table 2 - Projected Maximum Emissions					
	Temp*	Fuel	NOx	CO	HC
Month	deg F	gallons	tons	tons	tons
Jan	62.5	103,062	10.097	4.535	0.232
Feb	63.0	103,062	10.125	4.511	0.231
Mar	67.0	103,062	10.343	4.328	0.223
Apr	75.0	103,062	10.776	3.962	0.208
May	81.5	147,261	17.758	1.065	0.127
Jun	85.6	147,261	18.425	0.954	0.108
Jul	86.0	147,261	18.481	0.945	0.107
Aug	85.5	147,261	18.406	0.957	0.109
Sep	85.1	147,261	18.338	0.968	0.111
Oct	80.5	147,261	17.599	1.092	0.131
Nov	75.3	103,062	10.795	3.946	0.207
Dec	61.8	103,062	10.057	4.569	0.233
12 mo. Total		1,501,943	**171.20**	31.83	2.03

- *6 months of Engine 3 or 4 (large engine, fuel & NOx max Engine 3 May-Oct, CO&HC max Engine 4 Nov-April)*
- *6 months of Engine 1 or 2 (small engine, NOx & HC max Engine 2, fuel & CO max Engine 1, remaining months)*
- *2 MRO engines per month*

**Average monthly temperatures calculated from published hourly temperatures from Palm Beach International Airport for the year 2010 between 7 am and 11 pm. The test runs will be executed primarily during 1st & 2nd shift operations. When 3rd shift running is required, the resulting lower air temperatures would result in further reduction of the total NOX emitted. Lower temperatures result in higher emissions of CO & HC, however the few occurrences of expected 3rd shift runs will result in a negligible increases and well within the conservatism of the projected totals presented here.*

The emissions of particulate matters (PM_{10}), sulfur dioxides (SO_2) and hazardous air pollutants (HAPs) are calculated by using the emissions factor provided in US EPA AP-42 for combustion turbines. Tables 3.1-2a, 3.1-4, and 3.1-5 were all based upon engines running at high loads (≥ 80 percent load) only. Therefore, the background document "Emission Factor Documentation for AP-42 section 3.1 Stationary Gas Turbines April 2000" was utilized for more factors similar to the facility's running conditions. Factors for "All Loads" of Table

3.4-2 in the background document were most appropriate for the application. Based upon the maximum expected fuel usage of 1,501,943 gallons/year, total SO_2, PM_{10} and HAPs were calculated.

Sulfur dioxide (SO_2) and particulate matters (PM_{10}) are calculated as shown below:

Table 3 - Projected Emissions			
Pollutant	**Emissions Factor**	**Fuel Consumption**	**Total Emissions**
	(lbs/1000 gals)	*(gallons/year)*	*(tons/year)*
Sulfur dioxide (SO_2)	4.58	1,501,943	3.44
Particulate Matters (PM_{10})	2.82	1,501,943	2.12

HAPs were calculated according to the rates/1,000 gallons also provided in Table 3.4-2, totaled into a single factor below:

Table 4		
HAP Emissions Factors from Table 3.4-2		
HAP Factors	**($x10^{-3}$ lbs per 1,000 gal)**	**TPY**
1,3-Butadiene (VOC)	2.30	0.002
1,4-Dichlorobenzene (VOC)	4.12	0.003
Acetaldehyde (VOC)	4.21	0.003
Arsenic	1.53	0.001
Benzene	7.62	0.006
Beryllium	0.0427	0.000
Cadmium	0.521	0.000
Carbon Tetrachloride (VOC)	4.25	0.003
Chlorobenzene (VOC)	3.46	0.003
Chloroform (VOC)	3.55	0.003
Chromium	1.53	0.001
Ethylene Dichloride (VOC)	2.81	0.002
Formaldehyde (VOC)	30.41	0.023
Lead	1.87	0.001
Manganese	110.00	0.083
Mercury	0.167	0.000
Naphthalene (VOC)	4.89	0.004
Nickel	2.26	0.002
Polycyclic Aromatic Hydrocarbons (PAH)	5.61	0.004
Selenium	4.00	0.003
Tetrachloroethylene (VOC)	4.50	0.003
Trichloroethylene (VOC)	3.82	0.003
Vinyl Chloride (VOC)	7.33	0.006
Vinylidene Chloride (VOC)	2.81	0.002
TOTAL HAP factor ($x10^{-3}$ lbs per 1,000 gal)	**216.22**	0.162

$$HAP_{Total} = 216.2x10^{-3}\left(\frac{lbs}{1000gallons}\right)\times 1{,}501.9\left(\frac{1{,}000gallons}{year}\right)\times\frac{1ton}{2{,}000lbs} = 0.162\frac{tons}{year}$$

NOx Emissions Cap

Based on Table 2 – Projected Maximum Emissions, Nitrogen oxides is the highest emitted pollutant from the facility in a given year compared to other criteria pollutants. The facility has requested the emissions cap for Nitrogen oxides (NOx) limited to 171.20 tons per year. The emissions of Nitrogen oxides (NOx) will be capped to 171.20 tons in any consecutive 12-month period (rolling total). Other pollutants will also be indirectly capped at levels of less than 50% of the PSD Major Source thresholds.

Control Equipments

No external control equipment will be installed. According to the facility, no external control equipment beyond within the engine itself can be employed and meet air worthiness test criteria.

Method of Compliance

The facility, at this time, expects to conduct several tests on four different types of jet engines and several maintenance, repair and overall (MRO) cycles at the test stand. Due to the proprietary nature of the information, the facility has not submitted the names and the emissions rates of these engines in this application. The facility, however, submitted the emissions rates for an average engine that displays the order of magnitude and nature of the data. The facility also submitted the potential emission per cycle for these four different jet engines and an MRO cycle.

The facility provides reasonable assurance to the department by proposing the following method of compliance:

- Prior to the jet engines' testing, the facility will obtain the emissions rates documents for the jet engine being planned to be tested.
- The facility will maintain the records of original emissions rates documents certified by the OEM for all the engine models that are tested in the facility.
- The facility will utilize a computer controlled data acquisition system that will record ambient temperature, an accurate measurement of actual fuel flow to the engine via calibrated coriolis flow meters and duration of each flue flow rate. These temperatures, fuel flow rates and duration will be recorded in real time during the test. Upon completion of a cycle, the actual temperature, fuel flows, and durations will be known.
- The emissions resulting from each actual cycle will be calculated utilizing the actual measured data and corresponding emissions rates.
- The facility will maintain a log of calculated emissions and fuel consumption of each cycle performed and a 12-month rolling total of these emissions.

The emissions rates documents maintained by the facility on site will be reviewed by the Health Department representatives during the site visits. The comparison between the document received date and the engine test date will provide the reasonable assurance that that the emissions rates were received prior to the scheduling of the engine test. Additionally the emissions rates used in the calculation of the emissions during the engine tests will be reviewed during the site inspection.

The facility will maintain the records of date of testing, types of testing, name and model of the engine being tested, emissions rates, fuel flow rates, duration of each fuel flow rates, total fuel consumption and ambient temperature for each engine test cycle.

Additional Assurance

The facility has proposed additional emissions monitoring procedure to ensure that the facility will not exceed the permitted limits. The procedure is detailed as shown below:

Before each cycle is performed, the facility will perform the following steps for all the pollutants listed in this application.

1. The difference (M) between the application limit and the current actual 12 month rolling total ($Total_{12}$) of emissions will be determined.

$$M = Limit - Total_{12}$$

2. This margin (M) will be compared to the calculated emissions expected (E_E) for the planned cycle.
   a If the margin is greater than or equal to 2 times the calculated emissions, the cycle will be performed.

   If $M \geq 2 * E_E$ → Perform Cycle

   b If at any time the margin is less than 2 times the calculated expected emissions, the test will not be performed unless the Responsible Official or the Owner approves an acceptable safety plan to prevent exceeding the limit.

As history of cycle data is collected, this process will be reviewed and updated as required to ensure the conservatism of the intent is met and the limit is not exceeded.

The facility's plan to establish the emissions monitoring procedure provides an additional assurance that the facility will not exceed the permitted limit of nitrogen oxides (NOx). The compliance status of the permit will be verified on site by the amount of emissions on any consecutive 12-month period (rolling total), fuel consumption and the review of emissions rates documents certified by the original equipment manufacturers.

4. PRELIMINARY DETERMINATION

The Health Department 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. Laxmana Tallam, P.E. is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Health Palm Beach County, P.O. Box 29 (800 Clematis Street), West Palm Beach, Fl 33402.

5. APPENDICES

Location Map

Site Plan

S 53° 38' 43" E
2203.17'
Emissions Unit 2:
Fugitive emissions source
Fuel tanks - Jet-A
2x 20,000 gallon
horizontal tanks
Ø10'9 x 32'2" long
Future
Data
Building
11'-4 x 28'8
12' tall
268'-5"
305'-5"
335'-10"
Control
Building
33x 50
14' tall
Exhaust
N
19'-9"
26'-2"
Test Stand
Ø9' tubular structure
48' tall
Exhaust
Driveway
N 00° 01' 04"
1341.10'
Canal
14'-6"
203'-4"
346'-4"
426'-5"
CANAL
1090.00'
7'-5"
Future
0
75'
150'
225'
Emissions unit 1:
Aircraft Jet Engine Test Stand
Engine Centerline
21' above grade
Driveway
S 36° 21' 17" W
N 53° 38' 43" W
1387.72'
BEE LINE HIGHWAY (S.R. No. 710)

ELECTRONIC CORRESPONDENCE
bneff@ctsengines.com

PERMITTEE

Apogee Investment Partners LLC
3060 SW 2nd Ave.
Ft. Lauderdale, Fl 33315

Authorized Representative:
Brian Neff, Owner/CEO

ARMS No. 0990700
Air Permit No. 0990700-001-AC
Permit Issued: DRAFT
Permit Expires: DRAFT

Facility: Aircraft Jet Engine Test Facility
Project: Initial Air Construction Permit for the construction of Aircraft Jet Engine Test Facility

LOCATED AT:

Project Location: Located at 18855 Bee Line Highway in Jupiter, Florida in Palm Beach County.

UTM Coordinates: Zone 17; 567.760 km E; 2978.130 km N
Latitude: 26° 55′ 24″ North / **Longitude:** 80° 19′ 3″ West

STATEMENT OF BASIS:

The Florida Department of Environmental Protection (DEP) has permitting jurisdiction for this project pursuant to Section 403.087 of the Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the DEP recognizes the Florida Department of Health Palm Beach County (Health Department) as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County. Accordingly, the Health Department issues this permit under the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the work for the proposed project in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

ISSUED BY:

Executed in West Palm Beach, Florida
FLORIDA DEPARTMENT OF HEALTH PALM BEACH COUNTY

DRAFT

_____
James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health

Air Permit Engineer: Laxmana Tallam, P.E.

FACILITY AND PROJECT DESCRIPTION

Proposed Project

The Title V Source, identified as Aircraft Jet Engine Test Facility (SIC Code 8734), will be located at 18855 Bee Line Highway in Jupiter, Florida in Palm Beach County.

The facility will consist of a jet engine test stand and two 20,000-gallons above ground storage tanks. The facility plans to conduct several jet engine tests at the test stand and the two storage tanks will be used for storing Jet-A fuel that will be used during the testing activities. The primary purpose of the tests is to ensure the airworthiness of the engine at test.

The emissions of nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) are calculated by using the emissions rate provided by the original equipments manufacturers prior to the testing of each engine. The emissions of particulate matters (PM_{10}), sulfur dioxides (SO_2) and other hazardous air pollutants (HAPs) are calculated by using the emissions factor provided in US EPA AP-42 for combustion turbines. The control equipment built within the test engines will be used for the control the emissions. According to the facility, no external control equipment beyond within the engine itself can be employed and meet air worthiness test criteria.

The facility proposes to limit the emissions of nitrogen oxides (NOx) to 171.20 tons per consecutive 12-months period (rolling total) to escape the Prevention of Significant Deterioration (PSD) review under Rule 62-212.400, F.A.C. The facility proposes to use 1,501,943 gallons to be used in the facility per consecutive 12-months period. The sulfur content of the Jet-A distillate fuel stored in the storage tanks and used for the tests will be equal or less than 0.3% by weight. Other pollutants associated with the engine tests are also indirectly capped at levels less than 50% of the PSD major source threshold.

This project will construct the following emissions units.

Facility ID No. 0990700

ID No.	Emission Unit Description
001	A Jet Engine Test Stand *The jet engine test stand is designed to support different jet engines testing.*
002	Two 20,000-galons above ground storage tanks *The two above ground storage tanks will be used for storing Jet-A distillate fuel to be used for the jet engine testing performed at the test stand.*

PROCESSING SCHEDULE

02-10-2013: Health Department received application for Air construction permit
02-11-2013: Health Department received EPSAP P.E. Signature Document
02-12-2013: Health Department received revised application for Air construction permit
02-13-2013: Health Department received the processing fees for an emissions unit having potential emissions of 100 or more tons per year of any single pollutant
02-28-2013: Health Department issued a Request for Additional Information
04-04-2013: Health Department received the response of the Request for Additional Information

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 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PERMIT CONTENT

- **Section 1:** General Information
- **Section 2:** Administrative Requirements
- **Section 3:** Emissions Unit Specific Conditions

  Subsection A: Jet Engine Test Stand

  Subsection B: Storage Tanks
- **Section 4:** Appendices

  Appendix A: Citation Formats and Glossary of Common Terms

  Appendix B: General Conditions

  Appendix C: Common Conditions

1.0 ADMINISTRATIVE REQUIREMENTS

1.1 Permitting Authority: The permitting authority for this project is Florida Department of Health Palm Beach County (Health Department). The Health Department's mailing address is P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida, 33402, and telephone number (561) 837-5900. All documents related to applications for permits to operate an emissions unit shall be submitted to the Health Department. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401. **[Specific Operating Agreement]**

1.2 Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Health Department. The mailing address and phone number of the Health Department is P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida, 33402, and telephone number (561) 837-5900. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401. **[Specific Operating Agreement]**

1.3 Appendices: The following Appendices are attached as part of this permit:

a. Appendix A. Citation Formats and Glossary of Common Terms;

b. Appendix B. General Conditions;

c. Appendix C. Common Conditions; and

1.4 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.; 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. **[Rule 62-210.300, F.A.C. and SOA]**

1.5 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.]**

1.6 Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be 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.]**

1.7 Source Obligation:

(a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between constructions of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Health Department in the permit.

(b) 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 exceeding its projected actual emissions, 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.]

1.8 Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after 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, 62-4.220 and Chapter 62-213, F.A.C.]**

2.0 EMISSION LIMITING STANDARDS

2.1 General Particulate Emission Limiting Standards: Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, the permittee shall not:

(a) Cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as No. 1 on the Ringelmann Chart (20 percent opacity). **[Rule 62-296.320(4)(b)1, F.A.C.]**

(b) If the presence of uncombined water is the only reason for failure to meet the visible emissions standards given in Rule 62-296.320(4)1, F.A.C., such failure shall not be a violation of the rule. **[Rule 62-296.320(4)(b)3, F.A.C.]**

(c) All visible emissions test performed pursuant to the requirements of Rule 62-296.320(4)(b)1., F.A.C. shall use EPA Reference Method 9, and shall meet all applicable requirements of Chapter 62-297, F.A.C. **[Rule 62-296.320(4)(b)4.a, F.A.C.]**

2.2 Prevention of Accidental Releases (Section 112(r) of CAA): At such time as the requirements of 40 CFR Part 68 are applicable to this source, the permittee shall: **[Section 112(r)(7)(B)(iii) of the CAA, 40 CFR Part 68, Section 252.941(1)(c), F.S.]**

(a) Submit a Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office RMP Reporting Center.

(b) Report to the appropriate representative of the Department of Community Affairs, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the permittee is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the Clean Air Act (CAA).

(c) Submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

*Note: Currently the only substance stored at this facility is distillate fuel. However, neither distillate fuel nor its components are among the regulated substances listed in Section (r)(b) of CAA (40 CFR 68.130). Based on this information, the requirements of 40 CFR Part 68 are **not** applicable to this facility.*

2.3 Objectionable Odor Prohibited: The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**

Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. ***[Rule 62-210.200(221), F.A.C.]***

2.4 Volatile Organic Compounds Emissions or Organic Solvents Emissions: The permittee shall allow no person to store, pump, handle, process, load, unload, or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. **[Rule 62-296.320(1), F.A.C.]**

2.5 Unconfined Particulate Emission Limiting Standards: The permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions shall include the following:

(a) Paving and maintenance of roads, parking areas and yards.
(b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
(c) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
(d) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
(e) Landscaping or planting of vegetation.
(f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
(g) Confining abrasive blasting where possible.
(h) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C. & Permitting application]

3.0 PERFORMANCE STANDARDS

3.1 Circumvention: The permittee shall not circumvent air pollution control equipment/methods or allow the emission of air pollutants without the equipment/methods operating properly. **[Rule 62-210.650, F.A.C.]**

3.2 Excess Emissions Requirements**:**

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Pollution Control Section of the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

(d) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust the maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. **[Rule 62-210.700(5), F.A.C.]**

3.3 Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance

tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. **[Rule 62-297.310(7), F.A.C.]**

4.0 REPORTS REQUIRED

4.1 Annual Operations Report: The annual operating report *[DEP Form No. 62-210.900(5)* shall be submitted to the Health Department by April 1. If the report is submitted, using the Department's electronic annual operating report software (EAOR), there is no requirement to submit a hardcopy to DEP or the Health Department. **[Rule 62-210.370(3)(c),F.A.C.]**

4.2 Excess Emissions Report: If excess emissions occur, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

4.3 Notifications and Reports: The permittee shall submit all compliance-related notifications and reports required by this permit to the Health Department and the Florida Department of Environmental Protection's (FDEP) Southeast District Office at:

Florida Department of Health Palm Beach County
Air & Waste Section
Post Office Box 29
800 Clematis Street, 4th Floor
West Palm Beach, Florida 33402-0029
Telephone: (561) 837-5900
Fax: (561) 837-5295

Florida Department of Environmental Protection
Air Program, Southeast District Office
400 North Congress Avenue, Suite 200
West Palm Beach, Florida, 33401
Telephone: (561) 681-6600
Fax: (561) 681-6790

4.4 U.S. Environmental Protection Agency, Report & Notifications: Any reports, data, notification, certifications, and requests required to be sent to the U. S. EPA should be sent to:

United States Environmental Protection Agency
Region 4
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303
Telephone: (404) 562-9155
Fax: (404) 562-9163 or (404) 562-9164

5.0 RECORDKEEPING REQUIREMENTS

5.1 Recordkeeping: The permittee shall ensure that all records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. **[Rule 62-213.440(1)(b)2.a., F.A.C.]**

5.2 Record Retention: The permittee shall retain records of all monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. **[Rule 62-213.440(1)(b)2.b., F.A.C.]**

Subsection A – Jet Engine Test Stand

This section of the permit addresses the following emissions unit.

ID No.	Emissions Unit Description
001	**A Jet Engine Test Stand** *The jet engine test stand is designed to support many different engines' testing.*

This emissions unit is not subject to 40 CFR 63, Subpart PPPPP "National Emission Standard for Hazardous Air Pollutants for Engine Test Cells/Stands" because it is categorized as area source of HAPs.

EQUIPMENT

1. A Jet Engine Test Stand: The permittee is authorized to construct a Jet Engine Test Stand. The test stand will be used to support different jet engines' testing. **[Application No. 0990700-001-AC]**

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following without prior authorization from the Permitting Authority:

   (a) *NOx Emissions Cap*: The emissions of nitrogen oxides (NOx) **shall not exceed 171.20 tons** per any consecutive 12 months, rolling total.

   (b) *Annual Fuel Consumption*: The Jet-A distillate fuel consumption **shall not exceed 1,501,943 gallons** per any consecutive 12 months, rolling total.

   [Rule 62-210.200(PTE), F.A.C. and Permittee's request to escape PSD regulations]

3. Authorized Fuel: The fuel shall be limited to Jet-A distillate fuel containing no more than 0.30% sulfur by weight. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

4. Hour of Operation: The hours of operation of are not limited (8760 hours per year) **[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]**)

5. Emissions Rates: Prior to the testing of any jet engine, the permittee shall obtain, from the original equipment manufacturer (OEM), the emissions rates for nitrogen oxides (NOx), carbon monoxides (CO) and hydrocarbons (HC) for multiple fuel consumption rates and ambient temperatures for the engine to be tested at the test stand. All emissions rates documents shall contain the original certification from the OEM. No engine test shall be performed without obtaining the emissions rates from the OEM prior to scheduling the testing. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

MONITORING REQUIREMENTS

6. Test Parameters Monitoring: During each engine testing activity, the permittee shall monitor the following to calculate the emissions of NOx, CO and HC:

   a. Date of Testing,
   b. Type of Testing,
   c. Name and Model No. of the engine being tested,
   d. Name of the Original Equipment Manufacturer (OEM),
   e. Date when emissions rates documents were received from OEM,
   f. Fuel consumption rates (lb/hr),
   g. Duration for each fuel consumption rates,
   h. Ambient temperature (Deg F.) during test,
   i. Emissions rates (lb/hr) of NOx, CO and HC for corresponding fuel consumption rates, and

j. Total emissions (lbs) of NOx, CO and HC from the engine test.

[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]

7. Fuel Consumption Monitoring: The permittee shall monitor the total fuel consumption (gallons) during each engine testing conducted at the jet engine test stand.

   [Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]

8. Emissions Monitoring:

   a. The permittee shall monitor the emissions of NOx, CO and HC during each engine testing activity.

   b. The permittee shall calculate the emissions of SO_2, PM_{10} and other hazardous air pollutants (HAPs) using the total quantity of the fuel consumed (gallons) during the engine testing activity as monitored pursuant to the specific condition no. 7 of this section of the permit.

   c. To calculate the emissions of SO_2, PM_{10} and other hazardous air pollutants (HAPs), the permittee shall use the emissions factors provided for distillate oil fired gas turbines in AP-42 or equivalent.

   {Permitting Note: Tables (3.1-2a, 3.1-4, and 3.1-5) in AP-42 are all based upon engines running at high loads (≥ 80 percent load) only. Therefore, the background documents "Emission Factor Documentation for AP-42 section 3.1 Stationary Gas Turbines April 2000" is utilized for more factors similar to the facility's running conditions. Factors for "All Load" of Table 3.4-2 in the background document are most appropriate for the facility's running condition}

   [Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]

RECORDS AND REPORTS

9. Emissions Rates Documents: The permittee shall maintain the records of all the emissions rates documents containing the original certification from the original equipment manufacturer. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representative upon request. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

10. Monthly Fuel Consumption Records: The permittee shall maintain monthly fuel consumption records, on or before the 20th day of the following month. These records shall include, as a minimum, the monthly fuel consumption and the rolling 12-month total fuel consumption records. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

11. Monthly Emissions Records: The permittee shall maintain monthly emissions records, on or before the 20th day of the following month, to summarize the emissions of NOx, CO, HC, SO_2, PM_{10} and other hazardous air pollutants for the previous 12 months. These records shall include, as a minimum, the monthly emissions and the rolling 12-month total emissions of the above mentioned air pollutants. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

12. Fuel Sulfur Records: The permittee shall demonstrate compliance with the fuel sulfur limit specified in this permit by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to the compliance authority. Alternatively, the fuel sulfur limit shall be demonstrated by keeping the fuel sulfur analysis reports obtained from the vendor, during each supply of the fuel. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

13. Emissions Reporting: The permittee shall report the emissions as recorded pursuant to the specific condition 11 of this subsection of the permit on quarterly basis for two years from the beginning of the operation. The report shall be submitted to the Health Department before the 20th day following the end of each quarter.

The emissions report shall contain the detail monthly emissions and the fuel consumption of each month. **[Rule 62-4.070(3), F.A.C.]**

14. Fuel Sulfur Analysis Report: The permittee shall report the fuel sulfur analysis report to the Health Department on quarterly basis for two years from the beginning of the operation. The report shall be submitted to the Health Department before the 20th day following the end of each quarter. **[Rule 62-4.070(3), F.A.C.]**

Subsection B – Storage Tanks

This portion of the permit addresses the following group of emissions units:

EU ID NO.	EMISSIONS UNIT DESCRIPTION
002 (EXEMPT)	Two (2) 20,000 -gallons above ground storage tanks *The two above ground storage tanks will be used for storing Jet-A distillate fuel. The fuel will be used for the jet engine testing performed at the Jet Engine Test Stand.*

OPERATING RESTRICTIONS

1. Permitted Capacity. The permittee shall not allow, cause, suffer, or permit the capacity of this unit in excess of the following without prior authorization from the Permitting Authority:

   Storage Capacity: The storage capacity of each of the two tanks shall not exceed 20,000 gallons. **[Rules 62-4.160(2),F.A.C., 62-210.300, F.A.C.]**

2. Methods of Operation: The methods of operation include the following:

   Fuel Type(s): The maximum sulfur content of Jet A distillate fuel shall not exceed 0.30% by weight.

   [Rules 62-4.160(2),F.A.C., 62-210.300, F.A.C.]

3. Hours of Operation: The permittee is authorized to operate the units continuously. **[Rule 62-4.070(3), F.A.C. and Application No. 0990700-001-AC]**

COMPLIANCE DEMONSTRATIONS AND MONITORING

4. Operating Parameters: The permittee shall implement the following monitoring requirements to ensure compliance with the Specific Condition 2 of this subsection of the permit:

   Volatile Organic Liquid Types: For each fuel delivery, the permittee shall monitor and record the date, time, quantity, and the sulfur content of the delivered fuel. **[Rule 62-4.070(3), F.A.C.]**

SECTION 4. APPENDICES

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Appendix A. Citation Formats and Glossary of Common Terms
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Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of noncompliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);

    b. Determination of Prevention of Significant Deterioration (not applicable); and

    c. Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (a) The date, exact place, and time of sampling or measurements;

        (b) The person responsible for performing the sampling or measurements;

        (c) The dates analyses were performed;

        (d) The person responsible for performing the analyses;

        (e) The analytical techniques or methods used;

        (f) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and

paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

(3) Mass Balance Calculations.

(a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

(7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with

such facility or emissions unit.

(8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C