Pompano Beach Energy, L.L.C.

Houston, TX



PSD Permit Application for the Pompano Beach Energy Center

ENSR International Revised December 2000 Document Number 6792-140-100R

Enron North America Corp.

P.O. Box 1188 Houston, TX 77251-1188



December 14, 2000

Mr. Al Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation, Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

RECEIVED

DEC 15 2000

BUREAU OF AIR REGULATION

Re:

Request for Additional Information

DEP File No. 0112515-001-AC (PSD-FL-304)

Pompano Beach Energy Center

Dear Mr. Linero:

On behalf of Pompano Beach Energy Center, LLC (PBEC), we have reviewed your letter requesting additional information, dated November 21, 2000. There were nine separate items in your letter to be addressed in order for the Department to continue the processing of our application. The items are addressed below in the order in which they were stated in the Department's letter.

1. Please refer to the attached letter containing the comments of the Broward County Department of Planning and Environmental Protection. We will set up a meeting with them and include your representatives so we can agree on the baseline concentrations in the area. Also they will be able to explain their requirements for the Pollution Prevention Plan mentioned in the attached letter. We believe that it is necessary to comply with the local rule and that it should be done in the course of this permitting action. Please copy DPEP on the response as you did on the original application.

Response – The referenced letter from the Broward County Department of Planning and Environmental Protection (DPEP) is included as Attachment 1. The letter essentially references three items to be addressed that are required by the Broward County Code. First, the revised application (attached) now references the applicability of Broward County Code, Article IV, in the List of Applicable Regulations (Section II, Subsection A). Secondly, the application now meets the provisions of Broward County Code, Sec. 27-175 and 27-176(c)(2)b. Specifically, the application includes a demonstration that the emission of criteria pollutants will not reduce by more than one-half (½) the margin between the existing ambient concentrations and the applicable National Ambient Air Quality Standard (NAAQS). The revised application now presents the results of this analysis in Section 6.6. The last comment to be addressed was in reference to Broward County Code, Sec. 27-178, which requires the applicant to submit to DPEP, Air Quality

Mr. A. Linero December 14, 2000 Page 2

Division, a Pollution Prevention Plan. During the meeting held with the DPEP on November 30, 2000, it became apparent that the plan requested for this project would be the first to be submitted in fulfillment of this requirement. A follow-up meeting was conducted with William Hahne of the DPEP for further discussion regarding the intent of the requirements and the content of the plan. This plan, in *DRAFT* form is included as Appendix G in the attached revised application. It's understood, by all parties, that this remains a work in progress and that there is a commitment on behalf of the applicant to continue to address the DPEP's concerns and comments.

2. Significant Impact and/or Increment Consumption analyses are required for sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and particulate matter (PM_{10}) for the nearby Class I Everglades National Park. The Department is working with your consultant to prepare the particulate inventory. This will allow you to conduct the increment analysis for PM_{10} as well as the regional haze analysis.

Response – The required Class I area impact analysis has been completed and is included in the attached revised application (Section 7.3). The modeling was conducted in accordance with the protocol submitted to John Notar of the National Park Service (NPS) on October 17, 2000. Although final approval still has not been received from the NPS, the protocol provides the details of the proposed approach to assess the Class I area impacts and incorporates guidance previously received from the NPS. Once final comments are received from the NPS, the Class I analysis will be updated, if necessary. The preparation of a more refined particulate inventory isn't deemed necessary at this time.

3. Please review the cost calculation for the carbon monoxide oxidation catalyst. The cost appears high compared to similar projects. Please ask your consultant to contact us on this matter so we can provide specific guidance.

Response – Discussions were held regarding this issue with Messrs. Linero and Koerner on November 28, 2000. There were several assumptions used in the economic analysis that were discussed, such as the estimate of required labor (shifts/day), the use of interest costs during construction, and the inclusion of estimated lost revenue due to extended startups. Although PBEC feels that the addition of a catalyst bed would fundamentally alter the operation of the simple cycle turbines and that the inclusion of lost revenue due to extended startups was a legitimate cost, it was agreed that the application would be revised to reflect the Department's position on this issue and their other comments. However, the application text would also be modified to state that there were legitimate costs that were being excluded from the analysis. The BACT analysis in Section 5.0 of the revised application, has been updated to reflect these changes.

4. According to recent tests conducted at TECO Polk Power Station, a simple cycle GE 7FA unit achieved between 1 and 3 ppmvd CO at loads between 50 and 100 percent while burning fuel oil. These are very low emissions. We understand that GE will not actually guarantee these low values, but it is worth mentioning this fact in your analysis of CO control costs. We do not believe it is cost-effective to control CO by

oxidation catalyst, but want to have the most accurate possible information in the record.

Response – PBEC hasn't been able to obtain and review the referenced data, but does appreciate the Department's comment that actual CO values, determined during a unit's initial compliance test, have been found to be well below levels that the vendor was willing to guarantee. PBEC would add that the test values were likely recorded during the unit's "new and clean" conditions, at steady state operation. In cases where some simple cycle projects have committed to install CO CEMS (e.g. minor source projects that are required to demonstrate compliance with a 250 TPY cap), more data will be available regarding long-term CO values, during all representative operating conditions.

5. According to recent tests conducted at the Tallahassee Purdom Unit 8, a combined cycle GE 7FA unit achieved between NO_X emissions of 7.2, 6.1, 6.7, and 8.7 ppmvd at loads of 70, 80, 90, and 100 percent while firing natural gas. Indications are that this unit could probably consistently achieve emissions less than 12 ppmvd if operated as a simple cycle unit.

Response - This is likely a true statement. NOx CEMS data was obtained from the City of Tallahassee for an approximate 16 day period. Some of the hourly averages were in the 10 ppmvd range; however, it could be that the unit was tuned for compliance with a 12 ppmvd limit. PBEC has concerns regarding its ability to continuously meet a 9 ppmvd limit, during the life of the unit. However, in an effort to move forward with processing of the application, a limit of 9 ppmvd (corrected to 15% O₂, 24 hour average), while firing natural gas, has been accepted.

6. The cost of further NO_X control by hot selective catalytic reduction should be reexamined. For instance, costs for other similar projects have been estimated at \$10,000 to 15,000 per ton of NO_X removed. This compares with the estimate of \$20,000 per ton in your application. We do not believe hot SCR catalyst is costeffective, but want a more accurate evaluation for the record.

Response – Reference the response to Item 3. The Department's comments have been incorporated into the revised analysis.

7. We have not permitted any projects recently that allow 1,500 hours per year of backup fuel oil firing. Please review the attached table and consider how to insure that the proposed project can fit into the range of NO_X emission limits and hours of fuel oil operation.

Response - This issue was addressed in a letter from PBEC to the Department, dated December 1, 2000 (Attachment 2). Our initial request for 1,500 hours of fuel oil firing was based on a concern over near-term gas pipeline capacity constraints in South Florida. The referenced letter confirmed that we would revise our PSD application to reflect the equivalent of 1,000 hours per year of fuel oil use. In addition, PBEC reconfirmed the fact that natural gas is the primary fuel and that the reliable supply of natural gas to the site would be aggressively pursued.

8. During recent tests conducted at the City of Tallahassee, the 7FA combustion turbine achieved 7.2, 6.1, 6.7, and 8.7 ppmvd at 70, 80, 90, and 100% of full load. While the unit is a combined cycle unit, we believe that it is possible to consistently achieve better than 12 ppmvd in a simple cycle unit. For a requested 12 ppmvd limit, we would suggest only 500 hours of fuel oil firing.

Response - As the Department's policy is to relate the amount of back-up fuel oil firing to the allowable NOx emission limit, PBEC has elected to accept the NOx limit summarized in Item 5 above. This is necessary because PBEC feels that a minimum of 1,000 hours of fuel oil firing flexibility is necessary for the project. As described below in the response to Item 9, PBEC doesn't believe that this amount of fuel oil firing will be required; however the operational flexibility is necessary to minimize risk to the project.

9. Describe the feasibility and effects of the fuel oil delivery. Based upon the application, trucking of the fuel oil is contemplated. At 1500 hours per year of oil operation on all 3 turbines, approximately 70 million gallons may be consumed annually or approximately 9,000 truckloads. If fuel oil operation was concentrated into just a few months, this would require a great deal of truck traffic into and out of the facility.

Response – As stated above, our request for 1,500 hours of oil firing was based on a concern over near-term gas pipeline capacity constraints in South Florida. In spite of these concerns, we are also sensitive to the environmental concerns of the Florida DEP and the community at large. As a result, we've amended our PSD permit application (attached) to change our maximum annual use of distillate oil to the equivalent of 1,000 hours of oil firing.

This revised estimate of fuel oil firing would reduce annual truck traffic below that estimated by the Department and bring the project fuel usage in line with other recently issued Department permits. We estimate that this represents, on average, about 15 truck trips per day, assuming the full 1,000 hours of oil use occurs. The 30 acres upon which the facility is to be constructed is the subject of an agreement between Broward County and the landowner, whereby Broward County is required to make an official finding that industrial development upon the subject property meets traffic concurrency pursuant to the Broward County land development code and comprehensive plan.

Please contact Dave Kellermeyer of Enron North America at (713) 853-3161, if you have any questions or comments concerning the above.

Sincerely,

Enron North America

Ben Jacoby Director Mr. A. Linero December 14, 2000 Page 5

cc: Dave Kellermeyer, Enron North America Steve Krimsky, Enron North America Bob Iwanchik, ENSR Scott Osbourn, ENSR

Enclosures

C. Carlson

J. Carlson

J. Cardenson

SED

G. Thack, Browned Co.

EPA

AIDS

ATTACHMENT 1



Department of Planning and Environmental Protection

Air Quality Division 218 S.W. 1st Avenue Fort Lauderdale, FL 33301 (954) 519-1220 • Fax (954) 519-1495

November 21, 2000

Mr. A. A. Linero, P.E.
Administrator, New Source Review
Bureau of Air Regulation, Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Construction Permit Application #0112515-001-AC

Pompano Beach Energy, LLC

Dear Al:

In response to the above referenced Construction Permit Application for Pompano Beach Energy, LLC, we are offering the following comments:

- 1) Please advise the applicant that separate Prevention of Significant Deterioration (PSD) and construction permits are not required. Only a construction permit which incorporates all PSD requirements will be issued by your office.
- 2) Please advise the applicant that separate Title V and Title IV permits are not required. Only a Title V permit which incorporates all Acid Rain provisions will be issued by your office.
- 3) Please advise the applicant that the Section II. Facility Information Subsection A. General Facility Information: List of Applicable Regulations (Facility-Wide) is incomplete. The applicant must acknowledge that the facility is also subject to Broward County Code, Article IV although an additional county license will not be required.
- 4) Please advise the applicant that the application must meet the provisions of Broward County Code, Sec. 27-175 and 27-176(c)(2)b. Specifically, section 27-175 prohibits an owner or operator of a major source of air pollution from causing, letting, permitting, suffering or allowing the emission of criteria pollutants in quantities that will reduce by more than one-half (½) the margin between the existing ambient concentrations and the applicable National Ambient Air Quality Standard (NAAQS). Section 27-176(c)(2)b states the permit application for any facility whose potential emissions of a pollutant for which a NAAQS has been established, equal or exceed one hundred (100) tons per year, shall contain a demonstration, using any EPA-approved dispersion model, that the source will not reduce by more than one-half (½) the margin between the ambient concentrations and the applicable NAAQS. This requirement does not apply to sources whose potential to emit will be limited by the permit to less than one hundred (100) tons per year.

- 5) Please advise the applicant that the application must meet the provisions of Broward County Code, Sec. Sec. 27-178, which requires the applicant to submit to DPEP, Air Quality Division, a Pollution Prevention Plan. For example, one issue that might be addressed in the Pollution Prevention Plan is the reuse of the waste heat by a neighboring facility.
- 6) Finally, please advise the applicant that the equation for estimating the concentration of NO_x in 40 CFR 60.335(c)(1) is in error. The correct equation can be found in Broward County Code, Sec. 27-177(e).

We apologize for the delay in getting these comments to you. In the future, we will make every effort to submit any comments on applications more expeditiously. In addition, please keep us appraised of any and all significant developments regarding the intent to issue or deny this permit.

Very truly yours;	
Daniela Banu, Director	-

DB/wjh

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CERTIFIED MAIL

P.O. Box 1188 Houston, TX 77251-1188

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BUREAU OF AIR REGULATION

(Received by fax on 12/1/00)

December 1, 2000

Mr. Alvaro A. Linero, P.E. Administrator, New Source Review Section Bureau of Air Regulation, Division of Air Resources Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

RE: Request for Additional Information

DEP File No. 0112515-001-AC (PSD-FL-304)

Pompano Beach Energy Center

Dear Mr. Linero:

On behalf of Pompano Beach Energy Center, LLC, we have reviewed your letter requesting additional information, dated November 21, 2000. These data and analyses are in preparation; we expect to be able to submit everything by late next week. We did want to inform you immediately about our response to one issue raised in your letter: i.e., the request to be allowed up to 1500 hours of oil firing annually.

We recognize that the maximum oil usage that has previously been allowed in Florida for dual-fuel peakers is 1000 hours. Our request for a higher limit was based on a concern over near-term gas pipeline capacity constraints in South Florida. These capacity constraints are less critical to the north, where most of the dual-fuel peaker plants have been permitted to date. As stated in our application, we feel that FGT is taking steps to relieve these constraints and that the Project will be less likely to need oil firing after the initial 2 to 3 years of operation. Nevertheless, in the first couple of years of operation, the potential unavailability of the preferred fuel, natural gas, will likely dictate that the Pompano Beach Energy Center needs to fire oil during certain periods of peak power demand.

Although we have concern over the reliability of near-term natural gas supplies, we are also sensitive to the environmental concerns of the Florida DEP and the community at large. We are committed to being a good neighbor to the citizens of Pompano Beach and Broward County. Environmental protection is a major part of that commitment. We feel that our permit application has demonstrated that our environmental performance will be excellent while using either oil or gas. However, we also recognize that our environmental performance will be incrementally better on natural gas, the cleaner fuel.

As a result, we have decided to amend our PSD permit application to change our maximum annual use of distillate oil to 1000 hours. In addition, we want to reconfirm the fact that natural gas is the primary fuel for the plant and that we will aggressively pursue the reliable supply of natural gas to our site. We will be filing an amended application that reflects this and incorporates responses to your other information requests.

Please contact Dave Kellermeyer of Enron North America at (713) 853-3161 if you have any questions regarding this matter.

Sincerely,

Enron North America

David A. Kellermeyer

David A. Keller

Director

Cc: Steve Krimsky, Enron North America

Ben Jacoby, Enron North America

Bob Iwanchuk, ENSR Scott Osborne, ENSR

C. Carlson

J. andleson, SED Q. Track, Broward Co.

EPA NPS

	ATTACHMENT 2	
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On or about March 2001, the Department provided an Intent to Issue air construction permit (Permit) for a nominal 510-megawatt power plan to Pompano Beach Energy Center, LLC (PBEC – then an affiliate of Enron North America).

On or about June 2001, the Department provided an Intent to Issue air construction permit (Permit) for a nominal 510 megawatt power plant to Deerfield Beach Energy Center, LLC (DBEC – than an affiliate of Enron North America).

The Department issued both permits based on its belief that the applicants had provided reasonable assurance.....(reference page 1 of respective Intents to Issue.

The Department determined that the applicants had provided reasonable assurance.

An important underlying element in making this determination was the well-known economic standing of the parent company, Enron North America; as evidenced by ownership of established pipeline companies, well-publicized national and international power projects and energy trading activities.

Enron North America was known to have purchased at least 40 General Electric Model 7241 FA (7FA) combustion turbines. The GE 7FA is the only unit on the market capable of achieving the Department's proposed nitrogen oxides limits reflected in the Permits without additional (unplanned) add-on control equipment.

Enron declared bankruptcy for a number of its companies on or about December 1st, 2001. The worldwide repercussions of that bankruptcy are progressively being appreciated by the financial, energy, and other government entities. The status of PBEC, LLC and DBEC, LLC with respect to the bankruptcy filings is unknown to the Department.

The Department now has serious doubts that PBEC, LLC or DBEC, LLC still have active contracts with General Electric (through Enron North America or independently of Enron North America) for Model 7FA combustion turbines to be paid for and delivered by the planned startup dates of the two facilities.

According to Section 62 - 4.150, the Department may require proof of financial responsibility prior to issuance of a permit.

The Department may require posting of a bond prior to issuance of a permit.

The Department does not consider DBEC or PBEC to have the same economic standing since the mentioned bankruptcy as presumed by the Department at the time the Intents to Issue were provided.

The Department requires re-establishment of reasonable assurance in accordance with Section 62 - 4.070, F. A. C. prior to the consolidated administrative hearing on the two cases presently scheduled to begin January 29, 2002. Otherwise, the Department will file a Notice of Denial.

The Department requires affirmative establishment of financial responsibility in accordance with Rule 62 - 4.150, F. A. C. prior to the consolidated administrative hearing. Otherwise, the Department will file a Notice of Denial.

To establish reasonable assurance and proof of financial responsibility, the Department requires the following information:

- 1. Copies of contracts between DBEC, PBEC and General Electric (through or independently of Enron North America) with reaffirmation (dated December 1st, 2001 or later) by the buyer and the seller that the contract(s) are in force.
- 2. The name(s) of the facility representatives (required in the application) in view of the reported severance of Mr. Ben Jacoby (Attorney-in-Fact) from Enron North America.
- 3. The name(s) of the contact for the applications in view of the reported severance of Mr. Dave Kellermeyer from Enron North America.

- 4. The name of the professional engineer of record for the application to be presented at the ????? Hearing along with a re-affirmation that ENSR (signed by ENSR) is still the consultant for the air permit.
- 5. Copies of contracts (or options) for natural gas in view of the recent request (December 14th, 2001) by DBEC for elimination of diesel fuel use from its Deerfield site plan.
- 6. Description of the up-to-date gas delivery alternatives in view of the questionable status of the Enron Calypso Pipeline Project. The Department will also need to be advised if any of the gas will be shuttled from the Gulfstream Pipeline to connections with the Florida Gas Transmission Network in Palm Beach and St. Lucie Counties.
- 7. Provide information reflecting the ability of DBEC and PBEC to finance, construct, start up, manage, and operate power plants in Florida.
- 8. Provide information regarding the ability of DBEC and PBEC to post bonds, should the Department require these.



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

CITY OF COCONUT CREEK,

Petitioner.

v. STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION OGC File No. 01-0489

And

POMPANO BEACH ENERGY, L.L.C. (AN AFFILIATE OF ENRON NORTH AMERICA),

Respondents.

AMENDED PETITION FOR ADMINISTRATIVE HEARING

Petitioner, City of Coconut Creek, a Florida municipal corporation ("CITY"), in compliance with an Order of the Department dated May 21, 2001, hereby files this Amended Petition for Administrative Hearing challenging the Department of Environmental Protection's ("DEP") Intent to Issue Air Construction Permit for Permit No. 0112515-001-AC(PSD-FL-304) ("Permit") to Pompano Beach Energy, L.L.C., an affiliate of ENRON North America ("ENRON"), which would allow the construction of a five hundred ten (510) megawatt "peaking" power plant at 3300 Northwest 27 Avenue in Pompano Beach, Broward County, Florida. As amended grounds for this Administrative Hearing, CITY states:

1. CITY is a Florida municipality comprising approximately 11.7 square miles in the central northern end of Broward County.

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- 2. The DEP is the permitting authority in this proceeding and has its offices located at 400 North Congress Avenue, West Palm Beach, Florida 33416 and 111 S. Magnolia Drive, Suite 4, Tallahassee, Florida 32301.
- Pompano Beach Energy, L.L.C. has its offices located at 1400 Smith Street, Houston, Texas 77002.

SUBSTANTIAL INTEREST

4. CITY is a Florida municipality with over 40,000 residents, located within the immediate adjacent area that will be affected by the building of a power plant. As a result, CITY has a substantial interest in this proceeding.

BACKGROUND

- On or about March 10, 2001, the CITY received a copy of DEP's Public
 Notice of Intent to Issue Air Construction Permit for ENRON's proposed power plant facility.
- 6. On October 23, 2000, ENRON filed its Application with the Broward County Department of Planning and Environmental Protection. On December 15, 2000, ENRON filed a Revised Application with the Broward County Department of Planning and Environmental Protection.
- 7. On December 20, 2000, the Department of Planning and Environmental Protection found that the Application was complete.
- 8. On or about March 21, 2001, the CITY moved for an extension of time to file its Petition.
- 9. On April 9, 2001, the DEP granted CITY's Request for Extension of Time and gave the CITY until April 25, 2001 to file its Petition.

- 10. ENRON is proposing to construct three (3) one hundred seventy (170) megawatt duel-fuel combustion turbines with inlet chillers, three (3) mechanical draft cooling towers, three (3) eighty (80) foot stacks, a natural gas heater, a two and one half million gallon fuel oil storage tank, and a 0.6 million gallon fuel oil storage tank at the site.
- 11. If approved, fuel oil will be permitted at the power plant for up to three thousand (3000) hours per year or one hundred twenty-five (125) days per year.
- 12. The following regional producers of noxious emissions are located within the immediate vicinity of ENRON's proposed cogeneration power plant facility: (1) Broward County North Regional Wastewater Treatment Plant; (2) Florida Power and Light Electrical Substation; (3) Broward County Central Sanitary Landfill; (4) Wheelabrator Resource Recovery Facility; (5) Broward County Hazardous Materials Receiving Facility; and (6) Waste Management Trash Transfer Station. These large regional significant sources of noxious emissions, which are publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.
- 13. In addition, the proposed power plant is within thirteen (13) miles of the Arthur R. Marshall Loxahatchee National Wildlife Refuge, administered by the U.S. Department of the Interior, and within ten (10) miles of the Florida Everglades, specifically, Conservation Area No. 2, which is administered by the State of Florida Fish and Wildlife Conservation Commission.
- 14. CITY has received no indication that an Environmental Impact
 Statement/Evaluation has been undertaken for this proposed use.

- 15. Further, from a review of the available documentation, it appears that a quantitative cumulative air quality analysis has not been performed with regard to the facilities referenced in Paragraph 12 above. The issuance of a Federal Permit for the Prevention of Significant Deterioration (PSD) subjects the facility to the requirements of the National Environmental Policy Act (NEPA) (specifically regulations in 40 CFR Part 1508). Under NEPA, the cumulative environmental effects of a proposed project and other significant sources must be considered in an environmental assessment or an environmental impact statement.
- 16. CITY's experts believe that a quantitative cumulative air quality analysis should be performed in order to satisfactorily demonstrate that the combined emissions from the sources referenced in Paragraph 12 above do not cause a contravention of applicable air quality standards.

DISPUTED ISSUES OF FACT AND LAW

- 17. Whether an environmental impact statement/evaluation should have been conducted by ENRON prior to the Notice of Intent to Issue Air Construction Permit.
- 18. Whether the assessment of environmental impacts associated with industrial-related activities, including those on ambient air quality, must be performed prior to the issuance of a permit.
- 19. Whether the impact upon the CITY of the prevailing wind direction from the proposed facilities has been considered and factored into the decision to issue a Permit.
- 20. Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to the issuance of a Permit to ensure that the combined emissions

from the various sources in the area do not cause a contravention of applicable air quality standards:

- (i) The proposed facility is anticipated to emit approximately 572 tons per year (tpy) of NO₂, 171 tpy of CO, 55 tpy of PM/PM₁₀, 166 tpy of SO₂, 18 tpy of VOC, and 25 tpy of sulfuric acid mist. The facility will also emit trace quantities of total fluorides (0.09 tpy), mercury (0.003 tpy) and lead (0.003 tpy). Emissions of cumulative hazardous air pollutants (HAP₅) up to 5 tpy.
- (ii) The issuance of Federal Permits such as Prevention of Significant

 Deterioration subjects the proposed power plant facility to the
 requirements of the National Environmental Protection Act.
- (iii) Under the National Environmental Protection Act, the cumulative environmental effects of a proposed project must be considered in an environmental assessment.
- 21. Whether DEP's Intent to Issue Air Construction Permit was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed:
 - (i) The Technical Evaluation and Preliminary Determination provides in Paragraph 2 entitled "Facility Information" that the proposed power plant is located approximately 60 kilometers (37.2 miles) from the Everglades National Park; this statement may be accurate on its face as to the distance from the park entrance, but a map of the Conservation Areas potentially affected by the proposed power plant demonstrates that the affected

- ecosystems are far closer than stated. Please See Exhibit "A", attached hereto and made a part hereof.
- (ii) The pristine, environmentally sensitive ecosystem of the Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No. 2, to the north;
- (iii) While the public entranceway of Everglades National Park may be over thirty-seven (37) miles away from the proposed power plant, the environmentally sensitive ecosystem of the Florida Everglades, specifically Conservation Area No. 2 is within ten (10) miles of the proposed site; and
- (iv) The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location.
- 22. The project must use best available control technology ("BACT") to limit the emissions of nitrogen oxide ("NOx"), carbon monoxide ("CO"), volatile organic compounds ("VOCs"), sulfur dioxide ("SO₂"), sulfuric acid mist, and particulate matter with an aerodynamic diameter less than 10 microns ("PM10"), pursuant to Rule 62-212.400(2)(f), F.A.C.
- 23. Rule 62-210.200(38), F.A.C. defines BACT as "an emission limitation...based on the *maximum* degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and

available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant." (emphasis added)

- 24. In determining BACT, the Department shall give consideration to, among others, "all scientific, engineering, and technical material and other information available to the Department," "the emission limiting standards or BACT determination of any other state," and "the social and economic impact of such technology." Rule 62-212.400(6), F.A.C.
- 25. The City believes and will demonstrate to the Department that the applicant's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers, accepted by the Department, are not consistent with the definition of BACT in Rule 62-210.200(38), F.A.C. and the requirements in Rule 62-212.400(6), F.A.C. as specifically set forth below. The Department's BACT determinations do not recognize the much lower limits currently being permitted in other states, nor do they address the social and economic impacts to the City for failing to appropriately limit emissions from the facility.
- 26. The draft permit establishes BACT for NOx from the gas turbines as 9 ppmvd at 15% O₂ on gas, achieved with dry low NOx combustors and 42 ppmvd at 15% O₂ on fuel oil, achieved with water injection. Continuous compliance would be demonstrated based on a 24-hour block average. (Permit, § III.13.) Other states have permitted a large

number of simple cycle peaking power plants with NOx limits of 2 to 5 ppmvd at 15% O₂ on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR. Continuous compliance is demonstrated based on 1-hour to 3-hour rolling averages. These lower limits have been achieved in practice. The City recommends a much lower NOx limit be established for the turbines, consistent with the permitting history in other states.

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- 27. The draft permit establishes BACT for CO for the gas turbines as 9 ppmvd @ 15% O₂ on gas and 20 ppmvd @ 15% O₂ on oil, achieved with good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.14.) Other states have permitted simple cycle peaking power plants with CO limits of 2 to 6 ppmvd at 15% O₂ on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors. The City believes a much lower CO limit should be established for the turbines and that continuous compliance be demonstrated with a continuous emission monitor.
- 28. The draft permit establishes BACT for VOCs from the gas turbines as 2.8 ppmvd @ 15% O₂ on gas or oil, achieved with natural gas and good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.15.) Other states have permitted simple cycle peaking power plants with VOC limits of 2 ppmvd at 15% O₂ on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.

- 29. The draft permit indicates that the facility includes one 2.5 million gallon distillate storage tank, one 0.6 million gallon distillate storage tank, one 13 MMBtu/hr gas-fired fuel heater, and four wet mechanical draft cooling towers. (Permit, § III.2.) The draft permit contains no BACT determinations, emission limits, or monitoring requirements for these sources, even though they emit criteria and hazardous air pollutants. These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control)." The City requests that the Department conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.
- 30. The draft permit and files that were reviewed do not identify any other emission sources at the facility. However, power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines. The diesel exhaust from any such engines are a great concern to the City. Thus, the City requests that the Department investigate whether emergency diesel engines would be used and if so, that these be subjected to a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.

- 31. The project proposes to use distillate oil as a backup fuel for an average of 1,000 hours per installed unit. (Permit, § III.7.) The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions, as well as others, set out below, on the residents of Coconut Creek.
- 32. The definition of BACT in Rule 62-210.200(38) and implementing EPA guidance in the NSR Manual (EPA, New Source Review Workshop Manual, October 1990, Section IV.D.3) require taking into account the "environmental" impacts during the top-down BACT process. The Department is further required to evaluate the social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.
- 33. The draft permit establishes BACT for SO₂ and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. The City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.
- 34. Notwithstanding the health issues, 0.05% sulfur distillate is not BACT for SO₂ and sulfuric acid mist when firing oil. A sulfur content of 0.05% is equivalent to 5,000 parts per million sulfur by weight ("ppmw"). Lower sulfur distillate, containing only 30

ppmw sulfur, is currently available on the east coast. Further, the EPA has adopted stringent fuel regulations that limit the sulfur content of diesel fuel to 15 ppmw. These regulations go into effect in June 2006 (Federal Register, v. 66, no. 12, January 18, 2001, p. 5002 et seq), at which point ultra low sulfur diesel will be widely available in the Florida market.

- 35. Thus, the City requests the permit be modified to eliminate the use of distillate oil. In the short-term, a backup fuel such as LNG or propane or a noninterruptible gas supply contract for curtailments should be required, until such time as the capacity constraints on the Florida Gas Transmission Pipeline are alleviated, but no later than January 2003. If distillate is retained, diesel exhaust emissions should be rigorously controlled and 30 ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.
- 36. The permit contains no limits on the number of startups/shutdowns nor on the emissions during these periods. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NOx, CO, and VOCs (including aldehydes) than during steady state operation.
- 37. The City is concerned that virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas of Coconut Creek, particularly during combined operation of the Pompano and Deerfield

Beach Energy Centers. Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100 startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.

38. Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. The U.S. EPA has consistently defined startup and shutdown to be part of the normal operation of a source. The EPA has also consistently concluded that these emissions should be accounted for in the design and implementation or the operating procedure for the process and control equipment. EPA has concluded that "[w]ithout clear definition and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." (Bennett 9/28/82.) Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38), F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT and MACT.

¹ Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

² Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983 (Bennett 2/15/83).

39. Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations. The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and other HAPs have not been assessed and mitigated. Therefore, the project is in violation of Rule

62-210.300(4)(d)15.a F.A.C, which requires compliance with the requirements of

Broward County.

WHEREFORE, Petitioner CITY, respectfully requests a formal administrative

evidentiary hearing, de novo, pursuant to Chapter 120, Florida Statutes, to resolve

disputed issues of material fact and law set forth herein be held and that the DEP should

not issue Permit No. 0112515-001-AC (PSD-FL-304) or, in the alternative, should

prohibit diesel oil from being used at this facility. Additionally, startup/shutdowns

should be limited and monitored. At a minimum, the DEP should, prior to issuing the

Permit, require that ENRON provide a quantitative cumulative air quality analysis to

ensure that the combined emissions from the various industries in the area do not cause a

contradiction of applicable air quality standards.

Respectfully submitted this ____ day of June, 2001.

Assistant City Attorney

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original has been filed by facsimile, (850) 921-3000 and Federal Express at: Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000 and a true and correct copy of the foregoing has been furnished by regular U.S. Mail to: Debbie Orshefsky, Attorney for Pompano Beach Energy, L.L.C., Greenberg, Traurig, 515 E. Las Olas Boulevard, Suite 1500, Fort Lauderdale, Florida 33301 this 5 day of June, 2001.

CITY OF COCONUT CREEK CITY ATTORNEY'S OFFICE

NANCY A. COUSINS
Assistant City Attorney
Florida Bar No. 224154
City of Coconut Creek
4800 West Copans Road
Coconut Creek, Florida 33063

(954) 973-6797 (954) 973-6790 (facsimile)

ACA/CM/Electrical Power Plant/Amended Petition for Admin Hearing 06/05/01

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DRAFT PERMIT

PERMITTEE:

Pompano Beach Energy, L.L.C. 1400 Smith Street Houston, Texas 77002-7631 Permit No. PSD-FL-304
Project No. 0112515-001-AC
SIC No. 4911
Expires: December 31, 2003

Authorized Representative: Mr. Ben Jacoby

PROJECT AND LOCATION:

This air construction permit is issued pursuant to the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality for: three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with inlet air chillers; four mechanical draft cooling towers; one 2.5-million gallon fuel oil storage tank; one 0.6 million gallon fuel oil storage tank; a gas-fired natural gas fuel heater; and three 80-foot stacks. The combustion turbines will operate in simple cycle mode and intermittent duty. The units will be equipped with Dry Low NO_X (DLN-2.6) combustors and wet injection capability.

The project will be located at 3300 Northwest 27th Avenue, Pompano Beach in Broward County. UTM coordinates are: Zone 17; 556.7 km E; 3028.5 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendices and Tables made a part of this permit:

Appendix BD BACT Determination

Appendix GC Construction Permit General Conditions

Appendix GG 40 CFR 60, Subpart GG

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION I. FACILITY INFORMATION

FACILITY DESCRIPTION

This facility is a new site. This permitting action is to install three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with inlet air chillers, three 80-foot stacks, one 2.5-million gallon fuel oil storage tank, one 0.6-million gallon storage tank, a gas heater and ancillary equipment. Emissions from the new units will be controlled by Dry Low NO_X (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants.

EMISSION UNITS

This permit addresses the following emission units:

EMISSIONS UNIT ID NO.	System	Emission Unit Description
001	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
002	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
003	Power Generation	One nominal 170 megawatt combustion turbine-electrical generator set with inlet air chiller
004 Fuel Storage		One 2.5-million gallon fuel oil storage tank and one 0.6-million gallon fuel oil storage tank
005	Fuel Heating	One 13 million Btu per hour natural gas heater
006	Inlet Air Chilling	Four 2-cell wet mechanical draft cooling towers

REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_X), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is not within an industry included in the list of the 28 Major Facility Categories per Table 212.400-1, F.A.C. Because emissions are greater than 250 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Pursuant to Table 62-212.400-2, modifications at this facility resulting in emissions increases greater than any of the following values require review per the PSD rules as well as a determination of Best Available Control Technology (BACT): 40 TPY of NO_X, SO₂, or VOC; 25/15 TPY of PM/PM₁₀; 100 TPY of CO; or 7 TPY

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION I. FACILITY INFORMATION

of sulfuric acid mist (SAM). This facility and the project are also subject to applicable provisions of Title IV, Acid Rain, of the Clean Air Act.

PERMIT SCHEDULE

•	10/23/00	Received Application
•	12/15/00	Received Revised Application
•	12/20/00	Application Complete
•	03/07/01	Distributed Intent to Issue
•	xx/xx/01	Notice of Intent published in

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on October 23, 2000;
- Letter from Broward County Department of Planning and Environmental Protection dated November 21, 2000;
- Letters from Enron North America dated December 1 and December 14, 2000;
- Revised Application received on December 15, 2000;
- Pollution Prevention Plan received on December 20, 2000;
- Application errata pages received January 19, 2001;
- Letter from Broward County Department of Planning and Environmental Protection dated February 8, 2000;
- CALPUFF air quality and Class I impact analysis received February 16, 2001;
- Department's Intent to Issue and Public Notice Package dated February 27, 2001;
- Letter from U.S. EPA Region IV dated ______;
 Letter from National Park Service dated ; and
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this permit.

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION II. ADMINISTRATIVE REQUIREMENTS

- 1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the Broward County Department of Planning and Environmental Protection, 218 Southwest 1st Avenue, Fort Lauderdale, Florida 33301 and phone number 954/519-1220. Copies of all such reports, tests, and notifications shall also be submitted to the Department's Southeast District Office at P.O. Box 15425, West Palm Beach, Florida 33416-5425.
- 2. <u>General Conditions</u>: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- 4. <u>Forms and Application Procedures</u>: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- 5. <u>Modifications</u>: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]
- 6. <u>PSD Expiration Approval</u>: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]
- 7. BACT Determination Revision: In accordance with Rule 62-212.400(6)(b), F.A.C. (and 40 CFR 51.166(j)(4)), the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source."

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION II. ADMINISTRATIVE REQUIREMENTS

This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation (e.g. conversion to combined-cycle operation), oil firing, short-term or annual emission limits, annual fuel heat input limits or similar changes. [40 CFR 51.166(j)(4) and Rule 62-212.400(6)(b), F.A.C.]

- 8. <u>Completion of Construction</u>: The permit expiration date is December 31, 2003. Physical construction shall be complete by June 30, 2003. The additional time provides for testing, submittal of results, and submittal of the Title V permit to the Department.
- 9. <u>Permit Extension</u>: The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit [Rule 62-4.080, F.A.C.]
- 10. <u>Application for Title V Permit</u>: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least ninety 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 Department's Bureau of Air Regulation, and a copy to the Broward County DPEP. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 11. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., 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.]

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION III. EMISSION UNITS SPECIFIC CONDITIONS

and 14.7 psi pressure. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200(PTE), F.A.C.]

- 6. <u>Unconfined Particulate Emissions</u>: 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.]
- 7. 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 owner or operator shall notify the Broward County DPEP as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include pertinent information as to the cause of the problem; the 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 and the regulations. [Rule 62-4.130, F.A.C.]
- 8. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in the operation of the installed equipment. [Rule 62-4.070(3), F.A.C.]
- 9. <u>Circumvention</u>: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
- 10. Restricted Operation: No single combustion turbine shall operate more than 5,000 hours during any consecutive 12-month period. The three combustion turbines shall operate no more than an average of 3,500 hours per installed unit during any consecutive 12-month period. This amount shall be reduced by two hours for each fuel oil-fired hour in excess of an average of 250 hours per installed unit during any consecutive 12-month period. The three combustion turbines shall operate no more than an average of 1000 hours per installed unit on distillate oil during any consecutive 12-month period. [Applicant Request, Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.]

CONTROL TECHNOLOGY

11. <u>DLN Technology</u>: Dry low NO_X (DLN-2.6) combustors shall be installed on the combustion turbine to control NO_X emissions when firing natural gas. [Design, Rules 62-4.070 and 62-212.400(BACT), F.A.C.]

AIR CONSTRUCTION PERMIT PSD-FL-304 (0112515-001-AC) SECTION III. EMISSION UNITS SPECIFIC CONDITIONS

APPLICABLE STANDARDS AND REGULATIONS

- 1. General Applicability: Unless otherwise indicated in this permit, the construction and operation of the subject emission 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 Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.
- 2. <u>Construction Authorization</u>: The permittee is authorized to:
 - a. EUs 001-003: Construct power generation facilities consisting of three simple cycle combustion turbines with a nominal generating capacity of 170 MW each. (Each unit is also subject to Subpart GG of 40 CFR 60, an NSPS for gas turbines as specified in Appendix GG of this permit.)
 - b. EU 004: Construct fuel storage facilities consisting of one 2.5 million gallon distillate fuel oil storage tank and one 0.6 million gallon distillate fuel oil storage tank. (Each unit is also subject to Subpart Kb of 40 CFR 60, an NSPS for the storage of volatile liquids.)
 - c. EU 005: Construct fuel heating facility consisting of one 13 million Btu per hour gasfired fuel heater to heat natural gas for use by the combustion turbines.
 - d. EUs 006: Construct inlet air chilling facilities consisting of four wet mechanical draft cooling towers.

[Application, Rule 62-204.800(7)(b), F.A.C., and 40 CFR 60 Subparts GG and Kb]

3. NSPS General Provisions: Each emissions unit subject to a specific New Source Performance Standard shall also comply with all applicable General Provisions of Subpart A in 40 CFR 60, including: 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). [Rule 62-204.800(7)(b), F.A.C.]

GENERAL OPERATION REQUIREMENTS

- 4. <u>Authorized Fuels</u>: Each gas turbine shall fire only pipeline-quality natural gas as the primary fuel and No. 2 distillate oil (or superior grade) containing a maximum of 0.05 percent sulfur by weight as a backup fuel. [Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.]
- 5. <u>Permitted Capacity (Gas Turbines)</u>: The maximum heat input to each gas turbine shall not exceed 1,700 MMBtu per hour when firing natural gas nor 1,900 MMBtu per hour when firing distillate oil. The heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 30° F temperature, 60% relative humidity,

- 12. Wet Injection: A water injection (WI) system shall be installed to reduce NO_X emissions when firing distillate oil. [Design, Rules 62-4.070 and 62-212.400(BACT), F.A.C.]
- 13. <u>Tuning</u>: The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems upon completion of initial testing. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO_X emissions and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rules 62-4.070 and 62-210.650, F.A.C.]

EMISSION LIMITS

14. <u>Summary</u>: Following is a summary of the emission limits and required technology.

POLLUTANT	CONTROL TECHNOLOGY	EMISSION LIMIT		
PM/PM ₁₀ , VE	Pipeline Natural Gas Good Combustion	11/17 lb/hr (Gas/Fuel Oil) 10 Percent Opacity (Gas or Fuel Oil)		
VOC (not PSD)	Pipeline Natural Gas Good Combustion	2.8 ppmvd @15% O ₂ (Gas or Fuel Oil)		
СО	Pipeline Natural Gas Good Combustion	9 ppmvd @15% O ₂ (Gas) 20 ppmvd @15% O ₂ (Fuel Oil)		
SO ₂ and Sulfuric Acid Mist	Pipeline Natural Gas Low Sulfur Fuel Oil	2 gr S/100 ft ³ (in Gas) 0.05% S (in Fuel Oil)		
NO _X	Dry Low NO _X for Natural Gas Wet Injection and Limited Fuel Oil Usage	9 ppmvd @15% O ₂ (Gas) 42 ppmvd @15% O ₂ (Fuel Oil)		

{Note: Mass emissions limits are based on full load and a compressor inlet temperature of 30° F.}

15. Nitrogen Oxides (NO_X) Emissions

- a. Initial Performance Tests: When firing natural gas, NO_X emissions shall not exceed 62 pounds per hour nor 9 ppmvd corrected to 15% oxygen. When firing distillate oil, NO_X emissions shall not exceed 332 pounds per hour nor 42 ppmvd corrected to 15% oxygen. NO_X emissions (measured as NO₂) shall be based on a 3-hour test average as determined as determined by EPA Method 7E or 20 during initial performance tests.
- b. Continuous Compliance: When firing natural gas, NO_X emissions from each combustion turbine shall not exceed 9 ppmvd corrected to 15% oxygen based on a 24-hour block average. When firing distillate oil, NO_X emissions from each combustion turbine shall not exceed 42 ppmvd corrected to 15% oxygen based on a 24-hour block average. Continuous compliance shall be demonstrated by data collected from the continuous emission monitoring system (CEMS) specified in Condition No. 29 of this section.
- c. NO_X Reduction Plan: When the average hours of oil firing exceed 500 hours per year per unit, the permittee shall develop a NO_X reduction plan. This plan shall include a

testing protocol designed to establish the maximum water injection rate and the lowest NO_X emissions possible without adversely affecting the actual performance of the gas turbine. The testing protocol shall set a range of water injection rates and attempt to quantify the corresponding NO_X emissions for each rate, noting any performance problems. Based on the test results, the plan shall recommend a new NO_X emissions limiting standard and shall be submitted to the Department's Bureau of Air Regulation and Broward County DPEP for review. If the Department determines that a lower NO_X emissions standard is warranted for oil firing, this permit shall be revised.

[40CFR60 Subpart GG; Rules 62-204.800(7) and 62-212.400(BACT), F.A.C.]

- 16. <u>Carbon Monoxide (CO) Emissions</u>: When firing natural gas, CO emissions from each combustion turbine shall not exceed 31 pounds per hour nor 9 ppmvd corrected to 15% oxygen. When firing distillate oil, CO emissions from each combustion turbine shall not exceed 70 pounds per hour nor 20 ppmvd corrected to 15% oxygen. CO emissions shall be based on a 3-hour test average as determined initial and annual EPA Method 10 performance tests. [Rule 62-212.400(BACT), F.A.C.]
- 17. <u>Volatile Organic Compounds (VOC) Emissions</u>: When firing either natural gas or distillate oil, VOC emissions from each combustion turbine shall not exceed 6 pounds per hour nor 2.8 ppmvd corrected to 15% oxygen. VOC emissions shall be based on a 3-hour test average as determined by an initial EPA Method 25A performance test. EPA Method 18 may be conducted concurrently with EPA Method 25A to deduct the ethane and methane emissions from the measured VOC emissions. [Synthetic Minor Limit pursuant to Rule 62-212.400(BACT), F.A.C.]
- 18. Sulfur Dioxide (SO₂) and Sulfuric Acid Mist (SAM) Emissions: SO₂ and SAM emissions shall be limited by firing pipeline-quality natural gas (≤ 2 grains of sulfur per 100 SCF of gas) as the primary fuel and No. 2 distillate oil (≤ 0.05 percent sulfur by weight) as a backup fuel for no more than 1000 hours per year per unit. Compliance with the fuel specification shall be determined by Condition No. 30 of this section. [40CFR60 Subpart GG; Rules 62-204.800(7) and 62-212.400(BACT), F.A.C.]
- 19. <u>Particulate Matter (PM/PM₁₀)</u>: PM emissions shall not exceed 10 pounds per hour when firing natural gas and 17 pounds per hour when firing distillate oil based on a 3-hour test average as determined by an initial EPA Method 5 performance test. [Rule 62-212.400(BACT), F.A.C.]
- 20. <u>Visible Emissions</u>: When firing either natural gas or distillate oil, visible emissions shall not exceed 10% opacity, based on a 6-minute average as determined by EPA Method 9. Except as allowed by Condition No. 22 of this section, this standard applies during all operating conditions. [Rule 62-212.400(BACT), F.A.C.]

EXCESS EMISSIONS

- 21. 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. These emissions shall be included in the 24-hour compliance averages for NO_X. [Rule 62-210.700, F.A.C.]
- 22. Excess Emissions Defined: During startup, shutdown, and documented unavoidable malfunction of the combined cycle gas turbine, the following permit conditions allow excess emissions or the exclusion of monitoring data for specifically defined periods of operation. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of excess emissions during such incidents.
 - a. During startup and shutdown, visible emissions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during any calendar day, which shall not exceed 20% opacity. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
 - b. Excluding startup and shutdown, operation below 50% base load is prohibited.
 - c. In accordance with Condition No. 29 of this section, specific data collected by the CEM systems during startup, shutdown, malfunction, and tuning may be excluded from the NO_X compliance averaging periods. If a CEM system reports emissions in excess of a 24-hour block emissions standard, the permittee shall notify the Broward County DPEP within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.
 - [G.E. Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.]

COMPLIANCE DETERMINATIONS

- 23. <u>Stack Testing Facilities</u>: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
- 24. <u>Test Methods</u>: Required tests shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments					
5	Determination of Particulate Matter Emissions from Stationary Sources (I)					
	• For gas firing, the minimum sampling time shall be two hours per run and the minimum sampling volume shall be 60 dscf per run.					
	• For oil firing, the minimum sampling time shall be one hour per run and the minimum sampling volume shall be 30 dscf per run.					
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (I, A)					
	CEM system RATA may be used for annual compliance demonstration.					

9	Visual Determination of the Opacity of Emissions from Stationary Sources (I, A)						
10	Determination of Carbon Monoxide Emissions from Stationary Sources (I, A)						
	The method shall be based on a continuous sampling train.						
	• The ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps.						
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography (I)						
	 EPA Method 18 is an optional method that may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. 						
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines (I)						
	Initial test is only for NOx emissions						
	• EPA Method 7E may be substituted for the initial NOx test						
25A	Determination of Volatile Organic Concentrations (I)						

The methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C.

[40 CFR 60, Appendix A; Rules 62-204.800 and 62-297.100, F.A.C.]

- 25. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2)(b), F.A.C.]
- 26. <u>Compliance Test Schedules</u>: Compliance with the allowable emissions standards shall be determined in accordance with the following schedule.
 - Initial: Initial (I) performance tests for each authorized fuel shall be conducted within 60 days after achieving at least 90% of the permitted capacity, but not later than 180 days of initial operation of each unit. The Department may require initial performance tests to be conducted after any modifications of air pollution control equipment (such as a change in or tuning of combustors) with a shakedown period not to exceed 100 days after restart.
 - Annual: Annual (A) performance tests shall be conducted during each federal fiscal year (October 1 September 30) on each unit as indicated.

[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

27. Compliance Determinations

- a. **CO**: Compliance with the CO emissions limits shall be demonstrated by conducting initial and annual tests for CO concurrently with NO_X, as required. Annual compliance with the CO emissions limit may be conducted at less than capacity when testing is conducted concurrently with the annual RATA testing for the NO_X CEM system.
- b. **VOC**: Compliance with the VOC emissions limits shall be demonstrated by conducting initial tests. Thereafter, the CO emissions limits shall serve as surrogate standards for VOC emissions limits. No annual testing for VOC emissions is required.
- c. NO_X: Compliance with the NO_X emissions limits shall be demonstrated by conducting initial performance tests, as required. Thereafter, compliance shall be demonstrated by data collected from the CEM systems, as specified in Condition No. 29 of this section.
- d. PM/PM₁₀: Compliance with the particulate matter emissions limits shall be demonstrated by conducting initial, concurrent tests for PM and visible emissions. Thereafter, compliance with the visible emissions limits shall be demonstrated by conducting annual tests. In addition to the visible emissions limits, the CO emissions limits and fuel specifications shall serve as surrogate standards for particulate matter.
- e. SO₂ and Sulfuric Acid Mist: The fuel specifications of this section effectively limit the potential emissions of SO₂ and sulfuric acid mist. The permittee shall demonstrate compliance with the fuel sulfur limits in accordance with the analysis and record keeping requirements of Condition No. 30 of this section.

[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

28. <u>Special Compliance Tests</u>: The DEP may request a special compliance test when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated. [Rule 62-297.310(7), F.A.C.]

MONITORING REQUIREMENTS

29. Continuous Emissions Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the exhaust stack of each gas turbine to measure and record the emissions of NO_X from the gas turbines in a manner sufficient to demonstrate compliance with the CEM emission standards of this permit. The oxygen content or the carbon dioxide (CO₂) content of the flue gas shall also be monitored at the location where NO_X emissions are monitored to correct the measured NO_X emissions rates to 15% oxygen. If a CO₂ monitor is installed, the oxygen content of the flue gas shall be calculated by the CEM system using F-factors that are appropriate for the fuel being fired. The CEM system shall be used to demonstrate compliance with the CEM emission standards for NO_X specified in this permit.

- a. Data Collection. Compliance with the CEM emission standards for NO_X shall be based on a 24-hour block average. The block average shall be calculated from 24 consecutive hourly average emission rate values. A new block average would be determined for the next 24-hour data set. Each hourly value shall be computed using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.
- b. NO_X Monitor Certification. The NOx monitors shall be certified and operated in accordance with the following requirements. The NOx monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the CEM emission standards of this permit, missing data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 7E, of Appendix A of 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span for the lower range shall not be greater than 25 ppm, and the span for the upper range shall not be greater than 120 ppm, as corrected to 15% O₂.
- c. Oxygen (CO₂) Monitor Certification. The oxygen (CO₂) monitors shall be certified and operated in accordance with the following requirements. Oxygen (and CO₂) monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to each Broward County DPEP. RATA tests required for the oxygen (and CO₂) monitors shall be performed using EPA Method 3B in Appendix A of 40 CFR 60.

- d. Data Exclusion. Emissions data for NOx and oxygen content (or CO₂) shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO_X emissions data recorded during these episodes may be excluded from the block average calculated to demonstrate compliance with the CEM emission standards as provided in this paragraph.
 - (1) Periods of data excluded for startup and shutdown shall not exceed two hours in any block 24-hour period.
 - (2) Periods of data excluded for a documented unavoidable malfunction shall not exceed two hours in any block 24-hour period. A "documented unavoidable malfunction" is a malfunction beyond the control of the operator that is documented within 24 hours of occurrence by contacting the Broward County DPEP by telephone or fax.

All periods of data excluded for any startup, shutdown or malfunction episode shall be consecutive for each episode. The permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction events shall not be excluded if the startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

- e. Data Exclusion Reports. A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported semi-annually to the Broward County DPEP. This report shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall also include the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, as allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.
- f. *Data Conversion*. Upon request from the Department, the CEM systems emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.
- g. Availability. All CEM systems shall operate continuously to monitor performance of the gas turbines except for monitor breakdowns, repairs, calibration checks, and zero

and span adjustments. Monitor availability shall not be less than 95% in any calendar quarter.

{Permitting Note: Compliance with these requirements will ensure compliance with the other applicable CEM system requirements such as: NSPS Subpart GG; Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

- 30. <u>Fuel Sulfur Limits</u>: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
 - a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions.
 - b. Compliance with the fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to Broward County DPEP before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of the Department or Broward County DPEP, the permittee shall perform additional sampling and analysis for the fuel sulfur content.

The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

31. Determination of Process Variables:

- a. The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C]

NOTIFICATION, REPORTING, AND RECORDKEEPING

- 32. <u>Test Notifications</u>: The Broward County DPEP shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests.
 - [Rule 62-297.310(7)(a)9., F.A.C.]
- 33. <u>NSPS Notifications</u>: All notifications and reports required by 40 CFR60, Subpart A shall be submitted to the Broward County DPEP.
- 34. <u>Annual Reports</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Broward County DPEP by March 1st of each year. [Rule 62-210.370(2), F.A.C.]
- 35. <u>Test Reports</u>: The permittee shall submit test reports indicating the results of the required compliance tests to the Broward County DPEP no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.
- 36. <u>Semi-Annual Reports</u>: The permittee shall submit semi-annual excess emission reports to the Broward County DPEP. In addition to the information required in 40 CFR 60.7 and 60.334, the report shall summarize the periods of data excluded due to startup, shutdown, and unavoidable malfunction. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7(1998 version)]
- 37. NSPS Fuel Tank Records: NSPS Subpart Kb applies to any storage tank with a capacity greater than or equal to 10,300 gallons that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Tanks with a capacity greater than or equal to 40,000 gallons that store a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb, except for the following record keeping requirement. The permittee shall keep readily accessible records showing the dimension of the storage vessel and the capacity of the storage tank. Records shall be retained for the life of the tank. [40 CFR 60.110b(a) and (c); 40 CFR 60.116b(a) and (b); Rule 62-204.800(7)(b)16., F.A.C.]
- 38. Records and Reports: All measurements, records, and other data required to be maintained by the permittee shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request. [Rule 62-213.440, F.A.C.]

Pompano Beach Energy Center FL-304) Three CTs and Ancillary Equipment County

Florida Gas Transmission Company Sulfur Report From Website

		Perry 36"		Perry 30"		Perry 24"		Brooker 24"	
		ppm	Grains/hcf	ppm	Grains/hcf	ppm	Grains/hcf	ppm	Grains/hcf
10/03/01	33	1.201	0.075	1.756	0.110	1.661	0.104	3.298	0.206
10/02/01	32	1.333	0.083	1.861	0.116	1.734	0.108	2.713	0.170
10/01/01	31	1.638	0.102	1.692	0.106	1.598	0.100	1.942	0.121
09/30/01	30	1.512	0.095	1.751	0.109	1.626	0.102	2.255	0.141
09/29/01	29	1.921	0.120	1.926	0.120	1.815	0.113	2.880	0.180
09/28/01	28	2.034	0.127	2.329	0.146	2.183	0.136	3.442	0.215
09/27/01	27	2.234	0.140	2.368	0.148	2.180	0.136	3.000	0.187
09/26/01	26	2.485	0.155	2.090	0.131	1.928	0.120	2.129	0.133
09/25/01	25	2.954	0.185	1.933	0.121	1.691	0.106	2.197	0.137
09/24/01	24	3.184	0.199	1.865	0.117	1.544	0.097	1.914	0.120
09/23/01	23	2.731	0.171	1.882	0.118	1.675	0.105	1.731	0.108
09/22/01	22	2.362	0.148	1.652	0.103	1.530	0.096	0.196	0.012
09/21/01	21	2.437	0.152	1.767	0.110	1.510	0.094	1.845	0.115
09/20/01	20	2.240	0.140	2.189	0.137	2.046	0.128	1.950	0.122
09/19/01	19	2.154	0.135	1.661	0.104	1.510	0.094	1.647	0.103
09/18/01	18	2.422	0.151	1.642	0.103	1.434	0.090	1.692	0.106
09/17/01	17	2.444	0.153	1.583	0.099	1.428	0.089	1.733	0.108
09/16/01	16	2.292	0.143	1.808	0.113	1.705	0.107	1.898	0.119
09/15/01	15	2.017	0.126	1.737	0.109	1.618	0.101	1.901	0.119
09/14/01	14	2.857	0.179	2.562	0.160	2.110	0.132	2.076	0.130
09/13/01	13	2.605	0.163	1.813	0.113	1.644	0.103	1.856	0.116
09/12/01	12	2.650	0.166	1.950	0.122	1.788	0.112	1.977	0.124
09/11/01	11	2.071	0.129	1.584	0.099	1.409	0.088	1.889	0.118
09/10/01	10	2.413	0.151	2.139	0.134	2.014	0.126	2.154	0.135
09/09/01	9	2.421	0.151	2.164	0.135	2.015	0.126	1.987	0.124
09/08/01	8	2.448	0.153	2.087	0.130	1.976	0.123	2.067	0.129
09/07/01	7	2.765	0.173	2.032	0.127	1.998	0.125	2.146	0.134
09/06/01	6	1.426	0.089	1.048	0.066	0.926	0.058	2.131	0.133
09/05/01	5	1.420	0.089	1.036	0.065	0.924	0.058	2.131	0.133
09/04/01	4	1.315	0.082	1.064	0.067	0.984	0.061	2.240	0.140
09/03/01	3	1.386	0.087	1.083	0.068	1.004	0.063	2.093	0.131
09/02/01	2	1.263	0.079	0.880	0.055	0.803	0.050	1.849	0.116
09/01/01	1	1.164	0.073	0.929	0.058	0.901	0.056	2.388	0.149



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

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4 APT-ARB

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APR 17 2001

A. A. Linero, P.E. FL Department of Environmental Protection Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

SUBJ: Preliminary Determination and Draft PSD Permit for Pompano Beach Energy Center (PSD-FL-304) located in Broward County, Florida

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for Pompano Beach Energy Center dated March 7, 2001. The preliminary determination is for the proposed construction and operation of three simple cycle combustion turbines (CTs) with a total nominal generating capacity of 510 MW to be located near Pompano Beach, FL. The combustion turbines proposed for the facility are General Electric, frame 7 FA units. The CTs will primarily combust pipeline quality natural gas with No. 2 fuel oil combusted as backup fuel. As proposed, each CT will be allowed to fire natural gas up to 5,000 hours per year (3,500 hours per year average) and fire No. 2 fuel oil a maximum of 1,000 hours per year. Total net emissions increases from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and particulate matter (PM/PM₁₀).

Based on our review of the PSD permit application, preliminary determination and draft PSD permit, we have the following comments:

- 1. The PSD permit application indicates (page 1-1 and 2-1) that "natural gas be the primary fuel source and oil will be used only to the extent transmission capacity constraints on Florida Gas Transmission preclude the delivery of natural gas to the site." We recommend that the Florida Department of Environmental Protection (FDEP) consider including language in the final PSD permit to restrict the applicant's use of fuel oil to only those times natural gas cannot be delivered to the Pompano Beach Energy Center.
- 2. In Section III, condition 29d of the draft PSD permit, excess emissions during startup and shutdown are allowed for up to 2 hours in any 24-hour period. Because periods of startup and shutdown are part of normal source operation, we recommend that FDEP also consider establishment of startup and shutdown best available control technology (BACT) emission limits for CO and NO_x such as mass emission limits (for example, pounds of emissions in any 24-hour period) that include startup and shutdown emissions, or future emission limits

derived from monitoring results during the first few months of commercial operation. We further recommend that FDEP include definitions of what constitutes periods of startup and shutdown as referenced in Condition 29d.

- 3. Section III, condition 10 of the draft PSD permit limits each individual CT to operating a maximum of 5,000 hours per year and all the CTs to an average of 3,500 hours per year per CT. Since it is possible for any single CT to operate up to 5,000 hours per year, the BACT analyses (which are currently based on 3,500 hours per year) should be reconsidered to take this limit into account. In order for the current BACT analyses to remain valid, the final PSD permit should restrict the operation of each individual CT to a maximum of 3,500 hours per year.
- 4. Table 5-5 (catalytic oxidation) and Table C-2 (high temperature selective catalytic reduction) include a figure which accounts for the "Cost of Heat Rate Loss," based on an estimated market value of \$0.10/kW-hr. Although it is appropriate to calculate the cost of using additional natural gas to compensate for the power consumption resulting from pressure drops across the catalyst bed, lost revenue should not be included in the cost analyses.

Thank you for the opportunity to comment on the Pompano Beach Energy Center preliminary determination and draft PSD permit. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,

R. Douglas Neeley

Chief

Air and Radiation Technology Branch

Air, Pesticides and Toxics

Management Division

CC; A. Finero E. Holladan V. Borne, Blumard Co. J. Georgal, SED G. Bernyal, NPS

ISSUE 1 – USE OF BACKUP FUEL OIL

The terms fuel oil, distillate fuel oil, No. 2 fuel oil, and diesel fuel are used interchangeably. In this review, the term "diesel" will be used for all of the mentioned terms and recognizes that this fuel is a common, distilled, transportation-grade, refinery product with a sulfur content no greater than 0.05 percent. This is in contrast to *residual* fuel oil used at certain other power plants in South Florida and having a sulfur content on the order of 1 to 2.5 percent sulfur.

The issue of diesel use is one of the items raised by public and EPA comments and in the petitions filed by the CITIES against the ENRON Project. The Department plans to further limit the use of diesel from the 1000 hours per year per unit limitation in the draft Permit. The Department plans to reduce this value in the Permit, if issued, to 500 hours per year per unit after 2004. This will match the Department's draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in June 2000 and considers conditions in other recent Intents and Permits in Southeast and Southwest Florida.

Refer to Exhibit 1 for a listing of NO_X limits and fuel oil use at some of the simple cycle E and F-Class combustion turbine projects under review or recently approved in Florida.

ISSUE 2 - NITROGEN OXIDES (NO_X) EMISSIONS WHILE BURNING FUEL OIL

The draft Permit includes a NO_X limit of 42 parts per million by volume, dry, at 15 percent oxygen (ppmvd) while firing (backup) diesel. The issue of the NO_X limit diesel use is one of the items in the petitions filed by the CITIES against the ENRON Project. The Department plans to further limit the NO_X emissions in the Permit, if issued, while firing diesel to 36 ppmvd. This reflects consideration of data from tests conducted at new identical units during the time gince issuance of the Intent and draft Permit. This will match the Department's

draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period and considers conditions in recent Intents and Permits for projects in Southeast and Southwest Florida. Refer to Exhibit 1

ISSUE 3 – STARTUP AND SHUTDOWN CONDITIONS

The draft Permit includes a condition (29d.) that excludes emission data during periods of startup, shutdown, and malfunction in accordance with Department Rules. The issue of startup and shutdown emissions is one of the items raised by EPA in its comments on the project and by the CITIES in their petitions. The Department plans to include an "Operational Standard" for startup and shutdown in the permit, if issued.

The draft operational standard and rule analysis are attached as Exhibit 2. This reflects consideration of comments received and rule analysis indicating that the Department has authority to control startup and shutdown emissions. This reflects the Department's recent Intents and Final Permits for several projects in Southeast and Southwest Florida.

The Department also plans to require a continuous emission monitoring system (CEMS) at one of the units to gather information regarding actual carbon monoxide (CO) emissions during startup of simple cycle combustion turbines. This was one of the possibilities suggested by EPA in its comments on the project. The data collected will allow the Department to set firm CO limits during startup and shutdown if feasible.

ISSUE 4 – EMERGENCY EQUIPMENT

The draft Permit did not include the firewater protection system that typically requires a small on-site emergency diesel-fueled pump. The issue of emergency equipment is one of the items raised in the petitions from the CITIES. Normally, such equipment is exempt from

permitting Department rules. As part of a new major facility subject to permitting, the Department plans to include the equipment in the permit.

ISSUE 5 – OTHER "MINOR SOURCES"

The draft Permit included diesel storage tanks, cooling towers that dissipate heat removed from warm ambient air prior to introduction into the unit compressors, and a small gas-fired fuel heater. An issue related to this equipment (described as "minor sources") is one of the items raised in the petitions from the CITIES.

As part of a new major facility subject to permitting, the Department included this equipment in the permit and, where appropriate, referenced the applicable New Source Performance Standards. The Department plans to add some minor details, as appropriate, in the permit that further clarify the purpose and capabilities of the mentioned units.

ISSUE 6 – VOLATLE ORGANIC COMPOUNDS (VOC) EMISSION LIMIT

The draft Permit includes a VOC limit of 2.8 ppmvd. The issue of the VOC limit is one of the items in the petitions filed by the CITIES against the ENRON Project. The Department plans to limit the VOC emissions in the Permit, if issued, to 1.4 ppmvd. This reflects the emission proposed by ENRON in its original application. This will match the Department's draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period.

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CASE NOS. 01-2682, 01-2683, 01-2684

INTERROGATORIES

1. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 1" identified in your Notice of Change.

> Gamberg Trausic, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33131 305-579-9500 FAX 305-979-0717 www.gtlaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PHILADELPHIA TYSONS CORNER CHICAGO BOSTON PHOENIX WILKINGTON LOS ANGELES DENVER SÃO PAULO FORT LAUDERDALE BOCA RATON WEST PALM BRACH ORLANDO TALLAMASSEE

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CASE NOS. 01-2682, 01-2683, 01-2684

2. Please identify each fact on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.

> GREENBERG TRAURIG, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA \$3131 305-579-0500 Fax 305-579-0717 www.gtlaw.com

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CASE NOS. 01-2682, 01-2683, 01-2684

3. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

4. Please identify each document on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

5. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 2" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

6. Please identify each fact on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

7. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

8. Please identify each document on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

9. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 3" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

10. Please identify each fact on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

11. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

12. Please identify each document on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.

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13. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 4" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

14. Please identify each fact on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

15. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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CASE NOS. 01-2682, 01-2683, 01-2684

16. Please identify each document on which you relied in changing your position with respec to "Issue 4" identified in your Notice of Change.

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17. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 5" identified in your Notice of Change.

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18. Please identify each fact on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

19. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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20. Please identify each document on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.

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21. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit as a result of "Issue 6" identified in your Notice of Change.

> GEBENBERG TRAURIG, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 33131 305-579-0500 FAX 305-579-0717 www.gtlaw.com

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22. Please identify each fact on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.

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CASE NOS. 01-2682, 01-2683, 01-2684

23. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

> GREENBERG TRAUNIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 38131 305-579-0500 Fax 305-279-0717 www.gilaw.com

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CASE NOS. 01-2682, 01-2683, 01-2684

24. Please identify each document on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.

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25. Please state, in redlined format showing additions and deletions appropriately marked, all changes that you propose to the language of the Permit other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change.

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26. Please identify each fact on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change).

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27. With respect to each fact identified in response to the preceding interrogatory, please identify each person known to you who has, claims to have or whom you believe to have knowledge of that fact.

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28. Please identify each document on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the changes that you have specifically identified in response to the foregoing interrogatories as a result of "Issues" "1" through "6" identified in your Notice of Change).

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29. Please identify all persons who participated in answering these interrogatories (whether by providing responsive information, by drafting responses, or by approving responses) and, as to each such person, identify the particular interrogatory or interrogatories with respect to which he or she participated in answering and the nature of his or her participation.

> GREENBERG TRAURIC, P.A. 1221 BRICKELL AVENUE MIAMI, FLORIDA 38131 305-579-0500 FAX 305-379-0717 www.gilaw.com

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STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS

CITY OF COCONUT CREEK, et al.,

Petitioners.

CONSOLIDATED

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DOAH CASE Nos. 01-2682

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER. L.L.C., etc.,

Respondents.

01-2683 01-2684

CITY OF COCONUT CREEK'S ANSWERS TO POMPANO BEACH **ENERGY CENTER'S FIRST SET OF INTERROGATORIES**

Petitioner, City of Coconut Creek, through undersigned counsel, hereby responds to Respondent, Pompano Beach Energy Center, L.L.C.'s, First Set of Interrogatories as follows:

I. **GENERAL OBJECTIONS**

The following are general objections to each and every interrogatory ("interrogatory"):

- 1. Petitioner objects to each interrogatory to the extent, if at all, it seeks documents representing communications between Petitioner's counsel and Petitioner. Petitioner will not produce any documents which are privileged from disclosure based on the attorney-client privilege.
- 2. Petitioner objects to each interrogatory to the extent, if at all, it seeks documents representing attorney work product. Petitioner will not produce any documents which are privileged from disclosure based on the work product privilege.
- 3. Petitioner objects to producing any document to the extent that it requires the Petitioner to gather or obtain information or documents already in the possession of or equally available to Respondent.

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- 4. By producing documents pursuant to any interrogatory, Petitioner does not: (a) admit that such documents (or related documents) are properly discoverable, (b) waive any objection which might otherwise be made to such documents, or (c) admit that any such documents are admissible at trial.
- 5. Petitioner reserves the right to supplement, amend or correct all or any part of these responses provided herein.

II. SPECIFIC RESPONSES TO EACH INTERROGATORY

1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Petitioner objects to this request as the request is overly broad and unduly burdensome. Subject to the foregoing objections, those persons currently known to City are:

GAI Consultants, Inc. - general environmental assessment of PBEC

O'Brien & Gere Engineers, Inc. - general cumulative impact analysis of PBEC

Environmental Management - Emission estimates; BACT limits; air pollution control technology cost and design; health risk assessments; permitting; air monitoring; source testing; compliance determinations; BACT and MACT analyses; cost-effectiveness analyses; assessment, measurement, estimation, modeling, and control of diesel fumes; water conservation systems including dry cooling and zero discharge systems.

Egan Environmental Inc. - dispersion modeling; emission estimates; permitting, air quality regulations; Clean Air Act compliance strategies; air toxics; hazard assessment; health risk assessments.

Engelhard - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Peerless - cost, design, and performance of SCR on simple cycle gas turbines and other combustion sources.

Mitsubishi - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Hitachi - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Cormetech - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

HUG/Miratech - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

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Steuler - cost, design, and performance of SCR and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Alstom power - cost, design, and performance of SCONOx, SCR, and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Goal Line Environmental Technologies - cost, design, and performance of SCONOx and oxidation catalysts on simple cycle gas turbines and other combustion sources.

Arnold Silverman - Emission estimates; BACT limits; air pollution control technology cost and design; health risk assessments; permitting; air monitoring; source testing; compliance determinations; BACT and MACT analyses; cost-effectiveness analyses; assessment, measurement, estimation, modeling, and control of diesel fumes; water conservation systems including dry cooling and zero discharge systems.

Catalytica - cost, design, and performance of XONON on simple cycle gas turbines and other combustion sources.

California Air Resources Board - Emissions and BACT levels for gas turbines and other combustion sources; assessment, measurement, estimation, modeling, and control of diesel fumes.

Air pollution control districts and agencies in California, Washington, Oregon, Arizona, Connecticut, Massachusetts, New York, and New Jersey, among others - Emissions and BACT levels for gas turbines and other combustion sources.

United States Environmental Protection Agency – limits on diesel fuel; emissions during start-up and shut-down; BACT; hours restriction.

Sheila N. Rose, Development Services Director, City of Coconut Creek – geographical locations of power plant in relation to Everglades National Park, Loxahatchee National Wildlife Refuge and other environmentally sensitive lands

Susan Hess, Director of Community Development, City of Coral Springs - geographical locations of power plant in relation to Everglades National Park, Loxahatchee National Wildlife Refuge and other environmentally sensitive lands

Various individuals at the Department of Environmental Protection and the Environmental Protection Agency – aware of all issues concerning this matter.

2. Please describe, by category and custodian, all documents, data compilations, and tangible things in your possession, custody or control that are relevant to any of the allegations contained in the Petition.

Objection. Interrogatory requests work product information.

3. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, drawing, motion picture, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what item such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.

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This interrogatory is overly broad and burdensome. However, without waiving any of City's objections, City's response to interrogatory number (1) identifies those persons currently known to City to have knowledge about, or possession of subject items.

CITY OF COCONUT CREEK

Please identify with particularity each and every fact upon which you rely in support of your contention that the DEP should not issue the Permit or should amend the Permit.

Without waiving any of City's objections, the facts currently known to City were alleged in City's First and Second Amended Petition and are contained in the documents provided in response to PBEC's First Request for Production of Documents. City further relies on innumerable public documents which are at the Florida Department of Environmental Protection, the Environmental Protection Agency and other public agencies.

For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the fact and, as to each such persons, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, this interrogatory is answered in City's response to interrogatory number (1) and (3) above.

Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your contention, as alleged in paragraph 12 of your Petition, that "the proposed Plant has failed to use best available control technology" and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, this interrogatory is answered in interrogatory number (1) and (3) above,

7. Please identify with particularity each and every fact on which you rely in support of your contention, as alleged in paragraph 12 of your Petition, that "the proposed Plant has failed to use best available control technology."

Subject to the foregoing objections, the facts currently known to City are provided in the First and Second Amended Petitions and other information provided in City's responses to PBEC's First Request for Production of Documents.

Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your claim, as alleged in paragraph 31 of your Petition, that "DEP's Intent to Issue Air Construction Permit was based on erroneous information concerning the proposed power plant's distance to environmentally sensitive lands" and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

r og programmen med filmen fram ett størret flamtilt flamtiger fra filmte flamt for ett flamt framt flamt flam Sheila N. Rose, Development Services Director, City of Coconut Creek. Based on review of maps and computer related documents. Also various personnel at Everglades National Park and Loxahatchee National Wildlife Refuge.

Susan Hess, Director of Community Development, City of Coral Springs

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9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in "disput[ing] the DEP's best available control technology determinations contained in Appendix BD," as alleged in pages 6-13 of your Petition, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3) above.

10. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The distance between the proposed Plant and environmentally sensitive lands including Loxahatchee National Wildlife Refuge and Conservation No. 2 of the Florida Everglades as represented by ENRON is inaccurate and disputable by City. As discussed above, these areas are much closer to the Plant as [sic] represented by ENRON and relied upon by DEP.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Sheila N. Rose, Development Services Director, City of Coconut Creek

Susan Hess, Director of Community Development, City of Coral Springs

11. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP's BACT determinations do not comply with federal or state law adopted pursuant to the Federal Clean Air Act and its amendments.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP has failed to enforce BACT as mandated by Rule 62-210, F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

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13. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The DEP has failed to give due consideration to the emissions limiting standards or BACT determination of other states as required under Rule 62-212, F.A.C. In addition, the DEP has failed to identify the maximum degree of reduction in violation of the Florida Administrative Code.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

14. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 15 of your Petition, that

The draft permit is deficient as it contains no BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers even though they emit criteria and hazardous air pollutants. These sources fall under BACT and must be regulated by permit pursuant to Rule 62-210.200(112), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

15. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The Draft Permit is deficient in that it does not identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

16. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

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The effects of diesel exhaust as a result of the combustion of distillate in the turbines was not considered as a collateral environmental impact in a BACT analysis contrary to Rule 62-210, F.A.C. and federal guidance.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

17. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The DEP has failed to consider the impact of its BACT decisions on the City's economic and social impacts and has failed to consider the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is inappropriate and not consistent with Rule 62-212.400(6)(a), F.A.C.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

Sulfur Distillate Is not BACT for SO₂ and Sulfuric Acid Mist when firing oil. At the very least, if distillate is retained, diesel exhaust emissions should be controlled and 30 ppmw diesel fuel should immediately be required and 15 ppmw diesel should be required when available, but no later than June, 2006.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

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Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 16 of your Petition, that

The DEP's failure to limit start-up and shut-down is inconsistent with the Clean Air Act and does not comply with BACT and MACT.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The proposed Permit contains inadequate monitoring requirements and, therefore, is not practically enforceable. Because they are not practically enforceable, the monitoring requirements do not quality as legitimate restrictions on emissions.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

22. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The Permit is inconsistent with federal case law as it does not require continuous compliance with the PM10 emission limits.

and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

23. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending, as alleged on page 17 of your Petition, that

The proposed air Permit does not comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule 62-210.300(4)(d), F.A.C.

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and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Subject to the foregoing objections, the persons currently known to City are identified in City's response to interrogatory number (1) and (3).

24. Have you relied on the opinions of any expert consultants or witnesses in asserting any of the allegations in your Petition? If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied in asserting the Petition, and a summary of the grounds for each opinion.

Yes. City relied on the expert opinions of the persons identified in City's response to interrogatory number (1) and (3) in asserting the allegations in paragraphs 9 through 13, 30, 31 and such facts as are alleged on pages 6 through 18.

25. Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

Subject to the foregoing objections, the City currently expects to call some or all of the persons City identified in City's response to interrogatory number (1) as witnesses to discuss the subject matter articulated in interrogatory (1) and in the allegations of the Second Amended Petition.

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VIN, Risk Manager

P. 11

STATE OF FLORIDA) so COUNTY OF BROWARD)

THE FOREGOING INSTRUMENT was acknowledged before me this 9th day of November, 2001, by Sam Irvin, who is known to me and who did take an oath, deposes and says that he has read the foregoing answers to interrogatories, and that they are true and correct to the best of his knowledge, information and belief.

NOTARY PUBLIC

My Commission Expires:

Derione A Kassof

My Commission CC788314

Expires August 11, 2002

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STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS NOV 26 PM 1: 32

CITY OF CORAL SPRINGS, et al.,

Petitioners.

v.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER, L.L.C., etc.,

Respondents.

DIVISION OF ADMINISTRATIVE HEARINGS

CONSOLIDATED

CAS

DOAH CASE NOS. 4

11-2682

01-2683 01-2684

POMPANO BEACH ENERGY CENTER'S OBJECTIONS AND RESPONSES TO FIRST SET OF INTERROGATORIES SERVED BY CITY OF CORAL SPRINGS

Respondent, Pompano Beach Energy Center, L.L.C., pursuant to Fla.R.Civ.P. 1.340 and F.A.C. 28-106.206, respectfully objects and responds as follows to the interrogatories propounded by the City of Coral Springs.

Respectfully submitted,

Greenberg Traurig, P.A. 1221 Brickell Avenue Miami, Florida 33131

Telephone: (305) 579-0500 Facsimile: (305) 579-0723

Bv:

Kerri L. Barsh Florida Bar No. 443840 C. Ryan Reetz

Florida Bar No. 934062 Paul C. Savage

Florida Bar No. 088587

Counsel for Pompano Beach Energy, L.L.C.

GREENBERG TRAURIG, P.A.
1221 BRICKELL AVENUE MIAMI, FLORIDA 33131
305-579-0500 FAX 305-579-0717 www.gtlaw.com

CERTIFICATE OF SERVICE

I certify that copies of the foregoing document and of the referenced interrogatories were served by U.S. Mail on November 16, 2001 to:

Martha L. Nebelsiek, Esq.
Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Eugene M. Steinfield, Esq. City of Margate 5790 Margate Boulevard Margate, Florida 33063

Nancy A. Cousins, Esq. City of Coconut Creek 4800 West Copans Road Coconut Creek, Florida 33063

Kerry L. Ezrol, Esq. Goren, Cherof, Doody & Ezrol, P.A. Suite 200 3099 E. Commercial Boulevard Ft. Lauderdale, FL 33308 John Hearn, Esq. City of Coral Springs 9551 West Sample Road Coral Springs, Florida 33065

Paul S. Stuart, Esq. City of Coconut Creek 4900 W. Copans Rd. Coconut Creek, FL 33062

Maite Azcoitia, Esq.
Jose Raul Gonzalez, Esq.
Broward County Attorney's Office
Governmental Center, Suite 423
115 S. Andrews Avenue
Fort Lauderdale, Florida 33301

C. Rvan Reetz

GENERAL OBJECTIONS

- A. Energy Center objects to the interrogatories to the extent that they purport to impose duties beyond those imposed by the Florida Rules of Civil Procedure and F.A.C. 28-106.206.
- B. Energy Center objects to the interrogatories to the extent that they purport to require disclosure of information subject to the attorney-client privilege, the work product privilege, or any other applicable privilege.

RESPONSES TO INDIVIDUAL INTERROGATORIES

 Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as overbroad, unduly burdensome, and as vague, ambiguous, and misleading with respect to the phrase "facts alleged in the Petition." The Petition is vaguely drafted and contains numerous contentions which are either factually incorrect or are argument. Moreover, a number of the so-called "facts alleged in the Petition," such as the statement that the petitioner is a Florida municipality, the DEP is the permitting authority in this proceeding, or the location of Energy Center's offices, are undisputed and are the subject of such widespread knowledge as to render any literal response virtually infinite in length. Subject to and without waiver its objections, Energy Center responds as follows: for persons with knowledge of petitioner's allegations, Energy Center refers petitioner to petitioner's response to Energy Center's First Set of Interrogatories, and to any subsequent response that may be compelled by the ALJ or otherwise made by the

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petitioner. In addition, Energy Center identifies the following persons who have substantial knowledge concerning, or relevant to, the basis for, and propriety of, Energy Center's application for the Permit:

David Kellermeyer

Enron North America 1400 Smith Street Houston, TX 77002-7361

(knowledge includes, without limitation, general knowledge of permit application, knowledge concerning BACT, PSD permitting, applicable regulations)

Scott Osbourn

ENSR Inc.

150 2nd Avenue N., Suite 1500

St. Petersberg, FL 33701

(knowledge includes, without limitation, knowledge concerning PSD permitting, applicable regulations, BACT, pollution prevention plan for Broward County Code Section 27-178)

Ben Jacoby

Enron North America
1400 Smith Street
Houston, TX 77002-7361
(knowledge includes, without limitation, general knowledge of permit application)

Steven Krimsky

Enron North America
1400 Smith Street
Houston, TX 77002-7361
(knowledge includes, without limitation, general knowledge of permit application)

Bob Iwanchuk

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, general knowledge of permit application)

Mike Griffin

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge concerning emission estimation and estimates, BACT)

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305-579-0500 FAX 305-549-0717 www.gtlaw.com

Bob Fraser

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of BACT, availability of SCR, XONON, SCONOx)

Brian Stormwind

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of air quality impact assessments, prevailing wind direction)

Bob Paine

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of air quality impact assessments)

Dave Heinold

ENSR Inc.

2 Technology Park Drive

Westford, MA 01886

(knowledge includes, without limitation, knowledge of PSD Class I air impact analysis and protocol document)

Kimberly A. Brown

Kimberly A. Brown & Associates

2641 N. Ocean Boulevard, Ste. 905

Ft. Lauderdale, FL 33308

(knowledge includes, without limitation, knowledge concerning certain regulatory requirements, pollution prevention plan for Broward County Code Section 27-178)

Gary McCutchen

RTP Environmental Associates, Inc.

304-A West Millbrook Road

Raleigh, NC 27609

(knowledge includes, without limitation, knowledge concerning PSD permitting, applicable regulations, BACT)

Douglas A. Leach

Enron Global Markets

1400 Smith Street

Houston, TX 77002-7361

(knowledge includes, without limitation, knowledge concerning availability and price of ultralow sulfur distillate fuel oil)

Alvaro Linero

New Source Review Section
Florida DEP
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(knowledge includes, without limitation, knowledge concerning DEP's review of application)

Deborah Galbraith

Florida DEP
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(knowledge includes, without limitation, knowledge concerning DEP's review of application)

Jarrett Mack last-known address: Broward County DPEP 218 SW 1st Avenue Ft. Lauderdale, FL 33301 954-519-1220 2. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, drawing, motion picture, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what item such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.

Energy Center objects to the interrogatory, as applied to the facts of this case, as vague and ambiguous with respect to the phrase "pertaining to any fact or issue involved in this controversy," and, depending upon the intended construction, as overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Due to the vagueness of the Petition, and petitioners' failure to provide proper responses to the discovery propounded by Energy Center, Energy Center is unable to determine which disputed "fact[s] or issue[s]" are actually "involved in this controversy." Subject to and without waiver of its objections, Energy Center states that (1) the DEP file concerning the permit, which is in DEP's possession, contains documents which may be within the scope of this interrogatory, and (2) Energy Center will produce copies of documents within the scope of this interrogatory to the extent that Energy Center determines that it is likely to rely upon such documents at trial.

3. Please identify with particularity each and every fact upon which you rely in support of your contention that the DEP should issue the Permit.

Energy Center objects to the interrogatory as overbroad, unduly burdensome, and as vague, ambiguous, and misleading with respect to the phrase "each and every fact upon which you rely in support of your contention that the DEP should issue the permit." There are a potentially infinite number of facts on which Energy Center may ultimately need to rely in support of its position at trial, including basic science and engineering facts, and it is wholly unclear from the Petition and from petitioner's insufficient response to Energy Center's First Set of Interrogatories which contentions the petitioner seriously intends to advance at trial, which will affect the proof that must be submitted by Energy Center. Subject to and without waiver of its objections, Energy Center responds that its application for the Permit, including all exhibits, supplements and other materials in the DEP file, constitutes the principal basis on which it seeks issuance of the Permit.

4. For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to that fact and, as to each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 4 on the same grounds as interrogatory no. 3, which is incorporated into interrogatory no. 4. As with interrogatory no. 3, the interrogatory seeks to elicit potentially unbounded information concerning a potentially infinite number of facts. Subject to and without waiver of its objections, Energy Center states that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit (as described in Energy Center's response to interrogatory no. 1).

5. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to your contention that the proposed Plant has or will use best available control technology and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

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Energy Center objects to interrogatory no. 5 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

6. Please identify with particularity each and every fact on which you rely in support of your contention that the proposed Plant has or will use best available control technology.

Energy Center objects to interrogatory no. 6 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center refers petitioner to its response to interrogatory no. 3.

Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the claim, as articulated on page TE-2 of the Technical Evaluation and Preliminary Determination that the proposed power

n plant's distance to Everglades National Park is approximately 60 kilometers northnortheast of the Everglades National Park and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as improper, abusive, harassing, overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. The location of Everglades National Park is a matter of general public knowledge, and the proposed plant's location and page TE-2 are both matters of public record.

8. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in supporting the DEP's best available control technology determinations contained in Appendix BD and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 8 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's BACT determinations do comply with federal or state law adopted pursuant to the Federal Clean Air Act and its amendments, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 9 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

10. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP enforced BACT as mandated by Rule 62-210, F.A.C. and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 10 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (which implicitly includes the propriety of the DEP's initial determinations) (as described in Energy Center's response to interrogatory no. 1).

\$1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has given due consideration to the emissions limiting standards or BACT determination of other states as required under Rule 62-212, F.A.C. In addition, the DEP has identified the maximum degree of reduction in accordance with Florida Administrative Code, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 11 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claim of "lack of due consideration," inasmuch as petitioner's failure to identify, with any particularity, the supposed "emissions limiting standards or BACT determination of other states" in either its Petition or its discovery responses has made it impossible for Energy Center, thus far, to understand the substance of petitioner's allegation (Petition, p. 15) that "due consideration" was not given and, accordingly, to respond thereto. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1). Energy Center further responds that the various personnel at DEP are presumably aware of the matters relied upon by DEP, and that the petitioners in this consolidated proceeding are aware of the extent to which they chose to submit any information to DEP in support of their respective positions against issuance of the Permit.

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12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient as it contains BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 12 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

13. Please identify each person who has, claims to have or whom you believe may knowledge or discoverable information pertaining to any fact on which you rely contending that the Permit is not deficient in that it does identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 13 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

14. Please identify each person who has, claims to have or whom you, believe may have knowledge or discoverable information pertaining to any fact on which you rely contending that the effects of diesel exhaust as a result of the combustion of distillate in the turbines was considered as a collateral environmental impact in a BACT analysis pursuant to Rule 62-210, F.A.C. and federal guidance, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 14 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position (and the law) and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Energy Center further objects that the interrogatory mischaracterizes the facility's emissions due to combustion of distillate by terming it "diesel exhaust." Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

15. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has considered the impact of its BACT decisions, considered the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 15 as unintelligible. To the extent that the interrogatory can be rewritten to make it intelligible, Energy Center objects to the interrogatory as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

16. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is appropriate and consistent with Rule 62-212.400(6)(a), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 16 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's present position (and the law, and the facts) and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

17. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that Sulfur Distillate is BACT for SO₂ and Sulfuric Acid Mist when firing oil, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 17 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's position. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's failure to limit start-up and shut-down is consistent with the Clean Air Act and does comply with BACT and MACT, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 18 as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence. Moreover, Energy Center objects that the interrogatory mischaracterizes Energy Center's position, as well as the relevant facts. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information as to the Air Quality Monitoring studies and tests done on the proposed power plant site and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to the interrogatory as vague and ambiguous, and depending upon the intended construction, as overbroad, unduly burdensome, misleading, vague, ambiguous, and not reasonably calculated to lead to the discovery of relevant, admissible evidence, because, as Energy Center understands the interrogatory, "Air Quality Monitoring studies and tests" were not required as part of the permitting process.

20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed Permit contains adequate monitoring requirements and, therefore, is practically enforceable, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 20 as duplicative of the preceding interrogatories, and further objects on the grounds identified in response to the preceding interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the propriety of monitoring under the Permit (as described in Energy Center's response to interrogatory no. 1).

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is consistent with federal case law as to compliance with the PM10 emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 21 as vague, ambiguous, misleading, and not reasonably calculated to lead to the discovery of relevant, admissible evidence, all with respect to the phrase "consistent with federal case law as to compliance with the PM10 emission limits." Energy Center further objects that the interrogatory mischaracterizes Energy Center's present position and is premature in seeking to elicit Energy Center's ultimate response to petitioner's claims (which have not been adequately developed in either the Petition or in petitioner's response to the discovery propounded by Energy Center). Depending upon the construction given to the interrogatory, Energy Center further objects to the interrogatory as overbroad, unduly burdensome, and/or duplicative of the previous interrogatories. Subject to, and without waiver of, its objections, Energy Center responds that the persons identified in response to interrogatory no. 1 have substantial knowledge of the basis for, and propriety of, Energy Center's application for the Permit, including the appropriate BACT analysis to be applied to the Plant (as described in Energy Center's response to interrogatory no. 1).

22. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed air Permit does comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule G2-210.300(4)(d), F.A.C., and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

Energy Center objects to interrogatory no. 22 as vague, ambiguous, overbroad, and not reasonable calculated to lead to the discovery of relevant, admissible evidence. Subject to, and without waiver of, its objections, Energy Center states that the persons identified in response to interrogatory no. 1 – particularly Scott Osbourn and Kimberly Brown – have relevant knowledge (as described in Energy Center's response to interrogatory no. 1).

23. Have you relied on the opinions of any expert consultants or witnesses in connection with the allegations of the Petition. If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied, and a summary of the grounds for the each opinion.

Energy Center objects to the interrogatory as vague and ambiguous with respect to the phrase "in connection with the allegations of the Petition," and, depending upon the intended construction, as overbroad, unduly burdensome, not reasonably calculated to lead to the discovery of relevant, admissible evidence, and intentionally violative of the attorney-client privilege, the work-product doctrine and any other applicable privileges. Subject to and without waiver of the foregoing objections, Energy Center states that it did not draft the Petition, and therefore did not rely on any experts or consultants in drafting the Petition.

24. Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

Energy Center anticipates that it will likely call one or more expert witnesses at the trial of this case. To date, the determination of which experts to call has not been made, and petitioner has delayed and hindered that process by failing to identify its contentions with specificity in the Petition and by failing to provide proper responses to the discovery propounded by Energy Center. Energy Center will identify its expert witnesses as required by the Order of Pre-Hearing Instructions, subject to any amendments, and subject to any other agreement among counsel for the identification of experts.

Summary of Disputed Issues – Pompano Beach Energy Center Coconut Creek Petition

Number	Disputed Issue	Comments	Follow Up/Testimony
28	Whether an environmental impact statement/evaluation should have been conducted by ENRON prior to the Notice of Intent to Issue Air Construction Permit.	NEPA is not triggered by FEDP issuing a PSD permit (i.e., this is not a Federal Action)	Can we get stipulation that this is not in dispute?
29	Whether the assessment of environmental impacts associated with industrial-related activities, including those on ambient air quality, must be performed prior to issuance of a permit.	Individual plant impacts less than SILs, mean that a facility will not cause or contribute to violation of a health-based standard	Air Quality Impact Assessment Testimony (Bob Paine)
30	Whether the impact upon the CITY of the prevailing wind direction from the proposed facilities ahs been considered and factored into the decision to issue a Permit.	Use of 5 years of hourly meteorological data in the air quality impact assessment <i>did</i> factor in prevailing wind considerations.	Air Quality Impact Assessment Testimony (Bob Paine)
31	Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to issuance of a Permit to ensure that the combined emissions from the various sources in the area do not cause a contravention of applicable air quality standards. (note: subparts to this cite NEPA cumulative impact requirements)	 NEPA is not triggered by FDEP issuing a PSD permit Individual plant impacts less than SILs, mean that a facility will not cause or contribute to violation of a health-based standard. 	Air Quality Impact Assessment Testimony (Bob Paine)
32	Whether DEP's Intent to Issue Air Construction Permit was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed.	The impact assessment addressed Class I impacts in the Everglades to the satisfaction of NPS. Impacts on other "sensitive areas" were addressed in Section 7 of application by evaluating peak impacts in comparison to most sensitive plant damage thresholds.	Air Quality Impact Assessment Testimony (Bob Paine)
33	Project must use BACT to limit emissions of NOx, CO, VOCs, SO2, sulfuric acid mist, and PM10, pursuant to Rule 62-213.400(2)(f), F.A.C.	VOC emissions are insufficient to trigger BACT review threshold.	Other than the VOC error, this is not in dispute.
34	Rule 62-210.200(38), F.A.C., defines BACT as "an emission limitationbased on the <i>maximum</i> degree of reduction"	Statement of fact, not of an issue in dispute.	
35	In determining BACT, the Department shall give consideration to, among others, "all scientific, engineering, and technical material and other information available to the Department," "the emission limiting standards or BACT determination of any other state," and "the social and economic impact of such technology." Rule 62-212.400(6), F.A.C.	Statement of fact. They are setting the stage for arguments that DEP did not address social and economic impacts, as required by FAC. Also, they later imply that DEP did not consider more stringent limits set by other state.	
36	The City believes and will demonstrate to the Department that the applicant's proposed BACT limits for the turbines, fuel oil heater, tanks, and cooling towersare not consistent with the definition of BACT in Rule 62-210.200(38), F.A.C. and the requirements of Rule 62-212.400(6), F.A.Cthe Department's BACT determinations do not recognize the much lower limits currently being permitted in other states, nor do they address the social and economic impacts to the City	Statement of fact/intent.	

Summary of Disputed Issues - Pompano Beach Energy Center Coconut Creek Petition

Number	Disputed Issue	Comments	Follow Up/Testimony
37	Turbine BACT for NOx was established as 9 ppm @ 15% O2 for gas and 42 ppm @ 15% O2 for oil on 24-hour block average. Other states have permitted large numbers of simple cycle peaking power plants with NOx limits of 2 to 5 ppm on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppm on oil, achieved with water injection and SCR. Continuous compliance is based on 1 to 3-hour rolling averages. These lower limits have been achieved in practice. The City recommends a much lower NOx limit be established.	- The "large number" statement is factually incorrect, particularly for oilThe Top-Down BACT analysis did address lower emission limits and the use of SCR, XONON, and SCONOx. These technologies were found to not be "available" within the context of BACT - These lower emitting facilities are based on LAER determinations in California	- McCutchen testimony on how top-down BACT is done - Frasier (ENSR) testimony on BACT determinations elsewhere - Osbourn (ENSR) on BACT evaluation for PBEC project.
38	Turbine BACT for CO was established as 9 ppm @ 15% O2 for gas and 20 ppm @ 15% O2 for oil. Other states have permitted simple cycle peaking power plants with CO limits of 2 to 6 ppm on oil and gas using an oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors. The City believes a much lower CO limit should be established and that continuous compliance be demonstrated with a continuous emission monitor.	 The Top-Down BACT analysis did address lower limits and the use of an oxidation catalyst. DEP determined that an oxidation catalyst is not cost effective. (Note: we may want to offer up installation of a CO CEMS to resolve the compliance demonstration issue) 	- McCutchen testimony on how top-down BACT is done - Frasier (ENSR) testimony on BACT determinations elsewhere - Osbourn (ENSR) on BACT evaluation for PBEC project.
39	The draft permit establishes BACT for VOCs as 2.8 ppm @ 15% O2 on gas or oil. Other states have permitted simple cycle peaking power plants with VOC limits of 2 ppm @ 15% O2 on gas or oil, using an oxidation catalyst. The City believes a much-lower VOC limit should be established for the turbines.	- The facility is not subject to BACT for VOCs	
40	The draft permit indicates that the facility includes one 2.5 million gallon distillate storage tank one 0.6 million gallon distillate storage tank, one 13 MMBtu/hr gas-fired fuel heater, and four wet mechanical draft cooling towers. The draft permit contains no BACT determinations, emission limits, or monitoring requirements for these sources	 The distillate tanks are sources of VOCs only, which are not subject to BACT for this facility. The application did do a BACT evaluation for the fuel heater. This could be cured by a de novo permit which provide specific emission limits for the cooling tower and gas heater. 	
41	The draft permit does not identify an emergency firewater pump or emergency generator. The City requests that the Department investigate whether emergency diesel engines would be used, and if so, these be subjected to a formal BACT analysis and permit limits.	- No emergency generator - There will be an emergency fire pump; do we want to include this now or address it later?	

Summary of Disputed Issues – Pompano Beach Energy Center Coconut Creek Petition

Number	Disputed Issue	Comments	Follow Up/Testimony
42	The project proposes to use distillate oil as a backup fuel for an average of 1,000 hours per installed unit. The combustion of distillate in the turbines would produce "diesel exhaust" which is recognized by EPA and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions on the residents of Coconut Creek.	 More a statement of concern than disputed issue. We should challenge their statement that turbines produce "diesel exhaust". Also, EPA does not recognize diesel exhaust as a "potent human carcinogen". Actually, there is no relevant stature or rule associated with this issue that they are challenging. 	
43	The definition of BACT in Rule 62-210.200(38) and implementing EPA guidance in the NSR Manual (EPA, New Source Review Workshop Manual, October 1990) require taking into account the "environmental" impacts during the top-down BACT process. The Department is further required to evaluate the social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	The NSR Guidelines describes how an evaluation of energy, economic, and environmental impacts can be used to eliminate higher-ranked control technologies. The evaluation in the application does address environmental impacts of each potential BACT technology.	
44	The draft permit establishes BACT for SO2 and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. The City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a)4, F.A.C.	 Distillate and residual fuel oil is already extensively used in County at Port Everglades The city has not provided any supporting information to document the "far reaching social and economic implications for its residents:. 	
45	Notwithstanding the health issues, 0.05% sulfur distillate is not BACT for SO2 and sulfuric acid mist when firing oil. Lower sulfur distillate, containing only 30 ppmw sulfur, is currently available on the east coast. Further, the EPA has adopted stringent fuel regulations that limit the sulfur content of diesel fuel to 15 ppmw in June 2006.	- Ultra Low sulfur fuel (15 ppm) is estimated by DOE to cost 4 to 10 cents per gallon more than 0.05% sulfur fuel. This would have a cost effectiveness of SO2 control of \$2,500 to \$10,000. Availability of 30 ppm is questionable other than in shipments that would exceed onsite storage capacity.	- Expert testimony on availability?
46	The City requests the permit be modified to eliminate the use of distillate oil. In the short term, a backup fuel such as LNG or propane, or an uninterruptible gas supply should be required. If distillate is required, the emissions should be rigorously controlled and 30 ppmw diesel fuel be required on startup and 15 ppmv when it becomes available, but no later than June 2006.	- Does BACT require the consideration of all fuels? What about landfill gas from the local landfill?	-Determine cost of LNG/propane, interruptible gas supply. Is there currently any firm capacity?

Summary of Disputed Issues – Pompano Beach Energy Center Coconut Creek Petition

Number	Disputed Issue	Comments	Follow Up/Testimony
47	The permit contains no limits on the number of startups/shutdowns nor on the emissions during these periods. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NOx, CO and VOCs than during steady state operation.	- Simple statement of alleged facts.	
48	The City is concerned that virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas of Coconut Creek. Emissions of formaldehyde can increase by over a factor of 500 during startup. If each turbine experienced 100 startups per year lasting 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of MACT.	- Statement of alleged facts	ENSR – research facts regarding statement on formaldehyde increase during startup.
49	Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. These emissions should have been considered in the BACT analysis and related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38). The City believes a that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT and MACT.	- DEP has proposed a startup conditions for the El Paso Deerfield Beach project that is probably acceptable.	Address in technical meeting with DEP?
50	Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations. The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and other HAPs have not been assessed and mitigated.	- Applicant met with DPEP on 2 (or more?) occaisions and produced a pollution prevention plan that was acceptable to the County.	Osbourn testimony on preparation of P2 Plan and meetings with DPEP.

ATTACHMENT "A" TO RESPONSES TO CORAL SPRINGS INTERROGATORIES

ALLEGED FACT	PERSON	KNOWLEDGE
Fuel oil will be permitted up to 3000 hours per year or one hundred 125 days per year.	Al Linero, DEP	Hours actually proposed in permit as amended by Department's Notice of change in Department Position filed October 25, 2001 and revised draft permit and best available satisfied technology determination (the frozents).
These large regional significant sources of "noxious emissions", which are	Broward County permitting/compliance personnel	Locations of stationary sources
publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.	Al Linero, DEP	Approximate locations of certain stationary sources
Issuance of a Federal PSD Permit subjects to NEPA, cumulative environmental effects, and EIA/EIS	Al Linero and Tom Rogers, DEP	State permitting actions pursuant to DEP Regulations do not subject project to NEPA and EIS/EIA.
	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Quantitative cumulative air quality analysis should be performed to demonstrate that combined emissions from (all) sources do not cause a	Cleve Holladay and Tom Rogers of DEP Jehbie Gulbruith	DEP Rule requirements regarding compliance demonstrations with applicable air quality standards.
contravention of applicable air quality standards.	Applicant's expert, Dr. R. Ewanchuk of ENSR.	General PSD requirements regarding compliance with air quality standards
Whether an EIS/EIA should have been conducted by ENRON prior to the DEP issuance of Intent	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
issuance of filterit	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.

end revited draft permit,

Whether the EIA associated with must be performed prior to the issuance of a permit.	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
· ·	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Whether the impact upon the Cities of the prevailing wind direction from proposed facilities has been considered	-Cleve Holladay and Debbie Galbraith of DEP.	Model output parameters
and factored into the decision to issue a Permit.	Applicant's expert, Dr. Robert Ewanchuk of ENSR.	Model input and output parameters
Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to the issuance of a Permit to ensure that the combined	Cleve Holladay and Tom Rogers of DEP	DEP Rule requirements regarding compliance demonstrations with applicable air quality standards.
emissions from the various sources in the area do not cause a contravention of applicable air quality standards	Applicant's expert, Dr. R. Ewanchuk of ENSR	General PSD requirements regarding compliance with air quality standards
The issuance of Federal Permits such as PSD subjects facility to NEPA EIS	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
Under NEPA, cumulative effects of proposed project must be considered in an EIA.	Al Linero and Tom Rogers of DEP.	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
all LIA.	Staff or management at Council of Environmental Quality (CEQ)	Applicability of NEPA and EIS/EIA to Federal (and not State) Government actions.
DEP's Intent was based on erroneous and misleading information concerning	Cleve Holladay and Tom Rogers of DEP	Basis of Department's Intent
the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed	Applicant's expert, Dr. Robert Ewanchuk of ENSR.	Basis of application for Air (PSD) Permit

The TEPD says proposed power plant is located 60 km from the Everglades National Park (ENP). Map of the	Salbia Galbia W	What TEPD actually says
Conservation Areas potentially affected demonstrates affected ecosystems are far closer than stated.	National Park Service (NPS) personnel in Denver such as Paul Bunyak and John Notar. Everglades Park Manager.	Areas of concern to NPS with respect to PSD. Exact location of Everglades National Park and distance from any given location.
Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No.2, to the north	U. S. Fish & Wildlife Service (USFWS) personnel in Denver such as Ellen Porter. Loxahatchee Refuge Manager.	Areas of concern to USFWS with respect to PSD. Exact location of Loxahatchee and distance from any given location.
Public entrance of ENP may be over 37 miles away from plant, but ecosystem of the Florida Everglades, specifically Conservation Area No. 2 is within ten miles.	Personnel at Southeast Florida Water Management District and personnel at U.S. Army Corps of Engineers.	Exact location of Conservation Area No. 2 and distance from any given location
The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location	Cleve Holladay and Fom Rogers of DEP	What was taken into account in review regarding proposed project location.
then review of the proposed location	Applicant's expert Dr. Robert Ewanchük of ENSR.	What was taken into account in preparation of application for Air (PSD) Permit
The project must BACT to limit NO _X , CO, VOCs, SO ₂ , sulfuric acid mist, and PM ₁₀ pursuant to Rule 62-212.400(2)(f),	Al Linero of DEP.	Which pollutants are subject to a BACT determination.
F.A.C.	Applicant's experts including Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	Pollutants for which BACT proposals were submitted.
ENRON's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers,	Al Linero of DEP.	DEP's definition of BACT. Draft BACT determination for Enron Pompano Project.
accepted by the Department, are not consistent with the definition of BACT.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Definition of BACT used by applicant and BACT proposal for Enron Pompano Project.

BACT not consistent with the requirements in Rule 62-212.400(6), F. A.C. Does not address the social and	Al Linero of DEP	DEP requirements for BACT determinations.
economic impacts to the City for failing to appropriately limit emissions from the facility.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
Other states require NO _X limits of 2 to 5 ppmvd on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR.	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
Continuous compliance is demonstrated based on 1-hour to 3- hour rolling averages. These lower limits have been achieved in practice.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for intermittent duty simple cycle combustion turbine projects in their respective states.
:	New Source Review Administrators for EPA Regions	BACT determinations and compliance requirements for intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

Other states require limits of 2 to 6 ppmvd on oil and gas using oxidation catalyst.	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
Much lower limits have been demonstrated in source tests and with continuous emission monitors (CEMS). City believes a much lower CO limit should be established for the turbine.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in their respective states.
Continuous compliance should be demonstrated with a continuous emission monitor.	New Source Review Administrators for EPA Regions	BACT determinations for some intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse
Other states require VOC limits of 2 ppmvd on oil and gas using oxidation catalyst. Much lower limits have been	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in some other states
demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.	New Source Review Administrators of other states	BACT determinations and compliance requirements (and demonstrations) for some intermittent duty simple cycle combustion turbine projects in their respective states.
,	New Source Review Administrators for EPA Regions	BACT determinations for some intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

Draft permit contains no BACT determinations, emission limits, or monitoring requirements for minor sources (storage tanks, gas-fired fuel heater, cooling towers).	Al Linero of DEP	DEP requirements for BACT determinations.
These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a		
facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, etc.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
The City requests that DEP conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.		
Power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR and Dave Kellermeyer and Greg Krause of Enron	Whether an emergency generator and an emergency firewater pump are actually planned for the facility
The diesel exhaust from any such engines are a great concern to the City.		
The Cities request DEP investigate whether emergency diesel engines would be used and perform a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.	Al Linero of DEP	Whether emissions from such units are included within DEP BACT determinations

The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen	Sims Roy of EPA OAQPS.	Believe he would have an opinion whether combustion of distillate in combustion turbines produce "diesel exhaust" or an opinion about who would have such knowledge or opinion.
and respiratory irritant. The Cities are deeply concerned about the impact of these emissions, as well as others, on the residents of the cities.	Staff and Management at EPA and California.	Whether EPA or California recognize diesel exhaust as carcinogen and respiratory irritant if indeed it is produced by combustion of distillate in combustion turbines.
	Staff and management of Cities	Depth of concern by cities regarding impacts of diesel exhaust if indeed it is produced by combustion of distillate in combustion turbines.
BACT definition requires "environmental" impacts during the "top-down" process.	Al Linero of DEP	DEP requirements for BACT determinations.
Department is required to evaluate social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR	Matters addressed in BACT proposals.
Draft permit establishes BACT for SO ₂ and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or	Al Linero of DEP	DEP's BACT determination for SO ₂ and sulfuric acid mist emissions for Enron Pompano project.
considering the substantial health impacts that may result from this choice.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	BACT proposals for SO ₂ and sulfuric acid mist emissions for Enron Pompano project.
City maintains that the use of distillate fuel in a densely populated area is		
inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.	Staff and management of Cities	What Cities actually maintain regarding use of distillate fuel in a densely populated area.

0.05% sulfur distillate is not BACT for SO ₂ and sulfuric acid mist when firing oil.	Al Linero of DEP.	DEP's BACT determination for SO ₂ and sulfuric acid mist emissions for Enron Pompano project.
A sulfur content of 0.05% is equivalent to 5,000 ppmw.	Dr. Robert Ewanchuk and Scott Osbourn of ENSR.	BACT proposals for SO ₂ and sulfuric acid mist emissions for Enron Pompano project.
Lower sulfur distillate, containing only 30-ppmw sulfur, is currently available on the east coast.	Any person with knowledge of engineering or chemistry.	That a sulfur content of 0.05 percent by weight is actually equivalent to 500 ppmw and not 5,000 ppmw.
EPA has adopted regulations that limit the sulfur content of diesel fuel to 15 ppmw.	Staff at Department of Energy and major refined products distribution companies such as Louis Dreyfus, Chevron-Texaco, Exxon-Mobil, etc	Availability of distillate containing 30 ppmw. Extent of availability of ultra low sulfur diesel in June 2006.
These regulations go into effect in June 2006 at which point ultra low sulfur diesel will be widely available in the Florida market.	Staff at EPA OAQPS.	EPA regulations regarding sulfur content of diesel fuel. Date these regulations go into effect.
Non-diesel backup fuel such as LNG (liquefied natural gas), propane, or non-interruptible gas supply contract for curtailments should be required, until	Al Linero of DEP	Opinion as to availability of LNG, propane as non-diesel backup fuel.
constraints on the FGT are alleviated, but no later than January 2003.	Staff at Florida Gas Transmission Company and at Federal Energy Regulatory Commission.	Availability of LNG, propane or non-interruptible gas supply. Constraints on FGT.
If distillate is retained, diesel exhaust emissions should be rigorously		
controlled and 30-ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.	Staff at Department of Energy and major refined products distribution companies such as Louis Dreyfus, Chevron-Texaco, Exxon-Mobil, etc.	Availability of distillate containing 30 ppmw. Extent of availability of ultra low sulfur diesel in June 2006.

39.	Pollution	
	Prevention	Plan

Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations. The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and other HAPs have not been assessed and mitigated. Therefore, the project is in violation of Rule 62-210.300(4)(d)15.a F.A.C., which requires compliance with the requirements of Broward County.

The Department included the requirement to submit a Pollution Prevention Plan to Broward County in a request for additional information dated November 21, 2000. The request was prominently mentioned as Item 1 of the mentioned letter.

By the Specific Operating Agreement between the Department and the County, Broward County interprets its own rules. ENRON met with County staff met on November 30, 2000 to discuss the requirements and submitted a Pollution Prevention Plan to Broward County and the Department as a revision to the application transmitted with a letter dated December 14, 2000.

Following a review of the submittal, the County's Air Permitting Manager advised the Department by electronic mail dated January 4, 2001 that "We have reviewed the response to your incompleteness letter as well as the revised application dated December, 2000. Our review indicates that the application, as amended, adequately addresses Broward County ordinances 27-176(c)(2)(b) and 27-178".

The Department relied on that conclusion by the staff competent to make it. ENRON can provide facts regarding their own discussions with the County. The County's staff can be called to testify regarding their conclusions.

Let ENRON handle. Al ready to explain.

38. Number of Startups and shutdowns

Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. The U.S. EPA has consistently defined startup and shutdown to be part of the normal operation of a source. 12 The EPA has also consistently concluded that these emissions should be accounted for in the design and implementation or the operating procedure for the process and control equipment. EPA has concluded that "[w]ithout clear definition and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." (Bennett 9/28/82.) Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38). F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT/MACT.

With due respect to the EPA memoranda, the Department is not required to follow them. The Department is also not required to implement EPA's comments on projects permitted pursuant to the Department's PSD rules. However the Department respects the input by EPA Region IV as a commenter on the project and planned to revise the permit in partial consideration of those comments.

Limitations on startup and shutdown emissions are not required by Department rules. However the rules require adherence to <u>best</u> operating practices and cannot "shield excess emissions arising from poor operation". The Department believes that the requirement to use best operating practices is consistent with the definition of BACT, which can be "a design, equipment, work practice, operational standard or combination thereof". The Department has gathered additional information from initial tests at the first units similar units to begin operation in Florida and is better able to describe the measures to control startup emissions.

The Department included Work Practice BACT for startup in several recent permits issued subsequent to the Draft ENRON Pompano permit and EPA's comments. EPA Region IV commented favorably on the new approach, specifically for El Paso projects in Broward, Palm Beach, and Manatee Counties.

There is no need to limit the number of startup and shutdowns. The previously described Work Practice BACT is sufficient.

Let ENRON handle.

Department can explain its position per Notice to Parties. Al will explain.

¹ Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

² Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15,1983 (Bennett 2/15/83).

; ;		The Department also plans to require a continuous emission monitoring system (CEMS) at one of the units to gather information regarding actual carbon monoxide (CO) emissions during startup of simple cycle combustion turbines. This was one of the possibilities suggested by EPA in its comments on the project. The data collected will allow the Department to set firm CO limits during startup and shutdown if feasible.	
37. Startup and shutdown impacts	Virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas (Coconut Creek, particularly during combined operation of the Pompano and Deerfield Beach Energy Centers. Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100 startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.	Even during startup and shutdowns, the ground level concentrations of CO and NO _X will not exceed the National Ambient Air Quality Standards (incorporated at Rule 62-,F.A.C.). The standards are designed to protect the public with an adequate margin of safety. The Department disagrees that emissions of formaldehyde will exceed 10 tons per year. The petitioner will need to present facts. ENRON will be able to rebut the claims.	Let ENRON handle.

35. Eliminate distillate	Non-diesel backup fuel such as LNG (liquefied natural gas), propane, or non-interruptible gas supply contract for curtailments should be required, until constraints on the FGT are alleviated, but no later than January 2003.	DEP will not modify the permit to eliminate use of distillate fuel oil without a request or agreement by ENRON to do this or by recommended order from the Administrative Law Judge. LNG is not available as a backup fuel. Propane is not available in the amounts needed to support the facility as a backup fuel. Enron can rebut the claims and there is no need for the Department to do any work on this. DEP proposes limiting fuel oil use to 500 (instead of 1000) hours per year per unit after 2004, when it is likely that at least one of the gas projects planned by Duke, ENRON, El Paso, AES, and FGT Co., will be completed and provide more gas to South Florida. This will make the permit consistent with the draft permit for the ENRON Deerfield project with respect to hours of fuel oil use and takes into consideration recent issuance of a draft permit to El Paso in Deerfield that allows no fuel oil use.	ENRON explains its position. Department must present its position per Notice to Parties. Al will explain.
35. Limit diesel t 15 ppmw of sulfur	If distillate is retained, diesel exhaust emissions should be rigorously controlled and 30-ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.	The Department will not change the fuel oil specification because the requirement is not cost-effective for sulfur dioxide/sulfur trioxide control.	Let ENRON handle. Al ready to explain.
36. Limits on startups and shutdowns	No limits on the number of startups and shutdowns nor on the emissions. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NO _X , CO, and VOCs (including aldehydes) than during steady state operation.	The issue of startup and shutdown emissions is one of the items raised by EPA in its comments on the project and by the CITIES in their petitions. The Department has authority to control startup and shutdown emissions and plans to include a "Work Practice BACT in the permit. This reflects consideration of comments received and rule analysis indicating that. This will match the Department's recent Intents and Final Permits for several projects in Southeast and Southwest Florida.	Let ENRON handle. Department can explain its position per Notice to Parties. Al will explain.

33. Impacts from SO ₂ BACT	Draft permit establishes BACT for SO ₂ and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.	Pipeline natural gas and low sulfur fuels are inherently clean fuels. Because pipeline natural gas is already very low in sulfur content, it represents the top technology and is accepted as BACT for the main fuel. Fuel oil is used as the backup fuel. Given that fuel oil is the backup fuel, ENRON proposed and the Department approved a specification of 0.05 percent sulfur. The fuel oil satisfying the requirement is the same widely available fuel used in transportation. The Department did not consider any additional analysis to be necessary as the only other reasonably available fuels oils to be considered have higher sulfur content. For example, the nearby FPL plant uses 1 percent sulfur fuel oil.	Let ENRON handle. Al ready to explain.
34. 0.05 percent sulfur not BACT	0.05% sulfur distillate is not BACT for SO ₂ and sulfuric acid mist when firing oil. A sulfur content of 0.05% is equivalent to 5,000 ppmw. Lower sulfur distillate, containing only 30-ppmw sulfur, is currently available on the east coast. EPA has adopted regulations that limit the sulfur content of diesel fuel to 15 ppmw. These regulations go into effect in June 2006 at which point ultra low sulfur diesel will be widely available in the Florida market.	Disagree that 0.05% sulfur fuel oil is not BACT for the backup fuel. The statement that 0.05% sulfur is equivalent to 5,000 ppmw is an error. The correct value is 500 ppmw. If the 30-ppmw sulfur distillate is available, it is not BACT. The difference in cost between 0.05% sulfur fuel oil and the 30-ppmw sulfur fuel oil (if available in Florida) is certainly more than 5 cents per gallon. At a difference of only 3 cents per gallon, the marginal cost of sulfur dioxide control would be is \$7,500 per ton of SO ₂ removed. This value is not considered cost-effective. The petitioners will need to provide information that the fuel is actually available in Southeast Florida and that it costs no more than about 2 cents per gallons more than the 0.05% sulfur fuel oil. The Department does not believe the petitioner can do this, while ENRON can provide facts sufficient facts to further buttress their proposal.	Let ENRON handle. Al ready to explain.

	Emergency Equipment	Power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines. The diesel exhaust from any such engines are a great concern to the City. The City requests DEP investigate whether emergency diesel engines would be used and perform a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.	The draft Permit did not include the firewater protection system that typically requires a small on-site emergency diesel-fueled pump. The issue of emergency equipment is one of the items raised in the petitions from the CITIES. Normally, such equipment is exempt from permitting Department rules. As part of a new major facility subject to permitting, the Department plans to include the equipment in the permit. The Department plans to add some minor details, as appropriate, in the permit that further clarify the purpose and capabilities of the mentioned units An emergency diesel generator is not planned at the facility.	ENRON needs to include firewater pump in de novo proceeding and explain any BACT proposal. Al ready to explain facility BACT on a pollutant-by-pollutant basis versus unit-by-unit basis.
31.	Diesel Exhaust	The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions, as well as others, on the residents of Coconut Creek.	The term diesel exhaust (DE) is not a defined pollutant with respect to permitting rules applicable to stationary source permitting in Chapters 62-4, 62-210, 62-212, 62-213, and 62-296, F.A.C. DE is described in various EPA documents (e.g. Health Assessment Document for Diesel Exhaust, EPA/600/8-90/057E, July 2000, SAB Review Draft). According to this document "DE is emitted from 'on road' diesel engines (vehicle engines) or 'nonroad' diesel engines (e.g. locomotives, marine vessels, heavy-duty equipment, etc). There is no mention of combustion turbines (CTs). The context for DE is clearly 'reciprocating engines' and not combustion turbines (CTs). CTs such as the General Electric 7FA combust fuel at a higher temperature than reciprocating engines and with a great deal of excess air (lean combustion). The exhaust from CTs cannot be characterized as DE.	Let ENRON handle. Al ready to explain/refute.
32.	BACT requirements	BACT definition requires "environmental" impacts during the "top-down" process. Department is required to evaluate social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.	The definition of BACT does require the Department to take into account possible environmental impacts of the control technology, and not the project, when it makes a BACT determination.	Let ENRON handle. Al ready to explain.

27. CO BACT	Other states require limits of 2 to 6 ppmvd on oil and gas using oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors (CEMS). City believes a much lower CO limit should be established for the turbines and that continuous compliance be demonstrated with a continuous emission monitor.	DEP determined that oxidation catalyst for CO is not cost- effective at intermittent duty, simple cycle GE 7FA units. DEP presented data on page BD-12 of the BACT determination showing that emissions less than 2 ppmvd CO are achieved without oxidation catalyst. DEP supports installation of CEMS on one unit	Let ENRON handle. Al ready to explain/refute. DEP introduce CO CEMS requirement per Notice to Parties.
28. VOC BACT	Other states require VOC limits of 2 ppmvd on oil and gas using oxidation catalyst. Much lower limits have been demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.	ENRON did in fact propose a much lower VOC limit of 1.4 ppmvd. However, the project does not trigger a BACT requirement for VOC even with a limit of 2.8 ppmvd. The Department proposes to limit the VOC emissions in the Permit, if issued, to 1.4 ppmvd. This will match the Department's draft Permit for the nearby, planned ENRON Deerfield Beach Project, for which an Intent was issued in the interim period.	Let ENRON handle. Al ready to explain/refute. DEP introduce revise VOC limit of 1.4 ppmvd per Notice to Parties.
29. Minor sources	Draft permit contains no BACT determinations, emission limits, or monitoring requirements for minor sources (storage tanks, gas-fired fuel heater, cooling towers). These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, etc. The City requests that DEP conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.	Rule 62-212(5)(c), F.A.C. requires that the proposed <u>facility</u> or modification apply BACT <u>for each pollutant</u> subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C. The rule does not specify a <u>unit-by-unit</u> BACT determination. DEP BACT determinations consistent with pollutant-by-pollutant requirements and emphasized larger sources over the minor sources.	Let ENRON take first shot. Al ready to explain because ENRON may not understand this possibly subtle interpretation. (Martha – consult with Pat Comer)

25. Social and Economic Impacts	BACT not consistent with the requirements in Rule 62-212.400(6), F. A.C. Does not address the social and economic impacts to the City for failing to appropriately limit emissions from the facility.		
26. NO _X BACT	Other states require NO _X limits of 2 to 5 ppmvd on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR.	Only one state permitted any simple cycle power plants with NO_X limits of 5 ppmvd on gas using SCR. DEP determined that SCR it is not cost-effective to limit NO_X emissions to the range of 2 to 5 ppmvd of NO_X by SCR while burning gas. The Department doubts that the CITY can show any simple cycle intermittent unit permitted to a limit less than 5 ppmvd NO_X .	Let ENRON handle. Al ready to explain/refute. DEP introduce lower NO _X limit when firing diesel per Notice to Parties.
		No intermittent duty, simple cycle gas and oil fired unit has been permitted at all using XONON.	
		No intermittent duty, simple cycle unit has been permitted at all using SCONO _X .	
		The Department recently determined that water injection to achieve 36 ppmvd of NO _X is BACT when firing backup fuel oil on an intermittent duty simple cycle combustion turbine. Basis is recent determinations made for the nearby ENRON Deerfield Beach Project and Constellation South Pond Project.	
26. Averaging time	Continuous compliance is demonstrated based on 1-hour to 3- hour rolling averages. These lower limits have been achieved in practice.		

21(iii) Distance to Everglades	Public entrance of ENP may be over 37 miles away from plant, but ecosystem of the Florida Everglades, specifically Conservation Area No.2 is within ten miles.	Everglades Conservation Area No. 2 is a Class II Area distinct from the Class I ENP.	Let ENRON handle. Cleve ready to explain.
21(iv) Proximity of Ecosystems	The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location	Proximity of the Class I ENP was taken into account. The "Ambient Impact Analysis" and the "Additional Impact Analyses" (summarized in Chapters 6 and 7 of the application and other supplementary submittals) required by Rules 62-212.400(5)(d) and (e), F.A.C. were performed by ENRON and reviewed by the Department prior to the Notice of Intent to Issue Air Construction Permit. These evaluations demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase" in the Class I ENP and in the Class II Areas.	Let ENRON handle. Cleve ready to explain.
22. BACT Required	The project must BACT to limit NO _X , CO, VOCs, SO ₂ , sulfuric acid mist, and PM ₁₀ pursuant to Rule 62-212.400(2)(f), F.A.C.	Per Rule 62-212.400(d)2.b., F.A.C., the proposed project is a new Major Facility with respect to the PSD regulations because emissions of several pollutants will be greater than 100 tons per year (tpy) and the type of facility is listed in Table 212.400-1, F.A.C. Per Rule 62-212.400(f), F.A.C., PSD review is required for the pollutants emitted in excess of the values given in Table 212.400-2, F.A.C. The value applicable to VOC is 40 tpy. VOC emissions rate will be 18 tpy. Therefore a BACT is not required for VOC	Let ENRON handle. Al ready to explain DEP introduce lower VOC emission limit per Notice to Parties.
25. Proposed BACT limits	ENRON's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers, accepted by the Department, are not consistent with the definition of BACT.	DEP did recognize lower limits permitted in certain other states. Such limits were typically required in areas that fail to meet the NAAQS. Areas in Florida that are out of compliance with the NAAQS are permitted in accordance with Rule 62-212.500, F.A.C., and require Lowest Achievable Emissions Rate (LAER, not BACT) defined at Rule 62-210.200(155) per Rule 62-212.500(7).	Let ENRON handle. Al ready to explain.

21. Erroneous distances	DEP's Intent was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed	Disagree	Let ENRON handle. Cleve ready to explain
locate Natio Conse demo	The TEPD says proposed power plant is located 60 km from the Everglades National Park (ENP). Map of the Conservation Areas potentially affected demonstrates affected ecosystems are far	Per Rule 62-204.360(4)(a), F.A.C., all areas of the State are designated Class II except the ENP, Chassahowitzka National Wilderness Area (NWA), St. Marks NWA, and Bradwell Bay NWA. Per Rule 62-204.360(4)(b)1., F.A.C. the ENP is a Class I Area.	Let ENRON handle. Cleve ready to explain.
	closer than stated.	All parts of South Florida except the ENP are Class II Areas. Therefore the mentioned Conservation Areas are Class II Areas.	
		Different "maximum allowable (air pollutant concentration) increases" apply in Class I areas than apply in Class II Areas. These differences are delineated in Rule 62-204.260, F.A.C., "Prevention of Significant Deterioration Increments". The distance given to the Class I ENP was provided for the purpose of rule applicability. It is correct and was not given to mislead regarding overall and undefined environmental sensitivity of nearby Class II Areas.	
21(ii) Distance to Loxahatchee	Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No.2, to the north	The mentioned Loxahatchee National Wildlife Refuge is a Class II Area and differs from the ENP Class I Area with respect to applicable air regulations. Everglades Conservation Area No. 2 is a Class II Area distinct from the Class I ENP	Let ENRON handle. Cleve ready to explain.

18. EIA	Whether the EIA associated with must be performed prior to the issuance of a permit.	See 15 above	See 15 above
19. Prevailing winds	Whether the impact upon the CITY of the prevailing wind direction from proposed facilities has been considered and factored into the decision to issue a Permit.	The statistical distribution of historical wind directions was considered when predicting ambient air quality impacts in all directions surrounding the proposed facility. This includes the frequency and speed of wind directions towards Coconut Creek.	Let ENRON handle. DEP (Cleve Holladay) ready to explain.
20. Quantitative air quality analysis	Whether it is necessary for a quantitative cumulative air quality analysis to performed prior to the issuance of a Permit to ensure that the combined emissions from the various sources in the area do not cause a contravention of applicable air quality standards	The "Ambient Impact Analysis" and the "Additional Impact Analyses" (summarized in Chapters 6 and 7 of the application and other supplementary submittals) required by the rules were performed by ENRON and reviewed by the Department prior to the Notice of Intent to Issue Air Construction Permit. These evaluations demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase". For parts of the mentioned analysis, emissions from other faculties were considered in accordance with the applicable rules.	Let ENRON handle. Cleve ready to explain
20(ii) NEPA	The issuance of Federal Permits such as PSD subjects facility to NEPA EIS	The permit is not a Federal Permit. State Air Construction (PSD) Permits pursuant to Chapters 62-210 and 62-212, F.A.C. are not subject to NEPA.	Let ENRON handle. Al ready to explain
20(iii) NEPA	Under NEPA, cumulative effects of proposed project must be considered in an EIA.	NEPA is not applicable to this State Permitting action y	Let ENRON handle. Al ready to explain

REVIEW OF COCONUT CREEK PETITION

ITEM	CLAIM	DEP POSITION	ACTIONS
11. Fuel Oil Use	Fuel oil will be permitted up to 3000 hours per year or one hundred 125 days per year.	Fuel oil (diesel) will be permitted for up to 500 hours per year per unit after 2004.	DEP advises Parties of change in position
12. Noxious emissions	These large regional significant sources of "noxious emissions", which are publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.	Term "noxious emissions undefined". Some of the sources may be "major facilities" or major sources as defined in rules.	None. Don't recognize term.
15. "Federal Permit" and NEPA	Issuance of a "Federal PSD) Permit subjects to NEPA, cumulative environmental effects, and EIA/EIS	"State Permit" not a "Federal Permit". DEP PSD rules approved. NEPA (EIS) requirements not in State permitting rules.	Let ENRON handle, but be ready to clarify. DEP PSD program approved, reference 40CFR52, Subpart K
16. Cumulative Analysis	Quantitative cumulative air quality analysis should be performed to demonstrate that combined emissions from (all) sources do not cause a contravention of applicable air quality standards.	The "Ambient Impact Analysis" and the "Additional Impact Analyses" required by Rules 62-212.400(5)(d) and (e), F.A.C. were performed. Demonstrated that the proposed facility "will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase". For parts of the mentioned analysis, emissions from other faculties were considered in accordance with the applicable rules	Let ENRON handle in prima facie case. Be ready to explain rules.
17. EIS/EIA not included	Whether an EIS/EIA should have been conducted by ENRON prior to the DEP issuance of Intent	See 15 above.	See 15 above.

Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations.	Ms. Daniela Banu, Mr. Jarrett Mack, and Mr. William Hahne, P.E. of the Broward County Department of Planning and Environmental Protection.	Requirements of Broward County Pollution Prevention Planning regulation.
The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and		
other HAPs have not been assessed and mitigated. Therefore, the project is in violation of Rule 62-210.300(4)(d)15.a F.A.C., which requires compliance with the requirements of Broward County.	Mr. Hahne and Mr. Mack.	Conclusions whether application was complete based on submittal by Enron in accordance with Broward County Pollution Prevention Planning regulation.
	Scott Osbourn of ENSR, Dave Kellermeyer of Enron, Kim Brown of Brown and Associates.	Discussions held with Broward County staff regarding requirements of Broward County Pollution Prevention Planning regulation. Preparation and submittal of document in effort to satisfy said requirement.
	Al Linero of DEP.	Manner by which Department addressed Broward County Pollution Prevention Planning regulation. Communication with Broward County staff regarding the review protocol, inclusion in Department evaluation, and suitability of submittal.

DEP ATTORNEY CLIENT PRIVILEDGED WORK PRODUCT

Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act.	David Solomon of EPA OAQPS and the New Source Review Administrators for EPA Regions.	EPA's definitions, requirements, and conclusions regarding startup and shutdown.
The U.S. EPA has consistently defined startup and shutdown to be part of the		
normal operation of a source.	Al Linero and John Reynolds of DEP	DEP BACT determination and startup and shutdown requirements.
The EPA has also consistently concluded that these emissions should be accounted for in the design and		1
implementation or the operating procedure for the process and control equipment.	Jim Little or Katy Fourney of EPA Region IV.	Opinions of recent draft permits prepared by DEP in relation to startup and shutdown provisions.
EPA has concluded that "[w]ithout clear definition and limitations, these		
automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38), F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT/MACT.	Al Linero, Jeff Koerner, Teresa Heron, Mike Halpin, and Joe Kahn, of DEP	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in some other states
	New Source Review-Administrators of other states	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in their respective states.
	New Source Review Administrators for EPA Regions	Startup and shutdown requirements for some intermittent duty simple cycle combustion turbine projects in their respective regions.
	Bob Blaszczak of EPA Office of Air Quality Planning and Standards	How to access information on BACT determinations entered by states and EPA Regions from the RACT/BACT/LAER Clearinghouse

DEP ATTORNEY CLIENT PRIVILEDGED WORK PRODUCT

There are no limits on the number of startups and shutdowns nor on the emissions.	Al Linero of DEP.	Requirements during startup and shutdown.
During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NO _x , CO, and VOCs (including	John Reynolds of DEP and experts at General Electric Power Systems.	What occurs during startup and shutdown of their combustion turbines. Emissions of some or all mentioned pollutants during startup and shutdown.
aldehydes) than during steady state operation.	Sims Roy of OAQPS.	Believe he would have an opinion on these matters or would know who has an opinion or knowledge about these matters.
Virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas, particularly during combined operation of the Pompano and Deerfield Beach Energy Centers.	Don't know of anyone	With knowledge that there will be significant health effects in downwind areas.
Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100	Sims Roy of OAQPS	An opinion or knowledge whether formaldehyde emissions can increase by a factor of 500 during startups compared to full load operation or an opinion about who might have knowledge or an opinion.
startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.	Experts at General Electric Power Systems.	What occurs during startup and shutdown of their combustion turbines. Emissions of some or all mentioned pollutants during startup and shutdown.

CITY OF CORAL SPRINGS

VS.

DEERFIELD BEACH ENERGY CENTER, L.L.C. (AN AFFILIATE OF ENVIRONMENTAL PROTECTION

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Date	Proceedings
11/16/01	Deerfield Beach Energy Center's Notice of Non- Oppostion to Joint Motion to Consolidate (filed via facsimile).
11/14/01	Broward County's Response to Deerfield Beach Energy Center's First Request for Production of Documents (filed via facsimile).
11/14/01	City of Coconut Creek's Response to Deerfield Beach Energy Center's First Request for Production of Documents (filed via facsimile).
11/09/01	Joint Motion to Consolidate (filed Respondent via facsimile).
10/26/01	Notice of Appearance (filed by K. Ezrol).
10/24/01	Deerfield Beach Energy Center's Objections and Response to City of Coral Springs' Request for Production of Documents filed.
10/19/01	Deerfield Beach Energy Center's First Request for Production of Documents Directed to Broward County filed
1 <u>0/19/01</u>	Deerfield Beach Energy Center's First Request for Production of Documents Directed to City of Coral Springs filed.

	Deerfield Beach Energy Center's First Request for
10/19/01	Production of Documents Directed to City of Coconut Creek filed.
10/17/01	Notice of Hearing issued (hearing set for January 29 through February 1, 2002; 9:00 a.m.; Fort Lauderdale, FL).
<u>10/17//01</u>	Order of Pre-hearing Instructions issued.
10/10/01	Status Report and Motion to Set Final Hearing (filed by Respondent via facsimile).
09/26/01	Notice of Appearance and Service Address filed by Deerfield Beach Energy Center, L.L.C.
09/24/01	Petitioner, City of Coral Springs, Request for Production of DocumentsDirected to Defendant, Deerfield Beach Energy Center, L.L.C. filed.
<u>08/07/01</u>	Order issued. (consolidated cases are: 01-002727, 01-002728, 01-002729)
08/07/01	Order issued. 9/14/2001)
07/25/01	Joint Response to Initial Order filed.
07/16/01	Deerfield Beach Energy Center's Motion to Dismiss City of Coral Springs Petition for Formal Administrative Hearing filed.
07/13/01	Initial Order issued.
07/12/01	Request for Assignment of Administrative Law Judge and Notice of Preservation of Record filed.
<u>07/12/01</u>	Intent to Issue Air Contruction Permit filed.
07/12/01	City of Coral Springs` Petition for Administrative Hearing filled.

Docket Sheet 01-2682

CITY OF CORAL SPRINGS

VS.

POMPANO BEACH ENERGY, L.L.C. (AN AFFILIATE OF ENRON NORTH AMERICA) AND DEPARTMENT OF ENVIRONMENTAL PROTECTION

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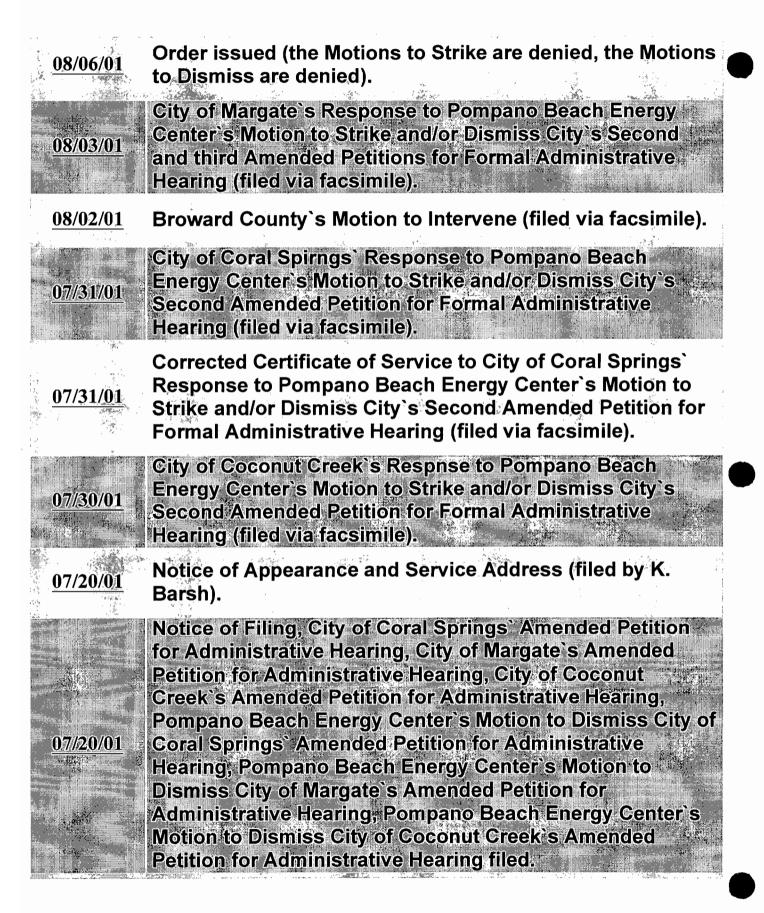
Date	Proceedings
11/13/01	City of Margate's Notice of Service of Answers to Pompano Beach Energy Center's First Set of Interrogatories filed.
11/13/01	City of Margate's Response to Respondent's First Request for Production filed.
11/13/01	City of Margate's Answers to Pompano Beach Energy Center's First Set of Interrogatories filed.
11/09/01	City of Coconut Creek's Response to Respondent's First Request for Production (filed via facsimile).
11/09/01	City of Coconut Creek's Notice of Service of Answers to Pompano Beach Energy Center's First Set of Interrogatories (filed via facsimile).
11/09/01	Joint Motion to Consolidate (Cases requested to be consolidated, 012982, 012683, 01-2684, 012727, 01-2728, 012729) filed via facsimile.
<u>11/09/01</u>	City of Coconut Creek's Answers to Pompano Beach Energy Center's First Set of Interrogatories (filed via facsimile).
11/07/01	Pompano Beach Energy Center's Response to DEP's Notice of Change of Agency Position (filed via facsimile).

11/07/01	Pompano Beach Energy Center's Request for Production of Documents Directed to Department of Environmental Protection (filed via facsimile).
11/07/01	Pompano Beach Energy Center's First Set of Interrogatories directed to Department of Environmental Protection (filed via facsimile).
11/07/01	Pompano Beach Energy Center's Notice of Serice of First Set of Interrogatories to Department of Environmental Protection (filed via facsimile).
10/29/01	City of Coral Springs` Notice of Serivce of First Set of Interrogatories to State of Florida Department of Environmental Protection filed:
10/29/01	City of Coral Springs` First Set of Interrogatories Directed to State of Florida Department of Environmental Protection filed.
10/25/01	Notice of Change of Agency Position (filed by M. Nebelsiek via facsimile).
10/24/01	Pompano Beach envery Center's Objections and Response to City of Coral Springs' Request for Production of Documents filed.
10/23/01	City of Coral Springs Notice of Service of First Set of Interrogatories to Pompano Beach Energy Center filed.
10/23/01	City of Coral Springs` First Set of Interrogatories Directed to Pompano Beach Energy Center, L.L.C. filed.
10/22/01	City of Coral Sptings' Response to Respondent's First Request for Production filed.
10/22/01	City of Coral Springs` Notice of Service of Answers to Pompano Beach Energy Center`s First Set of Interrogatories filed.
10/22/01	City of Coral Springs: Answers to Pompano Beach Energy Center's First Set of Interrogatories filed.

)	10/19/01	Order issued (the City`s Motion for extension of time to respond to Pompano`s Interrogatories is granted).
	10/19/01	Notice of Appearance (filed by K. Ezrol).
	<u>10/19/01</u>	Letter to C. R. Reetz from E. Steinfeld response to letter of 10/12/01 filed.
	<u>10/19/01</u>	Pompano Beach Energy Center's Memorandum in Partial Opposition to City of Coconut Creek's Motions for Extension of Time (filed via facsimile).
	<u>10/19/01</u>	Pompano Beach Energy Center's Memornadum in Partial Opposition to City of Coconut Creek's Motions for Extension of Time (filed via facsimile).
	<u>10/18/01</u>	Order issued (Pompano's Motion to Dismiss and/or Motion for Reconsideration are denied without prejudice. The City's Motions for extension of time to respond to Pompano's discovery are granted).
)	<u>10/17/01</u>	City of Margate's Motion for Extension of Time in Which to Respond to Pompano Beach Energy Center's First Request for Production to City of Margate filed.
	<u>10/15/01</u>	Broward County's Response to Pompano Beach Energy Center's Motion to Dismiss Broward County's Petition and/or Motion for Reconsideration of Broward County's Intervention (filed via facsimile).
	<u>10/11/01</u>	City of Coconut Creek's Motion for Extension of Time in Which to Respond to Pompano Beach Energy Center's First Request for Production to City of Coconut Creek (filed via facsimile).
	10/11/01	City of Coconut Creek's Motion for Extension of Time in Which to File Answers to Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coconut Creek (filed via facsimile).
)	10/01/01	Amended Notice of Hearing issued. (hearing set for

	December 11 through 14, 2001; 1:00 p.m.; Pompano Beach, FL, amended as to Date).
10/01/01	Pompano Beach Energy Center's Motion to Dismiss Broward County's Petition and/or Motion for Reconsideration of Broward County's Intervention filed.
09/28/01	Order issued (hearing set for December 11-14, 2001).
09/27/01	Broward County's Response to City of Coral Springs' Motion for Continuance (filed via facsimile).
09/27/01	Letter to J. Hearn from P. Stuart confirming that the City of Coconut Creek does not object to the Motion to Continue (filed by J. Hearn via facsimile).
09/26/01	Notice of Telephonic Hearing (filed by Petitioner via facsimile).
09/24/01	Pompano Beach Energy Center's First Request for Production of Documents directed to City of Margate filed.
09/24/01	Pompano Beach Energy Center's First Request for Production of Documents directed to City of Coral Springs filed.
<u>09/24/01</u>	Pompano Beach Energy Center's First Request for Production of Documents directed to City of Coconut Creek filed.
09/24/01	Petitioiner, City of Coral Springs, Request for Production of Documents Directed to Defendant, Pompano Beach Energy Center, L.L.C. filed
09/24/01	Corrected Order Granting Leave to Intervene issued.
<u>09/21/01</u>	Order Granting Leave to Intervene issued (Broward County)
09/12/01	Petitioner, City of Coral Springs, Motion for Continuance (filed via facsimile).

09/	<u>10/01</u>	Pompano Beach Energy Center's Notice of Service of First Set of Interrogatories to City of Margate filed.
<u>09/</u>	<u>10/01</u>	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coral Springs filed.
s <u>09/</u>	<u>10/01</u>	Pompano Beach Energy Center's Notice of Service of First Set of Interrogatories to City of Coconut Creek filed.
09/	10/01	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Coconut Creek filed.
<u>09/</u>	<u>10/01</u>	Pompano Beach Energy Center's Notice of Service of First Set of Interrogatories to City of Coral Springs filed.
09/	10/01	Pompano Beach Energy Center's First Set of Interrogatories Directed to City of Margate filed.
09/	06/01	Broward County's Amended Petition to Interene (filed via facsimile).
0 <u>8</u> /.	27/01	Order issued (Broward's Motion to Intervene is denied without prejudice and Broward may file an amended petition to intervene within 10 days from the date of this Order).
$\frac{08/2}{2}$	23/01	Notice of Hearing issued (hearing set for October 29 through November 1, 2001; 1:00 p.m.; Pompano Beach, FL).
<u>08/</u> 2	23/01	Order of Pre-hearing Instructions issued.
$= \frac{08/3}{2}$	14/01	Pompano Beach Energy Center's Response to Broward County's Motion to Intervene filed.
08/	<u>10/01</u>	Broward County's Amended Motion to Intervene 3 filed.
08/	06/01	City of Margate's Response to Pompano Beach Energy Center's Motion to Strike and/or Dismiss City's Second and Third Amended Petitions for Formal Administrative Hearing filed.



07/19/01	Pompano Beach Energy Center's Motion to Strike and/or Dismiss City of Margate's Second and Third Amended Petitions for Formal Administrative Hearing filed.
07/19/01	Pompano Beach Energy Center's Motion to Strike and/or Dismiss City of Coconut Creek's Second Amended Petition for Formal Administrative Hearing filed.
07/19/01	Pompano Beach Energy Center's Motion to Strike and/or Dismiss City of Margate's Second and Third Amended Petitions for Formal Administrative Hearing filed.
07/19/01	Pompano Beach Energy Center's Motion to Strike and/or Dismiss City of Coral Springs' Second Amended Petition for Formal Administrative Hearing filed.
07/18/01	Joint Response to Initial Order (filed via facsimile).
07/17/01	City of Margate's Notice of Absenia (filed via facsimile).
07/13/01	Order of Consolidation issued. (consolidated cases are: 01-002682, 01-002683, 01-002684)
<u>.07/10/01</u>	Initial Order issued.
07/09/01	Intent to Issue Air Construction Permit (filed via facsimile).
<u>. 07/05/01</u>	Request for Assignment of Administrative Law Judge and Notice of Preservation of Record filed.
07/05/01	City of Coral Springs` Second Amended Petition for Administrative heaing filed.

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STATE OF FLORIDA DEPARTMENT OF ADMINISTRATIVE HEARINGS

305 579 0717;

CITY OF CORAL SPRINGS, et al.,

Petitioners,

٧.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and POMPANO BEACH ENERGY CENTER, L.L.C., etc.,

Respondents, etc.

CONSOLIDATED

DOAH CASE NOS.

01 - 268201-2683

01-2684

POMPANO BEACH ENERGY CENTER'S REQUEST FOR PRODUCTION OF DOCUMENTS DIRECTED TO DEPARTMENT OF ENVIRONMENTAL PROTECTION

Respondent, Pompano Beach Energy Center, L.L.C., pursuant to Fla.R.Civ.P. 1.350 and F.A.C. 28-106.206, requests that co-respondent, State of Florida Department of Environmental Protection, produce the following documents within the time provided by law or such shorter time as is established by the Administrative Law Judge:

DEFINITIONS AND INSTRUCTIONS

- A. "Energy Center" shall refer to respondent Pompano Beach Energy Center, L.L.C. and to Enron North America; and to their corporate parents, subsidiaries, affiliates, successors, officers, directors, shareholders, employees, attorneys, agents, and other representatives known to you.
- B. "DEP," "you" and "your" shall refer to Respondent State of Florida Department of Environmental Protection; and to its officials, employees, attorneys, agents, and other representatives known to you.

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MIAMI NEW YORK WASHINGTOR, D.C. ATLANTA PRILADELPHIA TYSONS CORNER CHICAGO BOSTON PHOBRIX WILMINGTON LOS ANGELES DENVER São Paulo Port Lauderdale Boca Raton West Palm Brach Orlando Tallahassee

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C. The "Permit" shall refer to the Draft Permit challenged by the petitioners in this proceeding, and any actual or prospective amendments thereto.

D. The "Plant" shall refer to the facility that is the subject of the Permit.

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E. The "Notice of Change" shall refer to the Notice of Change of Agency Position submitted by you in this proceeding, and dated October 25, 2001.

F. The term "document" shall refer to all information and materials within the scope of Fla.R.Civ.P. 1.350 and specifically includes (without limitation) all information kept on audiotape, videotape, computer storage devices, or other electronic storage media. A draft or non-identical copy is a separate document within the meaning of this term.

G. The terms "all" and "each" shall be construed as all and each.

H. The connectives "and" and "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the discovery request all responses that might otherwise be outside its scope.

I. The term "concerning" means relating to, referring to, pertaining to, describing, evidencing, or constituting.

J. The use of the singular form of any word includes the plural and vice versa.

K. The term "person" means any natural person, individual, sole proprietership, partnership, corporation, association, organization, joint venture, firm, other business enterprise, governmental body, or group of natural persons or other entities.

L. "Date" shall mean the exact day, month, and year, if ascertainable, or if not, the best available approximation of the date (based, if necessary, upon relationship with other events). Requests for identification of a "time period" shall mean the beginning and ending

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dates of the time period, if ascertainable, or if not, the best available approximation of those dates (based, if necessary, upon relationship with other events).

M. The term "communication" means the transmittal of information (in the form of facts, ideas, inquiries, or otherwise).

DOCUMENTS REQUESTED

- 1. All documents identified in your responses to Energy Center's First Set of Interrogatories, which was served on you together with this Request for Production.
- 2. All documents on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.
- 3. All documents on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to 4. "Issue 3" identified in your Notice of Change.
- 5. All documents on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.
- All documents on which you relied in changing your position with respect to 6. "Issue 5" identified in your Notice of Change.
- 7. All documents on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.

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- 8. All documents on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the documents that you have produced in response to the foregoing requests for production).
- 9. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 1" identified in your Notice of Change.
- 10. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 2" identified in your Notice of Change.
- 11. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 3" identified in your Notice of Change.
- 12. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 4" identified in your Notice of Change.
- 13. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 5" identified in your Notice of Change.
- 14. All documents concerning any data or other facts on which you relied in changing your position with respect to "Issue 6" identified in your Notice of Change.
- 15. All documents concerning any data or other facts on which you relied in changing your position with respect to any changes that you propose to the language of the Permit (other than the documents that you have produced in response to the foregoing requests for production).
- 16. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 1" identified in your Notice of Change.

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17. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 2" identified in your Notice of Change.

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- 18. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 3" identified in your Notice of Change.
- 19. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 4" identified in your Notice of Change.
- 20. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to "Issue 5" identified in your Notice of Change.
- All documents concerning any communication with any person with respect to 21. whether DEP should change its position with respect to "Issue 6" identified in your Notice of Change.
- 22. All documents concerning any communication with any person with respect to whether DEP should change its position with respect to any aspects of the language of the Permit (other than "Issues" "1" through "6" identified in your Notice of Change).
- All documents concerning any "comments" received by you as described in 23. paragraph 3 of your Notice of Change.
- 24. All "other Intent to Issue Air Construction Permits and Final Permits to applicants for similar projects," as described in paragraph 4 of your Notice of Change.

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25. All documents concerning the "additional data" described in paragraph 5 of your Notice of Change.

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- 26. All documents concerning the "information [gathered] regarding several recently approved or announced pipeline projects", as alleged in paragraph 6 of your Notice of Change.
- All documents concerning the "proposed changes to the draft Permit", as 27. described in paragraph 7 of your Notice of Change.
- 28. All documents concerning whether "the proposed changes to the draft Permit will result in decreased emissions", as alleged in paragraph 7 of your Notice of Change.
- 29. To the extent not produced in response to the foregoing requests, all other documents on which you rely in support of any contention that the draft Permit should be modified or amended in any fashion.

Respectfully submitted,

Greenberg Traurig, P.A. 1221 Brickell Avenue Miami, Florida 33131

Telephone: (305) 579-0500 Facsimile: (305) 579-0723

Florida Bar No. 443840

C. Rvan Reetz

Florida Bar No. 934062

Paul C. Savage

Florida Bar No. 088587

Counsel for Pompano Beach Energy, L.L.C. GREENBERG TRADRIC, P.A.

1221 BRICKELL AVENUE MIAMI, FLORIDA 33131

305-579-0500 PAX 305-579-0717 www.gilaw.com

MIAMI NEW YORK WASHINGTON, D.C. ATLANTA PHILADELPHIA TYSONS CORNER CRICAGO BOSTON PHOENIX WILMINGTON LOS ANCELES DENYER SÃO PAULO FORT LAUDERDALE BOCA BATON WEST PALM BRACE OBLANDO TALLAHASSEE

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CERTIFICATE OF SERVICE

305 579 0717;

I certify that copies of the foregoing document were served by facsimile & U.S. Mail on

November 7, 2001 to:

Martha L. Nebelsiek, Esq. Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

Eugene M. Steinfield, Esq. City of Margate 5790 Margate Boulevard Margate, Florida 33063

Nancy A. Cousins, Esq. City of Coconut Creek 4800 West Copans Road Coconut Creek, Florida 33063

Kerry L. Ezrol, Esq. Goren, Cherof, Doody & Ezrol, P.A. Suite 200 3099 E. Commercial Boulevard Ft. Lauderdale, FL 33308

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INTERROGATORIES

1. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any of the facts alleged in the Petition and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.

Refer Attachment 1.

- 2. Please identify each person known to you, your agents, or your attorneys, who has knowledge about, or possession, custody or control of, any model, plat, map, videotape, or photograph pertaining to any fact or issue involved in this controversy; and describe as to each, what items such person has, the name and address of the person who took or prepared it, and the date it was taken or prepared.
- 3. Please identify with particularity each and every fact upon which you rely in your support of your decision to issue a Public Notice of Intent to Issue Air Construction Permit.
 - The Tri-County (Miami-Dade, Broward, and Palm Beach Counties) area is in attainment with the National Ambient Air Quality Standards (NAAQSs).
 - The State Rules for the Prevention of Significant Deterioration (PSD) at Section 62-212.400, F.A.C. are applicable to the Enron Pompano Beach Energy Center (PBEC) project.
 - Project must not "cause or contribute" to a violation of any NAAQS or maximum allowable increase.
 - All of the Tri-County Broward area (with the exception of the Everglades National Park (ENP) is classified as a "Class II area per Rule
 - The Class II area has a unique set of "Significant Impact Levels" (SILs) for PM₁₀, SO₂, NO₂, and CO.
 - Modeling of emissions from the PBEC indicate that groundlevel concentration increases in the Class II area for each pollutant will be less than the respective SIL for each pollutant.

- The ENP is classified as a "Class I" area per Rule
- The Class I area has a unique set of "Significant Impact Levels" (SILs) for PM_{10} , SO_2 , NO_2 , and CO.
- Modeling of emissions from the PBEC indicate that groundlevel concentration increases in the ENP Class I area for each pollutant will be less than the respective SIL for each pollutant.
- By definition, impacts on air quality that are less than the respective SIL for each pollutant do not cause or contribute to a violation of a NAAQS or allowable increase.
- The Department concludes that the project will not cause or contribute to a violation of any NAAQS or allowable increase.
- Best Available Control Technology (BACT) determinations are required for sulfur dioxide (SO₂), sulfuric acid mist (SAM), nitrogen oxides (NO_X), particulate matter (PM/PM₁₀), and carbon monoxide (CO) in accordance with Rule 62-212.400, F.A.C.
- 4. For each fact identified in response to the preceding interrogatory, please identify each person known to you, your agents, or your attorneys, who has, claims to have knowledge or discoverable information pertaining to the fact and, as to each such person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 5. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information supporting your determination that the proposed Plant has or will use best available control technology and, for each person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 6. Please identify with peculiarity each and every fact on which you rely in support of your contention that the proposed Plant has or will use best available control technology.
- 7. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to the claim as articulated on page TE-2 of ENRON's Technical Evaluation and

Preliminary Determination that the proposed power plant's distance to Everglades National Park is approximately 60 miles north-northeast of the Everglades National Park, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

Mr. Cleve Holladay of DEP has one or more maps of Florida prepared by the U.S. Geological Survey that delineate the Everglades National Park from its surroundings. Mr. Holladay is aware that certain cities such as Pompano Beach are labeled on the same map(s). The point on the ENP nearest to Pompano Beach can be found by visual inspection.

The distance between the two points can be measured in inches and converted to miles by use of a conversion factor shown on the map. The orientation of North is shown on the map. The shortest line segment that can be drawn from the ENP to Pompano Beach points to a direction slightly east of a true north bearing.

The Department believes that ENRON's consultant ENSR has knowledge or discoverable information regarding the approximate distance of the proposed power plant to the Everglades National Park (ENP). Specifically, Dr. Robert Ewanchuk of ENSR or persons under his supervision would have that information.

The Department believes that the National Park Service also has information regarding such distances. Mr. John Bunyak or Mr. John Notar of the NPS or persons working under their supervision would have such knowledge or materials from which such distances can be derived.

The Park Manager of the ENP would have information from which such distances can be derived.

8. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in supporting the DEP's best available control technology determinations contained in Appendix BD and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department's Professional Engineer Adminstrator for the New Source Review Section and permitting engineer for the ENRON application has knowledge and discoverable information in support of the Department's Best Available Control technology determination (BACT). His name is Al Linero.

The discoverable information is listed in the references given in the subject Appendix BD. Additional information consists of the cumulative public record of about one dozen BACT determinations made for similar projects in Florida. A list that is reasonably representative was included in the appendix provided with the Department's Notice of Change in Position filed on October 25, 2001. The list includes the ENRON project file that is also part of the public record.

Mr. John Reynolds, who works under the supervision of Mr. Linero also has discoverable information. He has information regarding the costs of controlling nitrogen oxides emissions by selective catalytic reduction catalyst (SCR). He also has a number of documents related to NO_X emissions tests conducted on units similar, if not identical, to the General Electric combustion turbines proposed by ENRON for the Pompano project.

Mr. Reynolds is in possession of various documents published by GE regarding NO_X control on their units. He also has documents describing estimated emissions of NO_X under various modes of operation. He has descriptions of the time required to reach low emissions modes after ignition of the units.

The applicant submitted information in the application that is part of the public record. Dr. Robert Ewanchuk, or Mr. Scott Sumner, or Mr. Scott Osbourne of ENSR or Mr. Dave Kellermeyer of ENRON or persons working for them would likely have additional background information used in the preparation of the application.

Mr. Robert Blazczcak of the Environmental Protection Agency's RACT/BACT/LAER Clearinghouse (RBLC) coordinates a database set up pursuant to the Clean Air Act Section _____ that contains BACT determinations conducted by EPA or States. Ms. Teresa Heron who reports to Mr. Linero submits Florida's BACT determinations to Mr. Blazczak for inclusion into the RBLC. She would have some of the submittal sheets.

9. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP's BACT determinations do comply with federal or state law adopted pursuant to the Federal Clean Air

- Act and its amendments, and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 10.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP enforced BACT as mandated by Rule 62-210, F.A.C. and for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 11.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has given due consideration to the emissions limiting standards or BACT determinations of other states as required under Rule 62-212, F.A.C. In addition, the DEP has identified the maximum degree of reduction in accordance with Florida Administrative Code, and, for each such person, please state the specific nature and substance of knowledge that you believe the person have.
- 12. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient as it contains BACT determinations, emission limits, or monitoring requirements for the 0.6 million distillate storage tank, gas-fired fuel heater and four wet mechanical draft cooling towers, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.
- 13. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is not deficient in that it does identify and provide BACT analysis for other emission sources at the facility such as emergency fire water pumps, emergency generators, which should be subject to a formal BACT analysis pursuant to 62-210.200(112), F.A.C., and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make this contention. The Department is not aware of an emergency diesel generator but believes that a firewater pump is a routine requirement at such facilities. Refer to the Department's Notice advising change in position filed on October 25, 2001 where the firewater pump is addressed. The Department relies on the review conducted by Mr.

Al Linero, P.E. Adminstrator for New Source Review who reviewed the applicant's BACT submittal and made a facility BACT determination that includes a firewater pump.

14. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the effects of diesel exhaust as a result of the combustion of distillate in the turbines was considered as a collateral environmental impact in a BACT analysis pursuant to Rule 62-210, F.A.C. and federal guidance, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make this contention.

15.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the DEP has considered the impact of its BACT decisions, considered the collateral environmental impacts of its BACT decisions pursuant to 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department does not make this contention taken as a whole. Consistency with EPA guidance is not a requirement to issue a permit. However, the applicant probably believes that its application was consistent with such guidance.

Scott Osbourne, BobEwanchuk, and Scott Sumner of ENSR and Dave Kellermeyer of ENRON would have knowledge based on their application intended to comply with at the Department requirements.

The Department's Administrator for New Source Review prepared the draft BACT determination and would obviously know the extent to which he considered impacts pursuant to 62-212.400(6)(a)4, F.A.C.

16.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the use of distillate fuel without the DEP's performance of analyses, evaluating alternatives or considering the substantial health impacts that may result from this choice in a densely populated area is appropriate and consistent with Rule 62-212.400(6)(a)4, F.A.C., and consistent with EPA guidance, and, for each such person, please

state the specific nature and substance of knowledge that you believe the person may have.

The Department did not make such a contention. Fuel oil is the backup fuel and is not a BACT determination as such. The specification limiting fuel oil to very low (0.05 percent) is part of the facility BACT determination for SO₂ and SO₃. That determination includes primarily firing clean pipeline quality natural gas, which is clearly the main alternative to fuel oil.

17.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that Sulfur Distillate is BACT for SO₂ and Sulfuric Acid Mist when firing oil, and, for each such person, please state the specific nature and substance of knowledge that you believe the person may have.

The Department did not contend that "Sulfur Distillate is BACT for SO₂ and Sulfuric Acid Mist when firing fuel oil". The Department requires that as part of the facility BACT determination for the mentioned pollutants, fuel oil used as backup must be limited to 0.05 percent sulfur content by weight.

18. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that DEP's failure to limit start-up and shutdown is consistent with the Clean Air Act and does comply with BACT and MACT, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make any contentions regarding any failures on the part of the Department. The Department did advise of a change in position that will result in Operating Practices applicable to startup and shut down.

- 19. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information as to the Air Quality Monitoring studies and tests done on the proposed power plant site and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.
- 20. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed Permit contains adequate monitoring requirements and, therefore is practically enforceable, and, for

each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make any contentions regarding practical enforceability. The Department does not discount the possibility that such a claim could be made and supported.

21. Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the Permit is consistent with federal case law as to compliance with PM_{10} emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make (and does not plan to make) any contentions regarding consistency with federal case law as to compliance with PM_{10} emission limits. The Department does not discount the possibility that such a claim could be made and supported.

22.Please identify each person who has, claims to have or whom you believe may have knowledge or discoverable information pertaining to any fact on which you rely in contending that the proposed air Permit does comply with the Pollution Prevention Plan of Broward County as required pursuant to Rule G2-210.300is consistent with federal case law as to compliance with PM₁₀ emission limits, and, for each such person, please state the specific nature and substance of the knowledge that you believe the person may have.

The Department did not make such a specific contention. However the Department believes that such a contention is supportable.

ENRON and the Department met separately with the Broward County Air Quality Division by teleconference or in person. By agreement, matters related to review of the application for compliance with the mentioned Pollution Prevention Plan (P² Plan) were referred to the Broward County Air Quality Division who wrote the P² rule.

Mr. William Hahne, Professional Engineer, of the Broward Program discussed the rule requirements with ENRON and the Department. He or his supervisor, Mr. Jarrett Mack, reviewed the submittal. After at least receiving and probably reviewing the submittal, Mr. Mack advised the

Department that the application submitted to the Department for an Air Permit was now complete as far as Broward County was concerned.

Ms. Daniela Banu, Broward County Director of Air Quality who is Mr. Mack's supervisor has knowledge of the matter. The Department believes that Mr. Steve Somerville, the Director of the Broward County Department of Planning and Environemtnal Protection also has some knowledge regarding internal deliberations about the adequacy of ENRON's P² submittal.

These individuals \underline{may} have communicated with their Commission, County Attorney, or their County Manager about ENRON's application and whether it complies with rules including the P_2 requirements.

Ms. Kimberly Brown, a consultant for ENRON is bel; ieved to have visited with Mr. Hahne, Mr. Mack, and possibly Ms. Banu to gain insight as to the precise requirements of the P² Plan and Broward's role in reviewing any submittals pursuant to the P² rule.

23. Have you relied on the opinions of any expert consultants or witnesses in connection with the allegations of the Petition. If so, then please state as to each such consultant or witness that person's name and business address, the person's qualifications as an expert, the allegations of the Petition with respect to which you relied on the person's opinions, the opinions asserted by the person on which you relied, and a summary of the grounds for each opinion.

The Department did not rely on any expert consultants except to the extent that applicants use qualified personnel whose work is submitted under the seal of a professional engineer licensed to practice in the State of Florida. The Department believes that the individual responsible for reviewing or supervising the review of ENRON's air permit application is an expert and will serve as an expert witness. However his profession is not as an expert witness or as a consultant.

24.Do you intend to call any expert witnesses at the trial of this case? If so, please state as to each such witness the name and business address of the witness, the witness's qualifications as an expert, the subject matter on which the witness is expected to testify, the substance of the facts and opinions to which the witness is expected to testify, and a summary of the grounds for each opinion.

The Department intends to call Al Linero, Professional Engineer Administrator of the New Source Review Section of DEP. His address is 2600 Blairstone Road, MS 5505, Tallahassee, Florida 32399.

Mr. Linero has a Bachellor's degree and is a professional engineer in the field of Chemical Engineering. He has a Master of Engineering degree in the field of Environmental Engineering. His main area of concentration was air sciences.

He has over twenty-eight years of experience in air pollution measurement, control, and assessment of which approximately seven were in the field of environmental (mostly air pollution) consulting, ten were in corporate environmental sciences and engineering, and eleven have been in government.

He was the Director of the Broward County Air Quality Division and is the Administrator of the DEP New Source Review Program. He has seven years of experience in conducting or reviewing all of the Department determinations of best available control technology (BACT) pursuant to the rules for the prevention of significant deterioration of air quality (PSD). He has supervised the personnel responsible for review of ambient air quality impacts pursuant to the PSD rules.

Mr. Linero will testify as to the Department's updated determination that fuel oil can be fired for only 500 hours per year after 2004 instead of 1000 hours as given in the permit. The grounds for the opinion are outlined in the Department's Notice advising of a change in position.

Briefly, the Department noted that the Gulfstream natural gas pipeline will be constructed by 2004 and several other large pipeline projects have been proposed by various companies to the Federal Energy Regulatory Commission. At the present time, requiring less than 1000 hours per year per unit of fuel oil use would impact a relatively scarse fuel in Southeast Florida. By 2004 (or by completion of any of the mentioned projects) a requirement to use less than 500 hours per year per unit of fuel oil will not impact scarse supplies of natural gas as these will no longer be scarse.

Pompano Beach Energy Project

Air Construction Permit Application

March 26, 2001 Pompano Beach



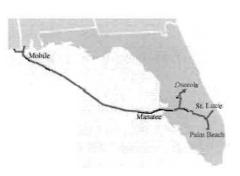
Power Projects in Florida

- Since mid -1998
- Throughout State
- 20,000 megawatts
- · Mainly Gas-fired
- · Typically Fuel Oil
- Simple Cycle
- · Combined Cycle
- Many Companies



Gulfstream Pipeline

- · Across the Gulf
- Manatee to Belle Glade
- St. Lucie and Osceola
- 1.1 Billion SCFD
- \$1.6 Billion Cost
- 10,000 megawatts
- · Duke & Williams
- Operational 2002



FGT Phases IV & V

- FPL Fort Myers
- Tampa to Fort Myers
- \$268,000,000 (IV)
- 297,000,000 SCFD
- TECO, FPL Sanford
- \$466,000,000 (V)
- 428,000,000 SCFD
- Upgrades, Laterals



Enron Pompano Project

- Pompano Beach Energy
- Enron affiliate
- 510 megawatts
- Combustion turbines
- Simple Cycle
- Primary Fuel Gas
- · Diesel Oil Backup



Vicinty

- · South of Sample Road
- East of Turnpike
- North of Copans Road
- Festival Flea Market (N)
- Waste Landfill (N)
- Tradewinds Park (W)
- Broward WWT Plant (S)
- Light Industrial (E)



Festival Flea Market



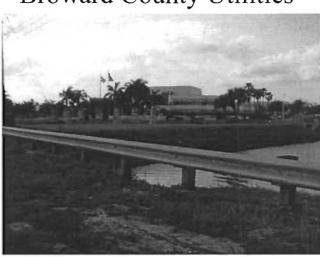
Waste Management Landfill



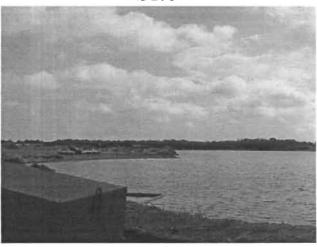
Tradewinds Park



Broward County Utilities

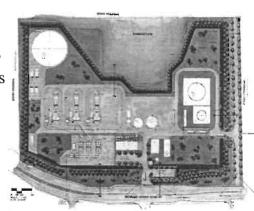


Site

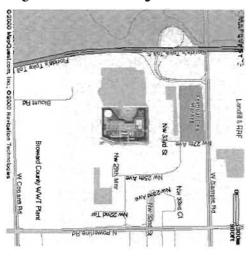


Project Layout

- Three 170 MW Units
- Combustion Turbines
- General Electric 7FAs
- Inlet Air Chillers
- Three 80-foot Stacks
- Four Cooling Towers
- 2.5 million gal Tank
- 0.6 million gal Tank

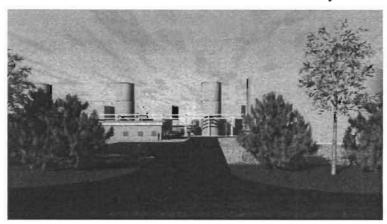


Project Overlay on Site

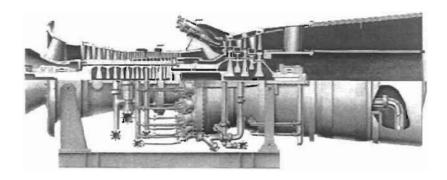


Side View Similar Project

Constellation Oleander - Brevard County



GE 7FA Combustion Turbine



Emissions in Tons Per Year

Pollutant	TPY	PSD
• Particulate Matter	55	25/15
 Carbon Monoxide 	171	100
 Nitrogen Oxides 	572	40
 Volatile Compounds 	18	40
 Sulfur Dioxide 	166	40
 Sulfuric Acid Mist 	25	7

Hours of Operation and Fuel Use

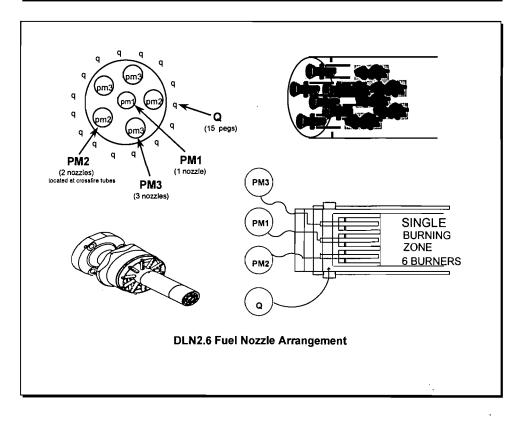
- 3500 Hours Per Year Per Unit
- 40 Maximum Percent Capacity Factor
- Pipeline Quality Natural Gas
- No. 2 Distillate Fuel Oil 0.05 percent Sulfur
- 1000 Hours Per Year Per Unit on Fuel Oil
- After 250 Hours on Fuel Oil, Big Restriction
- Reduce 2 Hours for Every Hour on Fuel Oil
- E.G. if 1000 on F.O., then Only 1000 on Gas

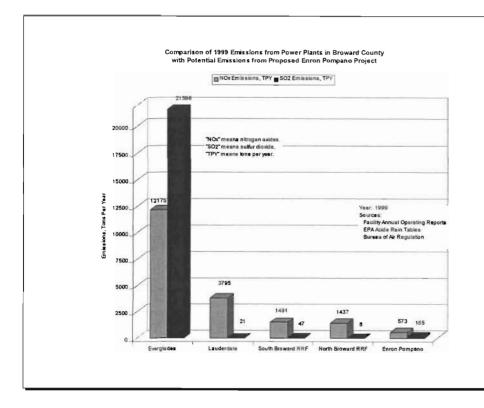
No. 2 Fuel Oil Use

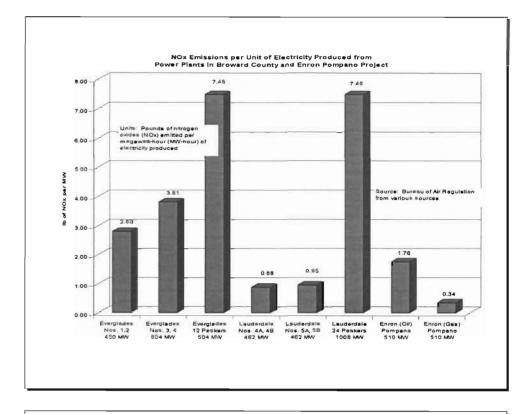
- No. 2 Fuel Oil Distilled Fraction
- Less than 0.05 percent sulfur
- Visibility (Opacity) 0 to 10 percent
- Not Residual Fuel Oil Bottoms from Distillation
- Typically 1 to 2.5 percent sulfur
- Opacity 20 to 40 percent

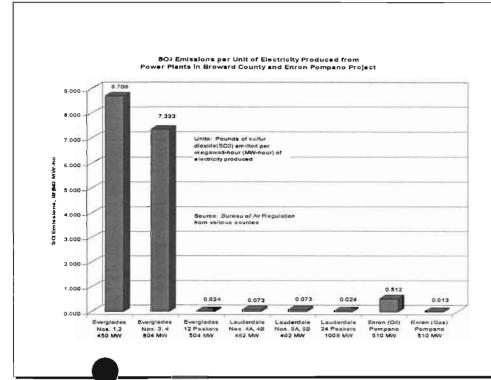
Best Available Control Technology

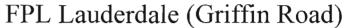
POLLUTANT	CONTROL TECHNOLOGY	PROPOSED BACT LIMIT
Particulate Matter	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	10 Pounds per hour - Gas 17 lb/hr – No. 2 Fuel Oil 10 Percent Opacity
Carbon Monoxide	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	9 ppmvd – Gas 20 ppmvd – Fuel Oil
Sulfur Oxides	Pipeline Natural Gas No. 2 Fuel Oil Good Combustion	2 grain of sulfur per 100 ft ³ gas 0.05 Percent Sulfur in Fuel Oil
Nítrogen Oxides	Dry Low NOx - Gas Wet Injection - for No. 2 Fuel Oil Limited No.2 Fuel Oil Use	9 ppmvd – Gas 42 ppmvd – No. 2 Fuel Oil Maximum 1000 of No. 2 Fuel Oil

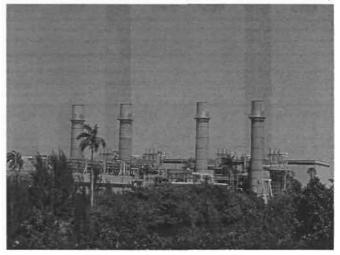




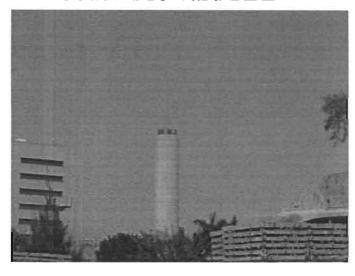




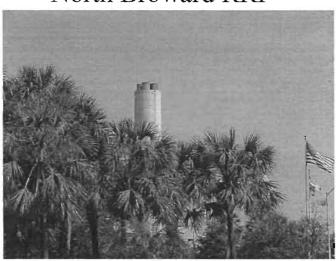




South Broward RRF



North Broward RRF



FPL Everglades



Conclusion

- Best Available Control Technology
- Ambient Air Impacts are Low
- Will Not Cause or Contribute to Violation
- National Park Service Reviewed
- EPA is Reviewing
- Request Public Comments
- Prior to Final Decision

Contacts

•	A. A.	Linero -	Permit/BACT	850/921	-9523
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- Tom Rogers Modeling 850/921-9537
- Cleve Holladay Modeling 850/921-8986
- Martha Nebelsiek Legal 850/488-9730
- Jarrett Mack Compliance 954/519-1208
- alvaro.linero@dep.state.fl.us

http://www8.myflorida.com/licensingpermitting/learn/environment/air/airpermit.html

Pompano Beach Energy Center

Air Quality Analysis



Pollutants Subject to Review

- Sulfur dioxide (SO2)
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- Particulate matter (PM/PM10)
- Sulfuric acid mist (SAM)



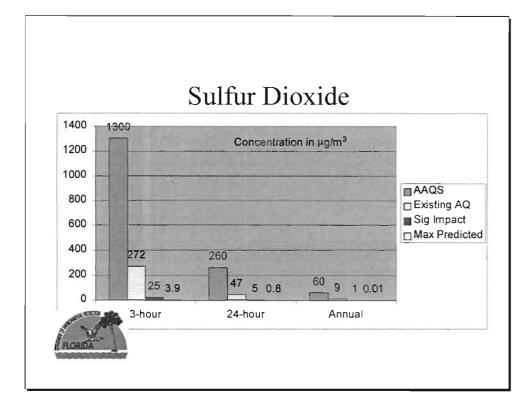
Requirements

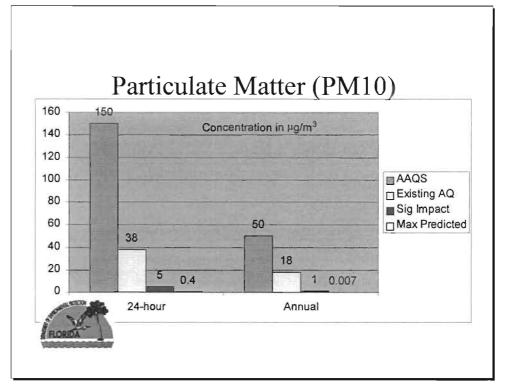
- Must show compliance with ambient air quality standards.
- Must show compliance with maximum allowable concentration increases (PSD increments and Broward county rules).
- Must make an acceptable demonstration that air quality-related values in the everglades are not significantly degraded.

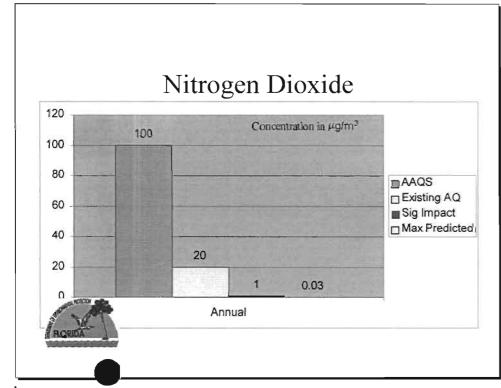
Results

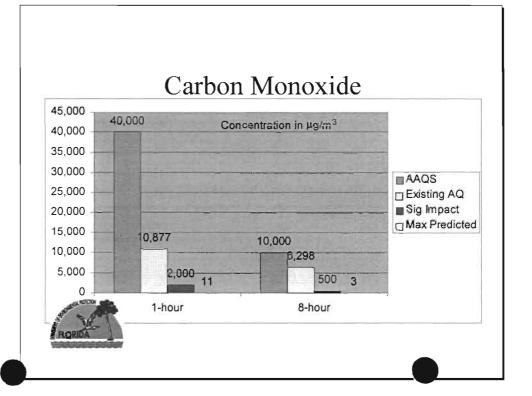
- Compliance with AAQS.
- Compliance with PSD increments.
- Compliance with Broward County rules.
- Impacts on the Everglades are minimal and acceptable to the National Park Service.











Conclusion

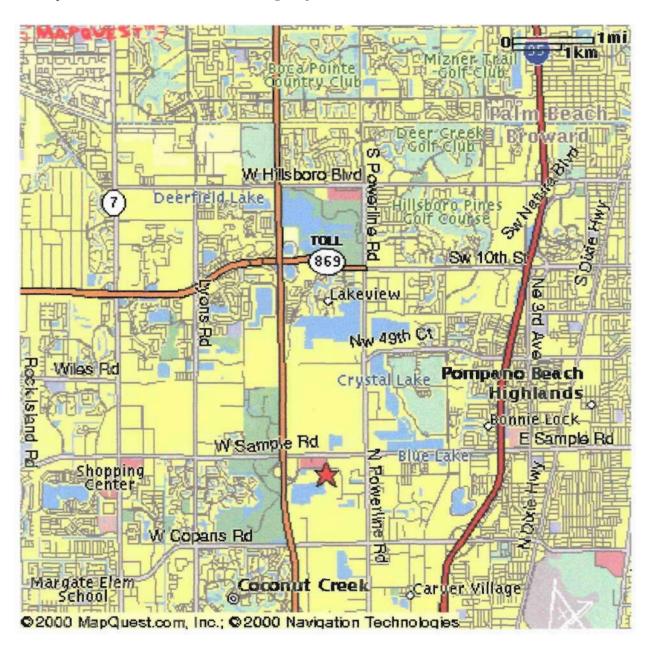
• Air pollutant emissions from the PBEC facility, as proposed, comply with all national, state, and local air quality requirements.



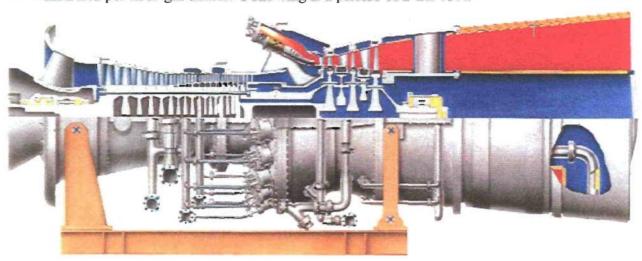
FLORIDA DEP AIR PERMITTING SUMMARY SHEET

POMPANO BEACH ENERGY CENTER THREE 170 MEGAWATT GAS -FIRED COMBUSTION TURBINE PUBLIC MEETING – POMPANO BEACH, BROWARD COUNTY MARCH 26, 2001

Pompano Beach Energy L.L.C. (an affiliate of Enron North America) submitted an application to construct three 170-megawatt (MW) combustion turbine electrical generators and ancillary equipment in Pompano Beach, Broward County. The location is East of the Turnpike and South of Sample Road as shown in the following map.



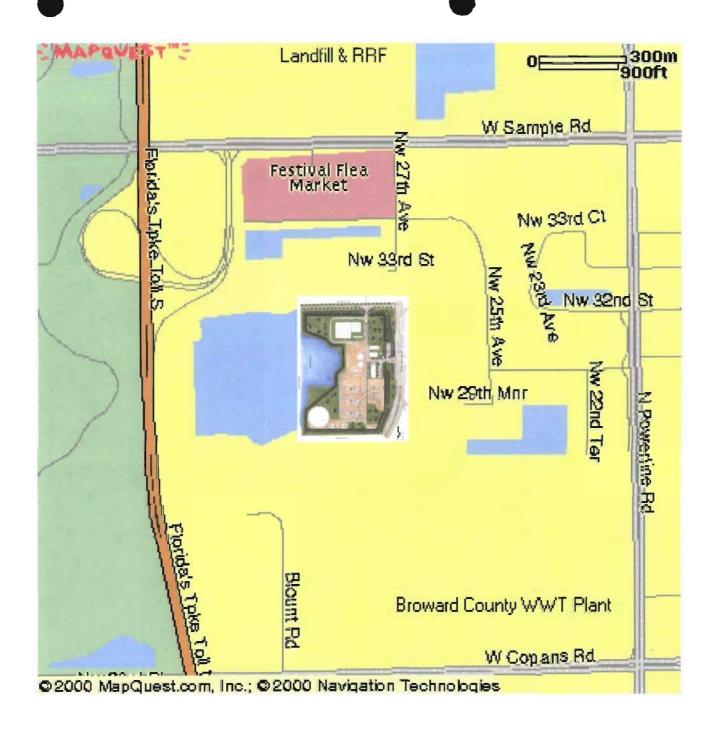
Each unit is a General Electric 7FA gas-fired combustion turbine, which directly generates approximately 170 MW of electricity. The units will operate in simple cycle and intermittent duty. There will not be separate heat recovery steam generators and steam-driven electrical generators. The project includes three 80-foot stacks, a 2.5 million-gallon storage tank for back-up diesel fuel, a 0.6 million gallon day tank, four mechanical draft cooling towers, and a 13-million Btu per hour gas heater. Following is a picture of a GE 7FA.



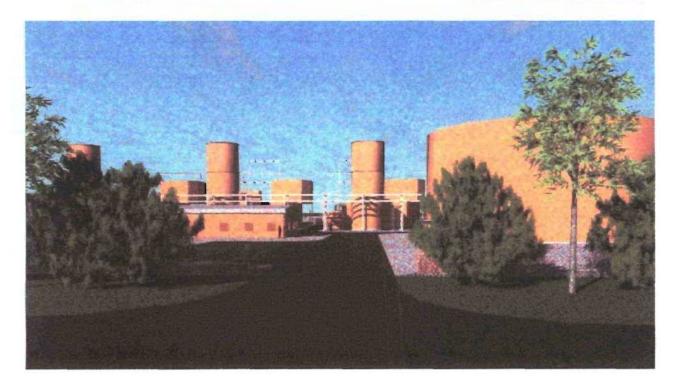
Basically these units are like jet engines. Air is drawn in and compressed. Fuel is introduced in the combustors. Hot exhaust gases expand in the rotor section. The rotational motion of the shaft drives the compressor and the electrical generator normally located before the compressor section.

Following is an artist's rendition of the layout for the facility and an overlay of the plant on the proposed site.





We do not have an elevated artist's rendition of the site. Following is a picture borrowed from a similar project in Brevard County (reference Oleander website www.oleanderpower.com)



The key air emissions will consist of nitrogen oxides, carbon monoxide, particulate matter, and sulfur dioxide. Air pollution control will be accomplished through "Dry-Low NO_X combustion" and use of natural gas with low sulfur diesel oil as backup. Pompano Beach Energy requested only 3,500 hours per year of operation. That is roughly 40 percent of the time in a year. Actual hours of operation are likely to be lower.

The facility will use very low sulfur No. 2 distillate fuel oil as back-up fuel for up to 1000 hours per year per unit. For every hour of operation on fuel oil (beyond 250 hours per year per unit) the authorized hours of operation will be reduced by two hours per year per unit. This will encourage use of natural gas. For example, if the facility uses fuel oil during 1000 hours per year per unit, it may only operate a total of 2000 hours per year per unit (instead of 3500 hours per year per unit).

Most conventional oil-fired power plants in South Florida burn residual fuel oil with a sulfur content of 1 to 2.5 percent. The sulfur content of the No. 2 distillate fuel oil is 0.05 percent and produces very little ash. There will be virtually no visible plume (0 to 10 percent opacity) from the proposed facility, whereas the typical opacity of existing conventional residual oil-fired plants in Southeast Florida is approximately 20 percent and they are allowed up to 40 percent opacity under normal operations.

The Department has determined that the ambient air impacts of the facility are very low and will not cause or contribute to a violation of any of the National Ambient Air Quality Standards and Increments.

The Florida Department of Environmental Protection (DEP) is the permitting authority for the air construction permit under Chapter 403 of the Florida Statutes, Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code.

The DEP Bureau of Air Regulation in Tallahassee received the application on October 23, 2000. We distributed it to the EPA Region 4 office in Atlanta, the U.S. National Park Service's Air Resources Division in Denver, Colorado, and the Broward County Department of Planning and Environmental Protection.

The Technical Evaluation and Preliminary Determination and the draft air permit were completed and sent to the applicant on March 7 along with the Department's Intent to Issue. Copies were provided to the previously - mentioned agencies, the mayors of the nearby cities and the County Commissioners representing the nearby Districts. Copies were made available for public inspection at DEP offices in Tallahassee and West Palm Beach and the Broward County Department of Planning and Environmental Protection. We also posted these materials at:

http://www8.myflorida.com/licensingpermitting/learn/environment/air/airpermit.html

The Department's Public Notice of Intent to Issue Air Construction Permit was published by the applicant in the Fort Lauderdale Sun-Sentinel on March 10. It provided a 30-day period for anyone to submit comments on the Department's proposed action. It also provided a 14-day period for anyone whose substantial interests are affected by the project to file a petition for an administrative hearing. Thus far, a number of cities have asked for additional time to consider filing petitions.

The Public Notice of Intent to Issue published on March 10 and a notice in the Florida Administrative Weekly of March 16 advised of this meeting.

As I mentioned before, you can view the entire package on our website. We will be happy to e-mail to you along with any presentation materials from this meeting. You can also call if you want us to guide you through our Internet Site so you can retrieve this material. The application and complete permitting file are also available for public review and copying at our offices in Tallahassee and West Palm Beach and the Broward County Department of Planning and Environmental Protection in Fort Lauderdale.

Issues such as zoning are beyond the scope of our authority in making this permitting decision. These fall within local ordinances and local planning and zoning authorities. An air construction permit does not authorize any infringement of federal, state, or local laws or regulations. Also such a permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

DEP will consider comments specifically related to air emissions and control, which are submitted here and until April 10. These comments will be reviewed prior to issuance of the final permit decision. We do not expect that to occur before the end of April. If an administrative hearing is held, we must generally abide by the findings of fact and the recommended order from the administrative law judge when issuing a final order.

Comments may be submitted at this public meeting, E-Mailed, or mailed to:

<u>CONTACT:</u> A. A. Linero, P.E. Administrator

New Source Review Section Bureau of Air Regulation

2600 Blair Stone Road, M.S. 5505

Tallahassee, Florida 32399

Tel: 850/921-9523 Fax: 850/922-6979

Internet: alvaro.linero@dep.state.fl.us

AIR MODELING:

Tom Rogers, Environmental Administrator

Air Modeling and Assessment Section

Office of Policy Analysis and Program Management

Tel: 850/921-9537

Cleve Holladay, Meteorologist New Source Review Section Bureau of Air Regulation

Tel: 850/921-8986

AIR COMPLIANCE:

Jarrett Mack, Manager Permitting and Compliance

Air Quality Division

Broward County Department of

Planning and Environmental Protection

Tel: 941/519-1208

LEGAL CONTACT:

Martha Nebelsiek, Attorney

Office of General Counsel, Tallahassee

Tel: 850/488-9730

Characteristics of Enron Pompano Beach Project

Location:

Pompano Beach Southeast of Turnpike and Sample Road

Area:

Approximately 30 acres

Plant Capacity:

510 megawatts (three 170-MW units)

Type of Units:

GE type 7FA Combustion Turbine-Electrical Generators

Stacks:

Three stacks at 80 feet each

Operation:

Simple Cycle (i.e. no steam cycle)

Primary Fuel:

Pipeline Natural Gas

Backup Fuel:

Very Low Sulfur No. 2 Distillate Fuel Oil

Permitted Hours:

3,500 hours per year per unit – (40 percent availability)

Restrictions:

Only 2000 hrs/yr/unit if they use 1000 hrs/yr/unit on fuel oil

Controls (gas):

Dry Low NO_x combustors and clean fuel

Controls (fuel oil): Wet Injection and clean fuel

Emissions:

Max 573 tons per year nitrogen oxides, 166 TPY sulfur dioxide

Emission Factors: See attached Figures comparing with other Broward Facilities

Distribute Draft:

March 7

Publish Notice:

March 10

Petitions:

By March 24 (extensions have been requested)

Public Meeting:

March 26 at 7:30 p.m. in the Pompano Beach Civic Center

All Comments:

By April 10

Final Action:

By April 30 unless a petition is filed

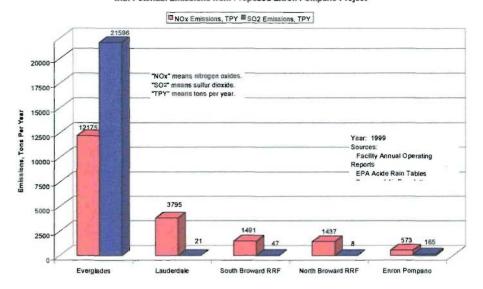
Construction:

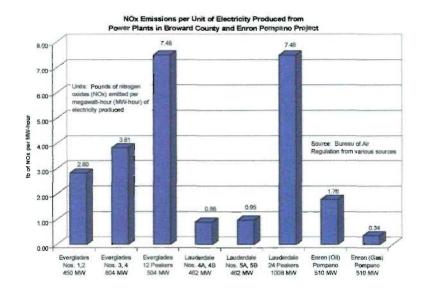
Planned Commencement in mid-2001

Startup:

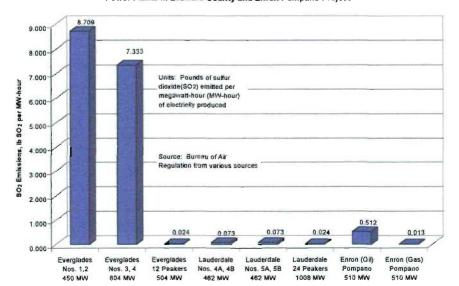
Planned Startup in late 2002

Comparison of 1999 Emissions from Power Plants in Broward County with Potential Emissions from Proposed Enron Pompano Project





SO₂ Emissions per Unit of Electricity Produced from Power Plants in Broward County and Enron Pompano Project



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Office of Research and Development



Diesel Exhaust

National Center For Environmental Assessment



Health Assessment Document for Diesel Exhaust PDF Version (70K)

EPA/600/8-90/057E, July 2000, SAB Review Draft

ABSTRACT:

This revised draft assessment of the possible health hazards from human exposure to diesel exhaust emissions updates three earlier drafts (1999, 1998 and 1994) that were reviewed by the Clean Air Scientific Advisory Committee (CASAC) of the Agency's Science Advisory Board (SAB). The current draft assessment characterizes the possible human health hazards and related exposure-response aspects of those hazards related to environmental exposure to diesel exhaust. This draft assessment incorporates peer review comments provided by the CASAC in February 2000. The document will undergo another peer review by the CASAC in the Fall of 2000 and EPA will accept public comments. The details of the CASAC review and the public review and comment period will be announced in the Federal Register on approximately August 11.

Chapter 2 PDF Version (1030K)
Chapter 4 PDF Version (56K)
Chapter 6 PDF Version (121K)
Chapter 8 PDF Version (71K)
Appendix B PDF Version (49K)
Appendix D PDF Version (268K)

For further information, please contact the Technical Information Staff, National Center for Environmental Assessment-Washington Office, by phone (202-564-3261), fax (202-565-0050) or email (nceadc.comment@epa.gov)



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1. EXECUTIVE SUMMARY

1.1. INTRODUCTION

The Health Assessment Document for Diesel Exhaust (DE) represents the Agency's first comprehensive review of the potential health effects from ambient exposure to exhaust from diesel engines. This assessment identifies and characterizes the potential human health hazards of DE (i.e., hazard assessment) and characterizes the related dose-response associated with the key health effects (i.e., dose-response assessment). This is part of the information needed for a complete risk assessment of DE in support of EPA's Clean Air Act regulatory programs. A full exposure assessment and risk characterization, the other two components of a complete risk assessment, are beyond the scope of this document.

The report has nine chapters (including this chapter) and four appendices. Chapter 2 provides a characterization of diesel emissions, atmospheric transformation, and human exposures to DE to provide a context for the hazard evaluation of DE. Chapters 3, 4, 5, and 7 provide a review of relevant information for the evaluation of potential health hazards of DE, including dosimetry (Chapter 3), mutagenicity (Chapter 4), other noncancer health effects (Chapter 5), and carcinogenicity (Chapter 7). Chapters 6 and 8 contain dose-response analyses to provide insight about the significance of the potential noncancer and cancer hazards, respectively. Chapter 9 characterizes the overall nature of the potential health hazard and risk from environmental exposure to DE and discusses the overall confidence and uncertainties of the assessment. Major conclusions of the health assessment for DE are provided below.

1.2. COMPOSITION OF DIESEL EXHAUST

DE is a complex mixture of hundreds of constituents in either a gas or particle phase. Gaseous components of DE include carbon dioxide, oxygen, nitrogen, water vapor, carbon monoxide, nitrogen compounds, sulfur compounds, and low-molecular-weight hydrocarbons. Among the gaseous components of DE that are of toxicologic relevance are the aldehydes (e.g., formaldehyde, acetaldehyde, acrolein), benzene, 1,3-butadiene, and polycyclic aromatic hydrocarbons (PAHs) and nitro-PAHs.

The particles present in DE (i.e., diesel particulate matter or DPM) are composed of elemental carbon, adsorbed organic compounds, and small amounts of sulfate, nitrate, metals, and other trace elements. DPM consists of fine and ultrafine particles. These particles are highly respirable and have a very large surface area, which make them an excellent carrier for adsorbed inorganic and organic compounds. The most toxicologically relevant organic compounds that are adsorbed onto the particles include PAHs, nitro-PAHs, and oxidized PAH derivatives. PAHs and

their derivatives comprise about 1% or less of the DPM mass. Many of the organic compounds present on the particle and in the gases are known to have mutagenic and carcinogenic properties.

1.3. DIESEL EMISSIONS

DE is emitted from "on-road" diesel engines (vehicle engines) or "nonroad" diesel engines (e.g., locomotives, marine vessels, heavy-duty equipment, etc). Nationwide, data in 1998 indicate that DE as measured by DPM made up about 6% of the total ambient PM_{2.5} inventory (i.e., particles with aerodynamic diameter of 2.5 microns or less) and about 23% of the inventory excluding natural and miscellaneous sources. Estimates of the DPM percentage of the total inventory in urban centers can be higher. For example, estimates range from 10% to 36% in some areas in California, Colorado, and Arizona. Available data indicate that over the years, there have been significant reductions in DPM emissions from the exhaust of on-road diesel engines, whereas very limited data suggest that exhaust emissions from nonroad engines have increased.

DE emissions vary significantly in chemical composition and particle sizes with different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), and fuel formulations. The mass of particles emitted and the organics on the particles from onroad diesel engines have been reduced over the years. Available data indicate that toxicologically relevant organic components of DE (e.g., PAHs, nitro-PAHs) were present in DPM and DE emitted from older vehicle engines and are still present in emissions from newer engines. There is insufficient information, however, to characterize the changes in the composition of DPM from nonroad diesel engines over time.

1.4. ATMOSPHERIC TRANSFORMATION OF DIESEL EXHAUST

After emission from the tailpipe, DE undergoes dilution and chemical and physical transformations in the atmosphere, as well as dispersion and transport in the atmosphere. The atmospheric lifetime for some compounds present in DE ranges from hours to days. DPM is either directly emitted from diesel-powered engines (primary particulate matter) or is formed from the gaseous compounds emitted by diesel engines (secondary particulate matter). Limited information is available about the physical and chemical transformation of DE in the atmosphere. It is not clear what the overall toxicological consequence of DE aging is, because some compounds in the DE mixture are altered during aging to more toxic forms while others are made less toxic.

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1.5. EXPOSURE TO DIESEL EXHAUST

DPM mass (expressed as μg/m³ of DPM) has historically been measured as a surrogate for whole DE. Although considerable uncertainty exists as to whether DPM is the most appropriate dosimeter for human health effects, it is considered a reasonable choice until more definitive information about the mechanisms or mode(s) of action of DE becomes available. In the ambient environment, exposure to DE comes from both on-road and nonroad engine exhaust. A large percentage of the U.S. population is exposed to ambient PM_{2.5}, of which DE is a part. Estimates suggest that nonroad sources of DE contribute as much to the nationwide PM inventory as do on-road DE sources. With limited information from actual measurements of DE, various types of models and assumptions are used to estimate human exposure to on-road generated DE as measured by DPM. Exposure information is useful to provide a context for the health effects information, and estimates for the early to mid-1990s suggest that annual average DE exposure from on-road engines alone was in the range of about 0.5 to close to 1.0 µg DPM/m³ of inhaled air in many rural and urban areas, respectively. For urban areas where people spend a large portion of their time outdoors, the exposures may range up to 4.0 µg DPM/m³ of inhaled air. Exposure estimates are adjusted to account for time spent outdoors. Exposures could be higher still, if there is a nonroad DE source that adds to the on-road-generated exposure.

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1.6. HEALTH EFFECTS

Available evidence indicates that adverse human health effects may result from current-day environmental inhalation exposure to DE. DE exposure may cause acute and chronic noncancer respiratory effects and has the potential to cause lung cancer in humans.

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1.6.1. Acute Effects

Available information for characterizing potential health effects associated with acute or short-term exposure is limited. On the basis of available human and animal evidence, it is concluded that DE can cause acute irritation (e.g., eye, throat, bronchial irritation), neurophysiological symptoms (e.g., lightheadedness, nausea), and respiratory symptoms (cough and phlegm). There is also evidence for possible immunologic effects and/or exacerbation of allergenic responses to known allergens. The lack of exposure-response information precludes the development of recommendations about levels of exposure that would be protective for these effects.

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1.6.2. Chronic Noncancer Respiratory Effects

The information in available human studies is inadequate for a definitive evaluation of possible noncancer health effects from chronic exposure to DE. However, on the basis of extensive animal evidence, DE may pose a chronic respiratory hazard to humans. Chronic animal inhalation studies show a spectrum of dose-dependent chronic inflammation and histopathological changes in the lung in several animal species including rats, mice, hamsters, and monkeys.

This assessment provides an estimate of an air-level exposure of DE (as measured by DPM) to which humans may be exposed throughout their lifetime without experiencing any untoward or adverse noncancer health effects. This exposure level, known as the reference concentration (RfC), for DE of $14 \,\mu\text{g/m}^3$ of DPM was derived on the basis of dose-response data from four chronic rat inhalation studies. This value is almost the same as the long-term PM_{2.5} NAAQS (National Ambient Air Quality Standard) of $15 \,\mu\text{g/m}^3$.

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1.6.3. Carcinogenic Effects

This assessment concludes that DE is likely to be carcinogenic to humans by inhalation at any exposure condition. This characterization is based on the totality of evidence from human, animal, and other supporting studies. There is considerable evidence demonstrating an association between DE exposure and increased lung cancer risk among workers in different occupations. The human evidence is considered strong but less than sufficient to definitively conclude that DE exposure is causally associated with lung cancer, because of the possible confounding effects of smoking and the lack of actual DE exposure data for the workers. In addition to the human evidence, there is extensive evidence for the induction of lung cancer in the rat from chronic inhalation exposure to high concentrations of DE, and supporting evidence of carcinogenicity of DPM and associated organic compounds in rats and mice by noninhalation routes of exposure. Other supporting evidence includes the demonstrated mutagenic and chromosomal effects of DE and its organic constituents. There is also suggestive evidence for the bioavailability of the organics from DE in humans and animals. The precise role of DPM with its organic component in DE-induced carcinogenicity is unclear, although in high-exposure animal test systems, DPM and its elemental carbon core are shown to be the most important fraction of DE.

Although the available human evidence shows the hazard to be present at exposures generally higher than ambient levels, it is reasonable to presume that the hazard extends to ambient environmental exposure levels. Because of an incomplete understanding of the mode of action for DE-induced lung cancer in humans, and some evidence for a mutagenic mode of action, it is a prudent public health policy to presume a cancer hazard for DE at any exposure condition. This presumption pertains only to the carcinogenic hazard and does not inform about the

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magnitude of the risk at ambient levels. Overall, the evidence for a potential cancer hazard to humans resulting from chronic inhalation exposure to DE is persuasive, even though assumptions and thus uncertainties are involved.

Given a carcinogenicity hazard, EPA typically performs a dose-response assessment of human or animal data to develop a cancer unit risk estimate that can be used with exposure information to characterize the potential cancer disease impact on an exposed population. For DE, the exposure-response data in rat studies are not deemed appropriate for the estimation of human risk. Exposure-response data in available human studies are considered too uncertain to derive a confident quantitative estimate of cancer unit risk. Therefore, EPA has chosen not to derive a quantitative estimate of cancer unit risk.

In the absence of a unit risk to assess environmental cancer risk, simple analyses are performed to provide a perspective of the range of the possible lung cancer risk from environmental exposure to DE. The analyses make use of epidemiologic findings of lung cancer risks from occupational exposures to DE, and consider the exposure margins between occupational and environmental exposures to DE. The magnitude of the possible lifetime cancer risk, based on the simple analyses, indicates the significance of the potential lung cancer hazard from ambient exposure to DE. These analyses, however, are subject to considerable uncertainties, and should not be viewed as a definitive quantitative characterization of risk.

1.7. SOURCES OF UNCERTAINTIES

Even though the overall evidence for potential human health effects of DE is persuasive, many uncertainties exist because of the use of assumptions to bridge data and knowledge gaps about human exposures to DE, and the underlying mechanisms by which DE causes observed toxicities in humans and animals. A major uncertainty of this assessment is how the physical and chemical nature of the past exposures to DE compares with present-day exposures, and how representative the DE exposure-response data are from occupational and toxicological studies for the characterization of possible hazard and risk from present-day environmental exposures. Available data are not sufficient to provide definitive answers to these questions, as changes in DE composition over time cannot be confidently quantified and the modes of action for DE toxicity and carcinogenicity are unknown in humans. Despite these uncertainties, this assessment assumes that prior-year toxicologic and epidemiologic findings can be applied to more current exposures, both of which use $\mu g/m^3$ of DPM mass as the dosimeter.

Other uncertainties include the assumptions that health effects observed at high dose may be applicable to low dose, and that toxicologic findings in laboratory animals are predictive of human responses. In the absence of more complete understanding of how DE may cause adverse health effects in humans and laboratory animals, the assumptions used in this assessment (i.e., a

biological threshold for chronic respiratory effects) and absence of a threshold for lung cancer are considered prudent and reasonable.

The assessment addresses the potential DE health hazards for average healthy adults. There is no DE-specific information that provides direct insight to the question of variable susceptibility within the general human population and vulnerable subgroups, including infants and children, and people with preexisting health conditions, particularly respiratory conditions. Despite these uncertainties, the default approach of using an uncertainty factor of 10 to account for possible interindividual variation to DE in the derivation of the RfC is appropriate and reasonable given the lack of DE-specific data.

In providing a perspective on the significance of the environmental cancer hazard of DE, this assessment considers the differences in the magnitude of DE exposures between the occupational and environmental settings. Variation in DE exposure is a source of uncertainty. Because of variation in activity patterns, different population subgroups could potentially receive higher or lower exposure to DE depending on their proximity to DE sources. Accordingly, DE exposure estimates used in this assessment have included possible high-end exposures.

Lastly, this assessment considers only potential heath effects from exposures to DE alone. DE exposure could be additive or synergistic to concurrent exposures to many other air pollutants. However, in the absence of more definitive data demonstrating interactive effects (e.g., potentiation of allergenicity effects, potentiation of DPM toxicity by ambient ozone and oxides of nitrogen) from combined exposures to DE and other pollutants, it is not possible to address this issue at this time. Further research is needed to improve the knowledge and database on DE exposures and potential human health effects, and thereby reduce uncertainties of future risk assessments of DE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 4 1979

OFFICE OF AIR AND WASTE MANAGEMENT

SUBJECT: Guidance for Determining BACT Under PSD

FROM: David G. Hawkins, Assistant Administrator for Air, Noise, and Radiation

TO: Regional Administrators, I-X

The 1977 Clean Air Act amendments pertaining to the Prevention of Significant Deterioration (PSD) require that the determination of best available control technology (BACT) be performed on a case-by-case basis considering energy, environmental, and economic impacts and other costs. The enclosed document provides guidance to assist you in determining BACT in the PSD review. This document has been circulated in draft form and reviewed by your staff.

The purpose of the guideline is to provide the framework for a consistent approach in determining BACT. The guidance is rather general, focusing on the parameters which should be considered in the analysis supporting the proposed control system. Unfortunately, no specific criteria can be developed a priori, nor can quantitative factors relating to the weighting and evaluation of energy, environmental, and economic consideration be prescribed. However, consideration of the same set of parameters should contribute to more consistent decisions among the Regions.

I recognize that the case-by-case BACT determination is a difficult task and one which may be resource intensive. To minimize the resource requirements, the primary responsibility for defending the proposed control system must be placed on the source. The guidelines suggest a significant effort by the source to provide data and analysis to support a permit application. My office will continue to provide assistance for the engineering aspects of control technology selection through operation of the OAQPS new source review clearinghouse.

Enclosure

cc: Assistant Administrators and Office Directors
Director, Air and Hazardous Materials Division, Regions I - X
Director, Facilities Technology Division, Region II
Director, Enforcement Division, Regions I-X

GUIDELINES FOR DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DECEMBER 1978

Office Of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
U. S. Environmental Protection Agency

GUIDELINES FOR DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

INTRODUCTION

The 1977 Clean Air Act Amendments establish more restrictive conditions for the approval of preconstruction permit applications under the Prevention Of Significant Deterioration (PSD) program. One of the new requirements is for best available control technology (BACT) to be installed for all pollutants regulated under the Act. [SEE FOOTNOTE¹ BELOW] Under the revised Act, BACT is to be determined on a case-by-case basis rather than automatically applying an applicable Federal New Source Performance Standard (NSPS), as was the case under the previous regulation. Concern has been expressed that these determinations should be consistent from area to area. In the context of case-by-case BACT, consistency does not necessarily mean that a new facility In one area will have an identical emission limit as the same type of facility in another area.

Consistency means that a consistent approach is used in determining BACT and that the impacts of alternative emission control systems are measured by the same set of parameters, although evaluation of specific parameters is done on a case-by- case basis.

PURPOSE

This guideline is intended for use by (1) EPA Regional Offices in determining BACT during the interim period before the States adopt State Implementation Plan (SIP) provisions for implementing the PSD program, (2) by States in writing PSD regulations or determining BACT and (3) by individual sources in preparing PSD permit applications. The purpose of the guideline is to provide the framework for a consistent approach to determining BACT. The emphasis is on the types of data which should be required in a pre-construction permit application and how the data should be used in order to determine BACT.

The guideline addresses the technological question of whether the emission control system proposed in the permit application represents BACT or whether a more stringent level of emission control is appropriate considering available technology and economic, energy, and environmental impacts. The guideline assumes accomplishment of all other air quality review requirements including, for example, the requirement that air quality standards and appropriate PSD increments are met, stack heights are appropriate, and siting is acceptable.

Pollutants subject to National Ambient Air Quality Standards, Standards of Performance for New Stationary Sources, National Emission Standards for Hazardous Air Pollutants, and Emission Standards for Moving Sources.

In accomplishing this purpose, the guideline lists a number of factors which can be considered in assessing energy, environmental, and economic impacts. While the full list represents the magnitude of the analysis that could be required for a very large and complex source, many of these factors will not be relevant to the typical BACT review. The inclusion of any factor should be based on its relative merit considering such influences as source size, nature of the process and control options, and local conditions.

It is the clear intent of EPA not to require an analysis of the full proportion described herein for small sources or for the use of conventional control equipment whose impacts are well established. In short, the BACT analysis should be held to a minimum with the depth of analysis being dependent on the difficulty of the decision.

PHILOSOPHY OF BACT

The primary purpose of BACT is to optimize consumption of PSD air quality increments thereby enlarging the potential for future economic growth without significantly degrading air quality. The Act places the responsibility of determining BACT with the State once a PSD SIP revision is approved. The BACT decision is to take into account energy, environmental, and economic impacts and other costs associated with application of alternative control systems.

This case-by-case approach allows adoption of improvements in emission control technology to become widespread more rapidly than would occur through the uniform Federal new source or hazardous emission standards. In setting the NSPS, for example, emission limits are selected which can reasonably be met by all new or modified sources in an industrial category, even though some individual sources are capable of lower emissions. Additionally, because of resource limitations In EPA, revision of new source standards must lag somewhat behind the evolution of new or improved technology. Accordingly, new or modified facilities in some source categories may be capable of achieving lower emission levels that NSPS without substantial economic impacts.

The case-by-case BACT approach provides a mechanism for determining and applying the best technology in each individual situation. Hence, NSPS and NESHAPS are Federal guidelines for BACT determinations and establish minimum acceptable control requirements for a BACT determination. Where Federal standards do not exist, guidance on well-controlled sources is available through the OAQPS clearinghouse (discussed later).

A critical decision in the BACT analysis is the relative weight assigned to the energy, environmental, and economic impacts. Congress implied that this decision should be made by the State, thus allowing some flexibility in emission control requirements depending on local energy, environmental, and economic conditions and local preferences. For example, in an area with unusually high unemployment, the economic impacts may be weighted more heavily if the application of a strict BACT emission requirement would reduce production or jobs. On the other hand, if visibility protection is a major value of the area, then environmental impacts could be weighted more heavily.

This flexible approach allows the permitting authority to consider a number of local factors (for example the size of the plant, the amount of the air quality increment that would be consumed, and desired economic growth in the area) in deciding on a weighting scheme. State judgment and the Federal emission standards are the foundations for the BACT determination. Accordingly, EPA does not consider it appropriate to assign nationally applicable weighting factors in this guideline.

GENERAL GUIDELINES

The recommended approach to determining BACT is to place on the applicant the responsibility for presenting and defending the technology selection.[SEE FOOTNOTE²] This approach recognizes that the applicant is best suited for assessing the costs, environmental residuals, and energy penalties associated with alternative control options as they apply to his processes. The permit application should contain the following elements relative to BACT:

- (1) Proposal of a control system representing BACT. BACT should address control of each emission point at a facility, including fugitive process, fugitive dust, and stack emissions. Technology selection should consider application of flue gas treatment, fuel treatment, and processes or techniques which are inherently low-polluting. In no circumstance should a system be proposed for any emission point unless it is at least as stringent as the applicable SIP or Federal emission requirement (whichever is more stringent). In cases where technological or economic limitations on the application of measurement techniques would make the imposition of an emission standard infeasible, a design, operating, or equipment standard may be established.
- (2) Presentation of alternative systems that could achieve a higher degree of emission control. For each pollutant, the BACT permit application should present control alternatives which have greater control capabilities than the system proposed as BACT and which have been used or proposed for the same or similar applications. In some cases, the BACT decision may require a trade-off of control among pollutants. That is, a technology may do slightly worse in controlling one pollutant, but do significantly better in controlling another air, water, or solid waste residual. Such alternatives should not be excluded from consideration, but in justifying BACT for a given pollutant only those alternatives which have greater control capabilities for that pollutant need be presented in the permit application.

If no better control technology is available for an emission point, then such finding should be stated and supported, and no further analysis is required. Other equipment with similar control capabilities need not be presented (e.g., a baghouse versus an equivalent ESP at a particulate emitter). Unrealistic alternatives need not be presented such as placing in series control equipment which is normally used alone (e.g., an ESP followed by a baghouse). In some cases, a better control technology may be available for a general type of operation, but unique processing equipment or procedures may create a valid technical reason which would preclude its selection as BACT. Such situations should be fully supported.

(3) Defense of the BACT selection. The BACT selection for a particular pollutant is defended by demonstrating that each alternative control system (representing a more stringent level of control for that pollutant) would cause unreasonable adverse energy, environmental, or economic impacts. The rationale for rejecting each alternative should be presented in the form of an incremental analysis of the impacts of each alternative system relative to the proposed BACT system. Relevant energy, environmental and economic impacts are described below.

Preliminary meetings between the applicant and the permitting authority are encouraged as a means of promoting efficiency in the review process.

IMPACT ANALYSIS

This section outlines the types of impacts that should be recognized by the permitting authority as relevant issues in assessing the energy, environmental, and economic impacts of alternative control systems. For instance, if an applicant wishes to reject an alternative control system, he would do so by demonstrating the adverse impacts which would result from the selection of that alternative system. This section lists specific energy, environmental, and economic impacts which may be addressed in this impact analysis and explains the data requirements for documenting an adverse impact.

Each of the factors discussed below need not be addressed in every permit application. Rather this guideline presents a set of potential impacts any number of which may be addressed in a permit application depending on the individual situation. For example, even though a control system may produce solid waste by-products, such impacts need not be presented in the PSD permit application unless the applicant wishes to use solid waste impact as an argument against selection of a particular control alternative as BACT.

In general, the BACT analysis should focus on the direct (on-site) impacts of alternative control systems. Indirect energy or environmental impacts are not required but may be considered where such impacts are found to be significant and well quantified. Indirect energy impacts include such impacts as energy to produce raw materials for construction of control equipment, increased use of foreign oil, or increased oil use in the utility grid. Indirect environmental impacts include such considerations as pollution at an off-site manufacturing facility which produces materials needed to construct or operate a proposed control system.

Indirect impacts will generally not be considered, in the BACT review, since the complexity of consumption patterns in the economy makes those impacts difficult to quantify. For example, since manufacturers purchase capital equipment and supplies from many suppliers, who in turn purchase goods from the other suppliers, accurate tracing of indirect impacts may not be possible. Raw materials may be needed to operate control equipment, and suppliers of these resources may change over time. Similarly, it generally will not be possible to determine specific power stations and fuel sources which would be used to satisfy electrical demand over the lifetime of a control device.

Duplicative analyses will not be required in preparing the BACT permit application. Any studies previously performed for Environmental Impact Statements, water pollution permits, State New Source Review, or other programs may be used when appropriate to demonstrate an adverse energy, environmental, or economic impact.

These guidelines are applicable to both new and modified sources. Where appropriate, however, the review may consider any special economic or physical constraints which might limit the application of certain control techniques to a modification project. That is, the level of control required for a process undergoing modification or reconstruction may not be as stringent as that which would be required if the same process were being constructed at a grass-roots facility. Such findings, however, must be made on a case-by-case basis by the permitting authority considering the relevant economic and environmental impacts.

The following discussion, under each of three headings of energy, environmental, and economic impacts, lists and briefly describes a number of factors which may be addressed in the respective impact analyses. These factors are guidelines only and are not intended as an exclusive list of considerations for BACT. Some of these factors may not be appropriate in all cases, while, in other instances, factors which are not included here may be relevant to the BACT determination.

The guideline does not address the evaluation of each factor nor the weighting of any factor relative to another. Such determinations should be made on a case-by-case basis by the permitting authority. For purposes of this discussion, terms such as "emission control system" or "BACT system" refer to design, equipment, or operating standards and non-polluting processes as well as flue gas control equipment.

I. Energy Impact

Energy impacts should address energy use associated with a control system and the direct effects of such energy use on the facility and the community. As noted earlier, indirect energy impacts (such as energy to produce raw materials for construction of control equipment) are not required but may be considered if the permitting authority determines, based on a showing by the applicant, that the impact is significant and that the impact can be well quantified. Some specific considerations for energy impacts are presented below.

A. Energy Consumption

The amount, type (e. g., electric, coal, natural gas), and source of energy required by each alternative emission control system should be identified and compared to the quantities and types of energy required by the proposed BACT system. In analyzing for energy consumption, various alternatives can be compared in terms of a) energy consumption per unit of pollution removed (for example, Btu/ton hydrocarbon removed) and b) energy consumption versus the portion of the remaining PSD increment which is preserved for future growth. If such comparisons are made, they should be computed on both an overall and an incremental basis.

B. Impact on Scarce Fuels

The type and amount of scarce fuels (e.g., natural gas, distillate oil) which are required to comply with each alternative control requirement should be identified and compared with the BACT requirement. The designation of a scarce fuel may vary from area to area, but in general a scarce fuel is one which is in short supply locally and can better be used for alternative purposes, or one which may not be reasonably available to the source either at present or in the future.

C. Impact on Locally Available Coal Alternatives which require the use of a fuel other than locally or regionally available coal should be discouraged if such a requirement causes significant local economic disruption or unemployment.

D. Energy Production Impacts (electric utilities)

The 1977 Act Amendments imposed more stringent BACT requirements, and may affect electric utility units that were well along in the planning process prior to adoption of EPA regulations in June 1978. Where the start- up of the more stringent PSD program would result in construction delays for these units, the BACT determination may consider such impacts. The impact of delay plant operation should be assessed in terms of reserve capacities, system reliability, and additional costs implied by such delays.

II. Environmental Impact

The net environmental impact associated with each alternative emission control system should be determined. Both beneficial impacts (e.g., reduced emissions attributed to a control system) and adverse impacts (e.g., exacerbation of another pollution problem through use of a control system) should be discussed and quantified. As pointed out above, indirect environmental impacts (such as pollution impacts at an off-site plant which manufacturers chemicals for use in pollution control equipment) normally need not be considered. The analysis should be presented in the form of the

incremental impact of alternative control systems relative to the system proposed as BACT in the permit application. Some specific considerations are presented below:

A. Air Pollution Impact

The impact of air pollutants emitted from a gas stream or a fugitive emission source can be assessed terms of either quantity of emissions, modeled effects on air quality, or both. If application of a control system directly removes or releases other air pollutants (or precursors to other air pollutants), then the pollutants affected and the impact of these emission changes should be identified. The analysis can consider any pollutant affecting local air quality including pollutants which are not currently regulated under the Act, but which may be of special concern locally.

In the absence of a more systematic technique (e.g., market-type systems, etc.) for allocating PSD increments, BACT determinations are important for executing such allocations. PSD programs which depend on BACT determinations to implement the allocation of increments should project desired levels of growth in an area so that BACT determinations for each source will serve to insure that the total air impacts of future growth are no greater than the available increments. Since in the first years of the PSD program many areas may have neither a functioning market system for allocating increments no accurate projects of desired growth, it is important that such areas use the BACT determinations during this initial period to conserve the remaining increments as much as possible until more systematic allocation mechanisms are put in place.

B. Water Impact

Relative quantities of water used and water pollutants produced and discharged as a result of use of each alternative emission control system should be identified. Where possible, the analysis should assess their effect on such local surface water quality parameters as pH, turbidity, dissolved oxygen, salinity, toxic chemical levels and any other important considerations, as well as on groundwater. The analysis should consider whether applicable water quality standards are met and the availability and effectiveness of various techniques to reduce potential adverse effects.

C. Solid Waste Disposal impact

The quality and quantity of solid waste (e.g., sludges, solids) that must be stored and disposed of or recycled as the result of the application of each alternative emission control system should be compared with the quality and quantity of wastes created if the emission control system proposed as BACT is used. The composition and various other characteristics of the solid waste (such as permeability, water retention, rewatering of dried material, compression strength, leachability of dissolved ions, bulk density, ability to support vegetation growth and hazardous characteristics) which are significant with regard to potential surface water pollution or transport into and contamination of subsurface waters or aquifers should be considered. The relative effectiveness, hazard and opportunity for solid waste management options, such as sanitary landfill, incineration, and recycling, should be identified and discussed.

D. Irreversible or Irretrievable Commitment of Resources

The BACT decision may consider the extent to which the alternative emission control systems may involve a trade-off between short-term environmental gains at the expense of long-term environmental losses and the extent to which the alternative systems may result in irreversible or irretrievable commitment of resources (for example, use of scarce water resources).

E. Other Environmental Impacts

Incremental differences in noise levels, radiant heat, or dissipated static electrical energy should be considered where appropriate.

III. Economic Impact

This analysis should address the economic impacts associated with the incremental costs of installing and operating alternative control systems above the economic impact associated with the system proposed as BACT. The review should include a complete explanation of procedures for assessing economic impacts and any supporting data. As outlined below, economic considerations can address direct economic impacts on the firm and impacts on local economic growth.

A. Direct Economic Impacts on the Plant

Direct economic impacts on the plant should be examined through evaluation of the following:

1. Direct Costs

The direct cost for each control alternative should be presented both on an incremental and on an overall basis. Investment costs, operations and maintenance costs and annualized costs should be presented separately. Annualized costs are operations and maintenance costs plus depreciation and interest charges on the investment. Costs should be itemized and explained. Credit for tax incentives should be included along with credits for product recovery costs and by-product sales generated from the use of control systems.

The lifetime of the investment should be stated. Where possible, costs should be broken down into process change costs (costs of less polluting production process) and direct pollution abatement costs (cost of pollution control equipment). The costs of air treatment, water treatment and solid waste disposal should be presented separately. The analysis should also include the total investment cost of the new facility.

As a guide in determining when control costs become excessive, alternative control systems can be compared in terms of certain cost effectiveness ratios. Such ratios may include the following:

- ratio of total control costs to total investment costs.
- cost per unit of pollution removed (for example, dollars/ton).
- cost versus additional portion of remaining PSD increment preserved for future growth.
- unit production costs (for example, mill/kw-hr, dollars/ton of steel).

In some cases, the unit of production output may be difficult to determine, as in the case of a plant producing many different products. In such cases, unit production costs can be expressed as cost per dollar of total sales.

2. Capital Availability

Capital availability addresses the difficulty that some sources may face in financing alternative control systems. Proof of such claims should be fully documented.

B. Local Economic Impacts

Local economic impacts address the economic feasibility of alternative BACT requirements and the impact of the production decisions of the firm in response to alternative levels of control. For example, a BACT alternative may alter the economics of a project to the point where the decision would be made to cancel the construction or expansion of a facility, to relocate a plant, to reduce the scale of operation, or to change the production mix.

The local economic impacts of such decisions should be assessed in terms of local employment effects including number of jobs, dollars paid in salaries, and changes in employee skill levels required. The guideline does not imply that the BACT decision should force new projects to the brink of cancellation. The BACT decision must be based on sound judgment, balancing environment benefits with energy, economic, and other impacts. Local economic impacts also can address the effect of various BACT alternatives on air quality increment consumption and the subsequent impact on future growth potential in the surrounding area. The BACT decision should reflect policy decisions to conserve the available air quality increment for future growth.

IV. Other Costs

Other costs associated with alternative emission control systems may be considered where appropriate.

ASSISTANCE IN DETERMINING BACT

Assistance to the states and Regional Offices in evaluating control technology will continue to be provided through the OAQPS new source review clearinghouse (August 1, 1977 memo, Walter C. Barber to Regional Offices, "OAQPS Assistance for BACT/RACT/LAER Determinations"). Through its repository of information on past BACT/RACT/LAER decisions, the clearinghouse provides a communication link for advising reviewing authorities of each other's determinations, thereby promoting consistency in BACT determinations.

The degree to which the clearinghouse will be effective as a consistency-improving tool will depend on the degree to which the BACT determinations are reported to OAQPS. All Regional Offices are requested to submit BACT findings to the clearinghouse. In addition to the repository, the clearinghouse system also provides a focal point for answering questions related to policy issues and control technology. With respect to control technology, OAQPS can assist in establishing the range of alternative controls for a particular process, but cannot evaluate case-by- case energy, environmental, and economic impacts or select BACT emission levels. In short, the clearinghouse can be an important input to the reviewing authority's decision, but it cannot substitute for the case-by- case analysis required to select the appropriate control technology.

The 2000 Florida Statutes

Title XXIX
PUBLIC HEALTH

Chapter 403
Environmental Control

View Entire Chapter

403.182 Local pollution control programs.--

- (1) Each county and municipality or any combination thereof may establish and administer a local pollution control program if it complies with this act. Local pollution control programs in existence on the effective date of this act shall not be ousted of jurisdiction if such local program complies with this act. All local pollution control programs, whether established before or after the effective date of this act, must:
- (a) Be approved by the department as adequate to meet the requirements of this act and any applicable rules and regulations pursuant thereto.
- (b) Provide by ordinance, regulation, or local law for requirements compatible with, or stricter or more extensive than those imposed by this act and regulations issued thereunder.
- (c) Provide for the enforcement of such requirements by appropriate administrative and judicial process.
- (d) Provide for administrative organization, staff, financial and other resources necessary to effectively and efficiently carry out its program.
- (2) The department shall have the exclusive authority and power to require and issue permits; provided, however, that the department may delegate its power and authority to local pollution control organizations if the department finds it necessary or desirable to do so.
- (3) If the department finds that the location, character or extent of particular concentrations of population, contaminant sources, the geographic, topographic or meteorological considerations, or any combinations thereof, are such as to make impracticable the maintenance of appropriate levels of air and water quality without an areawide pollution control program, the department may determine the boundaries within which such program is necessary and require it as the only acceptable alternative to direct state administration.
- (4)(a) If the department has reason to believe that a pollution control program in force pursuant to this section is inadequate to prevent and control pollution in the jurisdiction to which such program relates, or that such program is being administered in a manner inconsistent with the requirements of this act, it shall proceed to determine the matter.
- (b) If the department determines that such program is inadequate to prevent and control pollution in the municipality or county or municipalities or counties to which such program relates, or that such program is not accomplishing the purposes of this act, it shall require that necessary corrective measures be taken within a reasonable period of time, not to exceed 90 days.
- (c) If the municipality, county, or municipalities or counties fail to take such necessary corrective action within the time required, the department shall administer within such municipality, county, or municipalities or counties all of the regulatory provisions of this act. Such pollution control program shall supersede all municipal or county pollution laws, regulations, ordinances and requirements in the affected jurisdiction.
- (d) If the department finds that the control of a particular class of contaminant source because of http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0403/S 7/2/2001

- its complexity or magnitude is beyond the reasonable capability of the local pollution control authorities or may be more efficiently and economically performed at the state level, it may assume and retain jurisdiction over that class of contaminant source. Classifications pursuant to this paragraph may be either on the basis of the nature of the sources involved or on the basis of their relationship to the size of the communities in which they are located.
- (5) Any municipality or county in which the department administers its pollution control program pursuant to subsection (4) may with the approval of the department establish or resume a municipal or county pollution control program which meets the requirements of subsection (1).
- (6) Notwithstanding the existence of any local pollution control program, whether created by a county or municipality or a combination thereof or by a special law, the department shall have jurisdiction to enforce the provisions of this chapter and any rules, regulations, or orders issued pursuant to this chapter throughout the state; however, whenever rules, regulations, or orders of a stricter or more stringent nature have been adopted by a local pollution control program, the department, if it elects to assert its jurisdiction, shall then enforce the stricter rules, regulations, or orders in the jurisdiction where they apply.
- (7) It shall be a violation of this chapter to violate, or fail to comply with, a rule, regulation, or order of a stricter or more stringent nature adopted by a local pollution control program, and the same shall be punishable as provided by s. <u>403.161</u>. If any local program changes any rule, regulation, or order, whether or not of a stricter or more stringent nature, such change shall not apply to any installation or source operating at the time of such change in conformance with a currently valid permit issued by the department.
- (8) If any local program changes any rule, regulation, or order, whether or not of a stricter or more stringent nature, such change shall not apply to any installation or source located north of the Cross Florida Greenway, permitted and under construction as of May 1, 1997. Provisions of this subsection shall not apply to any facility which primarily generates electric power.
- (9) Nothing in this act shall prevent any local pollution control program from enforcing its own rules, regulations, or orders. All remedies of the department under this chapter shall be available, as an alternative to local enforcement provisions, to each local pollution control program to enforce any provision of local law. When the department and a local program institute separate lawsuits against the same party for violation of a state or local pollution law, rule, regulation, or order arising out of the same act, the suits shall be consolidated when possible.
- (10) Each local pollution control program shall cooperate with and assist the department in carrying out its powers, duties, and functions.

History.--s. 19, ch. 67-436; ss. 26, 35, ch. 69-106; s. 2, ch. 71-137; ss. 1, 2, ch. 73-256; s. 14, ch. 78-95; s. 76, ch. 79-65; s. 6, ch. 89-143; s. 371, ch. 94-356; s. 9, ch. 97-222.

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Privacy Statement

- (a) "National Ambient Air Quality Standard" means an ambient standard established by EPA and specified at 40 C.F.R. Part 50, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
 - (b) "Primary Standard" means an ambient standard established to protect public health.
- (c) "Secondary Standard" means an ambient standard established to protect the public welfare including the protection of animal and plant life, property, visibility and atmospheric clarity, and the enjoyment of life and property.
 - (d) "State Ambient Air Quality Standard" means an ambient standard established or adopted by the Department.
- (6) "Baseline Area" The area (and every part thereof) designated as a prevention of significant deterioration (PSD) area under Rule 62-204.360, F.A.C., in which the facility or modification establishing the minor source baseline date would construct or in which the emissions of the facility (or the significant net increase in emissions for a modification) would have a predicted air quality impact equal to or greater than one microgram per cubic meter (annual average) of the pollutant for which the minor source baseline date is established.
- (7) "Baseline Concentration" The ambient concentration level, or set of levels, that is predicted to occur at each point within a baseline area for conditions existing at the time of the applicable minor source baseline date. The concentration is comprised of the predicted impact of the baseline emissions using an appropriate air quality model and meteorological data that are generally representative of the baseline area, plus a representative background concentration. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and for each averaging time for which a maximum allowable increase is established in Rule 62-204.260, F.A.C.
- (a) For the annual average, the baseline concentration is the average concentration that is predicted to occur at each point within the area for each calendar year modeled.
- (b) For shorter term averages, the baseline concentration is the set of all such short-term concentrations predicted to occur at each point within the area for each calendar year modeled.
- (8) "Cause or Contribute" With respect to a violation of an ambient air quality standard, to have a significant impact on the ambient air concentration of a pollutant at any locality that does not or would not meet the applicable standard.
 - (9) "Clean Air Act (CAA)" or "Act" The Federal Clean Air Act (42 U.S.C. s. 7401 et seq.)
- (10) "Construction" The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities.
 - (11) "Department" The State of Florida Department of Environmental Protection.
 - (12) "Emission" The discharge or release into the atmosphere of one or more air pollutants.
- (13) "Emission Limiting Standard" or "Emission Standard" or "Emission Limitation" or "Performance Standard" Any restriction established in or pursuant to a regulation adopted by the Department which limits the quantity, rate, concentration or opacity of any pollutant released, allowed to escape or emitted, whether intentionally or unintentionally, into the atmosphere, including any restriction which prescribes equipment, sets fuel specifications, or prescribes operation or maintenance procedures for an emissions unit to assure emission reduction or control.
 - (14) "Emissions Unit" Any part or activity of a facility that emits or has the potential to emit any air pollutant.
 - (15) "Environmental Protection Agency" or "EPA" The United States Environmental Protection Agency.
- (16) "Facility" All of the emissions units which are located on one or more contiguous or adjacent properties and which are under the control of the same person (or persons under common control).
- (17) "Federal Land Manager" With respect to any lands in the United States, the Secretary of the department with authority over such lands.
- (18) "Indian Governing Body" The governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- (19) "Indian Reservation" Any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
- (20) "Major Source Baseline Date" Pursuant to 40 C.F.R. 51.166(b)(14)(i), adopted and incorporated by reference in Rule 62-204.800, F.A.C.;
 - (a) In the case of particulate matter and sulfur dioxide, January 6, 1975; and
 - (b) In the case of nitrogen dioxide, February 8, 1988.
- (21) "Marginal Nonattainment Area for Ozone" The lowest category of five classifications of nonattainment for the air pollutant ozone as defined in the Clean Air Act (42 U.S.C. s. 7511).
- (22) "Minor Source Baseline Date" Pursuant to 40 C.F.R. 51.166(b)(14)(ii), adopted and incorporated by reference in Rule 62-204.800, F.A.C., the minor source baseline date for each pollutant for which maximum allowable increases have been established under Rule 62-204.260, F.A.C., is the earliest date after August 7, 1977, for particulate matter and sulfur dioxide, and February 8, 1988, for nitrogen dioxide, that a facility or a modification subject to preconstruction review under 40 C.F.R. 52.21, Rule 17-2.500, F.A.C. (transferred), or Rule 62-212.400, F.A.C., submits a complete application for permit under such regulations provided that:

- (a) On the date the complete application is filed, the area in which the facility or modification would be constructed is designated as attainment or unclassifiable for the applicable pollutant under 42 U.S.C. Section 7407(d)(1) of the Clean Air Act (if the application is filed under 40 C.F.R. 52.21), or as a PSD area under Rule 17-2.450 (transferred), 62-275.700 (repealed) or 62-204.360, F.A.C., (if the application is filed under Rule 17-2.500 (transferred) or 62-212.400, F.A.C.); and
- (b) In the case of a facility, the emissions of the applicable pollutant would be equal to or greater than the significant emission rate in Chapter 62-212, F.A.C., Table 212.400-2, or, in the case of modification, there would be a significant net emissions increase of the pollutant.
- (23) "Moderate Nonattainment Area for Ozone" The second-lowest category of five classifications of nonattainment for the air pollutant ozone as defined in the Clean Air Act (42 U.S.C. s. 7511).
 - (24) "Modification" Either (a) or (b), as follows:
- (a) Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.
 - 1. A physical change or change in the method of operation shall not include:
 - a. Routine maintenance, repair, or replacement of component parts of an emissions unit; or
 - b. A change in ownership of an emissions unit or facility.
- 2. For any pollutant that is specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975.
- 3. For any pollutant that is not specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would exceed any restriction on hours of operation or production rate included in any applicable Department air construction or air operation permit.
 - (b) Any change which would be defined as a modification under;
 - 1. 40 C.F.R. 60.2;
 - 2. 40 C.F.R. 61.15;
 - 3. 40 C.F.R. 52.01; or
 - 4. 42 U.S.C. s. 7412(a).
- (25) "Nonattainment Area" Any area not meeting ambient air quality standards and designated as a nonattainment area under Rule 62-204.340, F.A.C. Such an area may be designated as a particulate, sulfur dioxide, nitrogen dioxide, carbon monoxide, lead or ozone nonattainment area, depending on which ambient standard has been violated. An area may be designated as nonattainment for more than one air pollutant. Ozone nonattainment areas may be transitional, marginal, moderate, serious, severe, or extreme as classified in Rule 62-204.340, F.A.C.
 - (26) "Particulate Matter"
- (a) With respect to concentrations in the atmosphere, particulate matter means any airborne finely divided solid or liquid material.
- (b) With respect to emissions, particulate matter means all finely divided solid or liquid material, other than uncombined water, emitted to the atmosphere as measured by applicable reference methods, or an equivalent or alternative method, specified in 40 C.F.R. Part 60, Appendix A, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
 - (27) "PM₁₀"
- (a) With respect to concentrations in the atmosphere, PM₁₀ means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 C.F.R. Part 50, Appendix J, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (b) With respect to emissions, PM₁₀ means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the atmosphere as measured by an applicable reference method or by an equivalent or alternative method specified in 40 C.F.R. Part 60, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (28) "Redesignation of an Area" A change in the designation or a redefinition of the boundaries of an area for any of the designations listed under Rule 62-204.340 or 62-204.360, F.A.C.
- (29) "Significant Impact" An impact of emissions on ambient air quality in excess of any of the following pollutant-specific concentration values:
 - (a) Sulfur Dioxide.
 - 1. Maximum three-hour concentration not to be exceeded more than once per year 25.0 micrograms per cubic meter.
- 2. Maximum 24-hour concentration not to be exceeded more than once per year 1.0 microgram per cubic meter for Class I areas; 5.0 micrograms per cubic meter for all other areas.
 - 3. Annual arithmetic mean 1.0 microgram per cubic meter.
 - (b) PM_{10} .
- 1. Maximum 24-hour concentration not to be exceeded more than once per year 1.0 microgram per cubic meter for Class I areas; 5.0 micrograms per cubic meter for all other areas.

- 2. Annual arithmetic mean 1.0 microgram per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 1.0 microgram per cubic meter.
- (d) Carbon Monoxide.
- 1. Maximum one-hour concentration not to be exceeded more than once per year 2.0 milligrams per cubic meter.
- 2. Maximum eight-hour concentration not to be exceeded more than once per year 0.5 milligram per cubic meter.
- (e) Lead. Maximum quarterly arithmetic mean 0.03 microgram per cubic meter.
- (30) "State Implementation Plan (SIP)" or "Implementation Plan" The EPA approved plan which Section 110 of the Clean Air Act requires a state to submit to the Administrator. The State Implementation Plan for the State of Florida, as approved by the U.S. Environmental Protection Agency, is identified in 40 C.F.R. Part 52, Subpart K, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

Specific Authority 403.061, 403.8055 FS. Law Implemented 403.021, 403.031, 403.061, 403.8055 FS. History-New 11-30-94, Amended 3-13-96.

62-204.220 Ambient Air Quality Protection.

- (1) Except as provided in Rule 62-212.500, F.A.C., Preconstruction Review for Nonattainment Areas, or in the Reasonably Available Control Technology rules of Chapter 62-296, F.A.C., the Department shall not issue an air permit authorizing a person to build, erect, construct, or implant any new emissions unit; operate, modify, or rebuild any existing emissions unit; or by any other means release or take action which would result in the release of an air pollutant into the atmosphere which would cause or contribute to a violation of an ambient air quality standard established under Rule 62-204.240, F.A.C.
- (2) Except as provided in Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), the Department shall not issue an air permit authorizing the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
- (3) Ambient air quality monitors used to establish a violation of an ambient air quality standard shall meet the requirements of 40 C.F.R. Part 58, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (4) For any provision of the air pollution rules of the Department which requires that an estimate of concentrations of pollutants in the ambient air be made, the estimates shall be based on the applicable air quality models, data bases, and other requirements approved by the Department and specified in 40 C.F.R. Part 51, Appendix W Guideline on Air Quality Models (Revised), adopted and incorporated by reference in Rule 62-204.800, F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.240 Ambient Air Quality Standards.

- (1) Sulfur Dioxide.
- (a) Maximum three hour concentration not to be exceeded more than once per year 1300 micrograms per cubic meter (0.5 ppm).
 - (b) Maximum 24-hour concentration not to be exceeded more than once per year 260 micrograms per cubic meter (0.1 ppm).
 - (c) Annual arithmetic mean 60 micrograms per cubic meter (0.02 ppm).
 - (2) PM_{10} .
- (a) 24-hour average concentration not to be exceeded more than once per year, as determined in accordance with 40 C.F.R. Part 50, Appendix K, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 150 micrograms per cubic meter.
- (b) Expected annual arithmetic mean concentration as determined in accordance with 40 C.F.R. Part 50 Appendix K 50 micrograms per cubic meter.
 - (3) Carbon Monoxide.
- (a) Maximum one hour concentration not to be exceeded more than once per year -35 parts per million (40 milligrams per cubic meter).
- (b) Maximum eight hour concentration not to be exceeded more than once per year 9 parts per million (10 milligrams per cubic meter).
- (4) Ozone. Daily maximum one hour concentration, not to be exceeded an average of more than one day per year -0.12 parts per million (235 micrograms per cubic meter).
- (a) Exceedances. An exceedance will occur for any calendar day when the maximum hourly average concentration for that day exceeds the standard. A day with more than one hourly value exceeding the standard shall count as a single exceedance.
- (b) Determination of Compliance with Standard. At the end of each calendar year, the number of days with maximum hourly concentrations above 0.12 ppm shall be determined as specified in subparagraph 62-204.220(4)(a)3., F.A.C., below, and that number averaged with the results of the immediately preceding two year's data. As long as this average remains less than or equal to 1.0, the site is in compliance.
- (c) Estimating the Number of Exceedances per Year. When a valid daily maximum hourly average value is not available for each day of the year, the following method shall be used to account for those missing values when determining the number of exceedances for a particular calendar year. If a site has two or more observed exceedances each year, the standard is not met and no requirement exists to account for the missing values in accordance with this paragraph. The term "missing values" means all days

that do not have an associated ozone measurement. A daily maximum ozone value is the highest hourly ozone value recorded for that day. This daily maximum is considered to be valid if 75 percent of the hours from 9:01 A.M. to 9:00 P.M. (LST) were measured or if the highest hourly value is greater than the level of the standard. A missing daily maximum ozone value may be assumed to be less than the level of the standard if the valid daily maxima on both the preceding day and the following day do not exceed 75 percent of the level of the standard (0.09 ppm in this case). No assumption can be made if more than one consecutive day's data are missing. The following equation shall be used to estimate the number of exceedances for the year:

- e = v + (v/n) (N n z); where:
- e = the estimated number of exceedances for the year;
- v = the number of daily values above the standard;
- n = the number of valid daily maxima;
- N = the number of days in the year; and
- z = the number of days assumed to be less than the standard level.

This estimated number of exceedances shall be rounded to one decimal place (fractional part equal to or greater than 0.05 rounds up).

- (5) Nitrogen Dioxide. Annual arithmetic mean 100 micrograms per cubic meter (0.05 ppm).
- (6) Lead. Maximum quarterly arithmetic 1.5 Micrograms per cubic meter.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.260 Prevention of Significant Deterioration Increments.

At each point within the baseline area, any increase in pollutant concentration over the baseline concentration shall be limited to the applicable amount, pursuant to 40 C.F.R. 51.166(c), adopted and incorporated by reference in Rule 62-214.800, F.A.C., and as set forth below. For any averaging period other than the annual period, the increase in pollutant concentration over the baseline concentration shall be determined for each period comprising the set of baseline concentrations for each point within the area for each calendar year modeled; furthermore, the applicable maximum allowable increase may be exceeded during one such period per year at each point.

- (1) Class I Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 4 micrograms per cubic meter.
- 2. PM₁₀, Twenty-four hour maximum 8 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 2 micrograms per cubic meter.
- 2. Twenty-four hour maximum 5 micrograms per cubic meter.
- 3. Three hour maximum 25 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean -2.5 micrograms per cubic meter.
- (2) Class II Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 17 micrograms per cubic meter.
- 2. PM₁₀, Twenty-four hour maximum 30 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 20 micrograms per cubic meter.
- 2. Twenty-four hour maximum 91 micrograms per cubic meter.
- 3. Three-hour maximum 512 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 25 micrograms per cubic meter.
- (3) Class III Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 34 micrograms per cubic meter.
- 2. PM₁₀, Twenty-four hour maximum 60 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 40 micrograms per cubic meter.
- 2. Twenty-four hour maximum 182 micrograms per cubic meter.
- 3. Three hour maximum 700 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 50 micrograms per cubic meter.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.320 Procedures for Designation and Redesignation of Areas.

(1) General.

- 4. The Southwest corner of Pasco County.
- (c) All of the state except those areas designated as nonattainment under Rule 62-204.340, F.A.C., is designated as unclassifiable for the air pollutant lead.
 - (4) Designation of Air Quality Maintenance Areas.
 - (a) Each of the following areas is designated as an air quality maintenance area for the air pollutant ozone:
 - 1. Orange County.
 - 2. Duval County.
 - 3. The area consisting of Broward, Dade, and Palm Beach Counties.
 - 4. The area consisting of Hillsborough and Pinellas Counties.
 - (b) Each of the following areas is designated as an air quality maintenance area for the air pollutant, particulate matter:
- 1. That portion of Hillsborough County which falls within the area of the circle having a centerpoint at the intersection of U. S. 41 South and State Road 60 and a radius of 12 kilometers.
- 2. The downtown Jacksonville area in Duval County located within the following boundary lines: south and then west along the St. Johns River from its confluence with Long Branch Creek, to Main Street; north along Main Street to Eighth Street; east along Eighth Street to Evergreen Avenue; north along Evergreen Avenue to Long Branch Creek; and east along Long Branch Creek to the St. Johns River.
- (c) Effective January 1, 1996, the area encompassed within a radius of five kilometers centered at UTM coordinates: 364.0 kilometers East, 3093.5 kilometers North, zone 17, in Hillsborough County, is designated as an air quality maintenance area for the air pollutant lead.
- (d) As soon as practicable after notice of redesignation is published by the U. S. Environmental Protection Agency in the Federal Register, the Department shall publish notice of the effective date of redesignation in the Florida Administrative Weekly and a newspaper of general circulation in each county affected by the redesignation.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS, History-New 3-13-96.

62-204.360 Designation of Prevention of Significant Deterioration Areas.

- (1) The following areas are designated as PSD areas for the air pollutant particulate matter:
- (a) All of the state except those areas designated under paragraph 62-204.360(1)(b), F.A.C., below. The particulate matter minor source baseline date established for this area is December 27, 1977.
 - (b) No other areas of the state.
 - (2) The following areas are designated as PSD areas for the air pollutant sulfur dioxide:
- (a) All of the state except those areas designated nonattainment under paragraph 62-204.340(2), F.A.C., and those areas designated under paragraph 62-204.360(2)(b), F.A.C., below. The sulfur dioxide minor source baseline date established for this area is December 27, 1977.
 - (b) No other areas of the state.
 - (3) The following areas are designated as PSD areas for the air pollutant nitrogen dioxide:
- (a) All of the state except those areas designated under paragraph 62-204.360(3)(b), F.A.C., below. The nitrogen dioxide minor source baseline date established for this area is March 28, 1988.
 - (b) No other areas of the state.
 - (4) All areas of the state shall be classified as Class I, Class II, or Class III.
- (a) Class II Areas. All areas of the state are designated Class II except for those areas specified in paragraph 62-204.360(4)(b), F.A.C., below.
 - (b) Class I Areas. The following areas are designated as Class I areas and shall not be reclassified.
 - 1. Everglades National Park.
 - 2. Chassahowitzka National Wilderness Area.
 - 3. St. Marks National Wilderness Area.
 - 4. Bradwell Bay National Wilderness Area.
 - (5) Federally designated Class I Areas outside of Florida but within 100 kilometers of the state are as follows:
 - (a) Okefenokee National Wilderness Area.
 - (b) Wolf Island National Wilderness Area.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.400 Public Notice and Hearing Requirements for State Implementation Plan Revisions.

- (1) The Department shall hold a public hearing prior to adoption of any proposed revision to the Florida State Implementation Plan (SIP).
- (a) In addition to the notice required by Section 120.54, F.S., for rulemaking, the Department shall publish notice of the hearing by prominent advertisement in a newspaper of general circulation in each air quality control region affected at least 30 days prior to the hearing. The notice shall specify the date, time, and place of the hearing and state that a copy of the proposed SIP revision is available for public inspection in each affected region.

- 7. 40 CFR 50 Appendix G, Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.
 - 8. 40 CFR 50 Appendix H, Interpretation of the National Ambient Air Quality Standards for Ozone.
 - 9. (Reserved).
 - 10. 40 CFR 50 Appendix J, Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere.
 - 11. 40 CFR 50 Appendix K, Interpretation of the National Ambient Air Quality Standards for Particulate Matter.
- (2) Chapter 40, Code of Federal Regulations, Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans.
- (a) The following subparts of 40 CFR Part 51, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
 - 1. 40 CFR 51, Subpart I, Review of New Sources and Modifications.
 - 2. 40 CFR 51, Subpart P, Protection of Visibility.
- 3. 40 CFR 51, Subpart T, Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded, or Approved Under Title 23 U.S.C. or the Federal Transit Laws, amended August 15, 1997, 62 FR 43780.
 - 4. 40 CFR 51, Subpart W, Determining Conformity of General Federal Actions to State or Federal Implementation Plans.
- (b) The following appendices of 40 CFR Part 51, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
- 1. 40 CFR 51, Appendix M, Recommended Test Methods for State Implementation Plans, amended June 16, 1997, 62 FR 32500.
 - 2. 40 CFR 51, Appendix P, Minimum Emission Monitoring Requirements.
 - 3. 40 CFR 51, Appendix W, Guideline on Air Quality Models (Revised), amended August 12, 1996, 61 FR 41838.
- (3) Chapter 40, Code of Federal Regulations, Part 52, Approval and Promulgation of Implementation Plans. The provisions of 40 CFR Part 52, Subpart K, revised as of July 1, 1996, are adopted and incorporated by reference.
 - (4) Chapter 40, Code of Federal Regulations, Part 53, Ambient Air Monitoring Reference and Equivalent Methods.
 - (a) The following subparts of 40 CFR Part 53, revised as of July 1, 1996, are adopted and incorporated by reference:
 - 1. 40 CFR 53, Subpart A, General Provisions.
- 2. 40 CFR 53, Subpart B, Procedures for Testing Performance Characteristics of Automated Methods for SO₂, CO, O₃, and NO₂.
 - 3. 40 CFR 53, Subpart C, Procedures for Determining Comparability Between Candidate Methods and Reference Methods.
 - 4. 40 CFR 53, Subpart D, Procedures for Testing Performance Characteristics of Methods for PM10.
- (5) Chapter 40, Code of Federal Regulations, Part 55, Outer Continental Shelf Air Regulations. The provisions of 40 CFR Part 55, Sections 55.1 through 55.15, revised as of July 1, 1996, are adopted and incorporated by reference.
 - (6) Chapter 40, Code of Federal Regulations, Part 58, Ambient Air Quality Surveillance.
 - (a) The following subparts of 40 CFR Part 58, revised as of July 1, 1996, are adopted and incorporated by reference:
 - 1. 40 CFR 58, Subpart A, General Provisions.
 - 2. 40 CFR 58, Subpart B, Monitoring Criteria.
 - 3. 40 CFR 58, Subpart C, State and Local Air Monitoring Stations (SLAMS).
 - 4. 40 CFR 58, Subpart D, National Air Monitoring Stations (NAMS).
 - 5. 40 CFR 58, Subpart E, Photochemical Assessment Monitoring Stations (PAMS).
 - 6. 40 CFR 58, Subpart F, Air Quality Index Reporting.
- (b) The following appendices of 40 CFR Part 58, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference;
 - 1. 40 CFR 58, Appendix A, Quality Assurance Requirements for State and Local Air Monitoring Stations (SLAMS).
- 2. 40 CFR 58, Appendix B, Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring.
 - 3. 40 CFR 58, Appendix C, Ambient Air Quality Monitoring Methodology.
- 4. 40 CFR 58, Appendix D, Network Design for State and Local Air Monitoring Stations (SLAMS), National Air Monitoring Stations (NAMS), and Photochemical Assessment Monitoring Stations (PAMS).
 - 5. 40 CFR 58, Appendix E, Probe Siting Criteria for Ambient Air Quality Monitoring.
 - 6. 40 CFR 58, Appendix F, Annual SLAMS Air Quality Information.
 - 7. 40 CFR 58, Appendix G, Uniform Air Quality Index and Daily Reporting.
 - (7) Chapter 40, Code of Federal Regulations, Part 60, Standards of Performance for New Stationary Sources.
- (a) Definitions. For the purposes of subsection 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60 adopted herein shall apply, except that the term "Administrator," when used in any provision of 40 CFR Part 60 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.
- (b) Standards Adopted. The following Standards of Performance for New Stationary Sources contained in 40 CFR Part 60, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:

- 1. 40 CFR 60, Subpart D, Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 2. 40 CFR 60, Subpart Da, Electric Utility Steam Generators for Which Construction is Commenced After September 18, 1978; amended September 16, 1998, 63 FR 49442 (effective April 1, 1999); amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; amended April 10, 2001, at 66 FR 18546; amended June 11, 2001, at 66 FR 31177; except that the Secretary is not the Administrator for purposes of 40 CFR 60.45a.
- 3. 40 CFR 60, Subpart Db, Industrial-Commercial-Institutional Steam Generating Units; amended September 16, 1998, 63 FR 49442 (effective April 1, 1999); amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended March 13, 2000, 65 FR 13242 (effective October 1, 2000); amended October 17, 2000, at 65 FR 61744; amended April 10, 2001, at 66 FR 18546; except that the Secretary is not the Administrator for purposes of 40 CFR 60.44b(f) and (g) and 40 CFR 60.49b(a)(4).
- 4. 40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 60.48c(a)(4).
 - 5. 40 CFR 60, Subpart E, Incinerators; amended October 17, 2000, at 65 FR 61744.
- 6. 40 CFR 60, Subpart Ea, Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989, and on or Before September 20, 1994; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 7. 40 CFR 60, Subpart Eb, Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994, or for Which Modification or Reconstruction is Commenced After June 19, 1996; amended August 25, 1997, 62 FR 45116 and 62 FR 45124; amended October 17, 2000, at 65 FR 61744. Any municipal waste combustor plant which contains a municipal waste combustor unit subject to 40 CFR 60, Subpart Eb, is subject to the permitting requirements of Chapter 62-213, F.A.C., solely because it is subject to 40 CFR 60, Subpart Eb, shall file an application for an operation permit under the requirements of Chapter 62-213, F.A.C., ninety days before expiration of the source's construction permit, but no later than 180 days after commencing operation.
- 8. 40 CFR 60, Subpart Ec, Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996; promulgated September 15, 1997, 62 FR 48348; amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for purposes of 40 CFR 60.56 (c)(i).
 - 9. 40 CFR 60, Subpart F, Portland Cement Plants; amended October 17, 2000, at 65 FR 61744.
 - 10. 40 CFR 60, Subpart G, Nitric Acid Plants; amended October 17, 2000, at 65 FR 61744.
 - 11. 40 CFR 60, Subpart H, Sulfuric Acid Plants; amended October 17, 2000, at 65 FR 61744.
 - 12. 40 CFR 60, Subpart I, Hot Mix Asphalt Facilities.
- 13. 40 CFR 60, Subpart J, Petroleum Refineries; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 14. 40 CFR 60, Subpart K, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978; amended October 17, 2000, at 65 FR 61744;
- 15. 40 CFR 60, Subpart Ka, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for purposes of 40 CFR 60.114a.
- 16. 40 CFR 60, Subpart Kb, Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268.
 - 17. 40 CFR 60, Subpart L, Secondary Lead Smelters; amended October 17, 2000, at 65 FR 61744.
 - 18. 40 CFR 60, Subpart M, Secondary Brass & Bronze Production Plants.
- 19. 40 CFR 60, Subpart N, Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973; amended October 17, 2000, at 65 FR 61744.
- 20. 40 CFR 60, Subpart Na, Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983; amended October 17, 2000, at 65 FR 61744.
 - 21. 40 CFR 60, Subpart O, Sewage Treatment Plants; amended October 17, 2000, at 65 FR 61744.
 - 22. 40 CFR 60, Subpart P, Primary Copper Smelters; amended October 17, 2000, at 65 FR 61744.
 - 23. 40 CFR 60, Subpart O, Primary Zinc Smelters.
 - 24. 40 CFR 60, Subpart R, Primary Lead Smelters.
 - 25. 40 CFR 60, Subpart S, Primary Aluminum Reduction Plants; amended October 17, 2000, at 65 FR 61744.
- 26. 40 CFR 60, Subpart T, Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants; amended October 17, 2000, at 65 FR 61744.
- 27. 40 CFR 60, Subpart U, Phosphate Fertilizer Industry: Superphosphoric Acid Plants; amended October 17, 2000, at 65 FR 61744
- 28. 40 CFR 60, Subpart V, Phosphate Fertilizer Industry: Diammonium Phosphate Plants; amended October 17, 2000, at 65 FR 61744.

- (a) Definitions. For purposes of subsection 62-204.800(9), F.A.C., the definitions contained in the various provisions of 40 CFR Part 61 adopted herein shall apply, except that the term "Administrator," when used in any provision of 40 CFR Part 61 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.
- (b) Standards Adopted. The following National Emission Standards for Hazardous Air Pollutants contained in 40 CFR Part 61, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference.
 - 1. 40 CFR 61, Subpart C, Beryllium; amended October 17, 2000, at 65 FR 61744.
 - 2. 40 CFR 61, Subpart D, Beryllium Rocket Motor Firing; amended October 17, 2000, at 65 FR 61744.
 - 3. 40 CFR 61, Subpart E, Mercury; amended October 17, 2000, at 65 FR 61744.
- 4. 40 CFR 61, Subpart F, Vinyl Chloride; amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.66.
- 5. 40 CFR 61, Subpart J, Equipment Leaks (Fugitive Emission Sources) of Benzene; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268, except that the Secretary is not the Administrator for the purposes of 40 CFR 61.112(c).
- 6. 40 CFR 61, Subpart K, Radionuclide Emissions From Elemental Phosphorous Plants; amended October 17, 2000, at 65 FR 61744.
- 7. 40 CFR 61, Subpart L, Benzene Emissions from Coke By-Product Recovery Plants; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.136(d).
- 8. 40 CFR 61, Subpart M, Asbestos; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.149(c)(2), 40 CFR 61.150(a)(4), 40 CFR 61.151(c), 40 CFR 61.152(b)(3), 40 CFR 61.154(d), and 40 CFR 61.155(a); and except that DEP Form Number 62-257.900(1) shall be used in lieu of the form identified as Figure 3 in 40 CFR 61.145.
- 9. 40 CFR 61, Subpart N, Inorganic Arsenic Emission From Glass Manufacturing Plants; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 10. 40 CFR 61, Subpart O, Inorganic Arsenic Emissions From Primary Copper Smelters; amended October 17, 2000, at 65 FR 61744.
 - 11. 40 CFR 61, Subpart P, Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities.
- 12. 40 CFR 61, Subpart V, Equipment Leaks (Fugitive Emissions Sources); amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268.
- 13. 40 CFR 61, Subpart Y, Benzene Emissions From Benzene Storage Vessels; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.273.
- 14. 40 CFR 61, Subpart BB, Benzene Emissions From Benzene Transfer Operations; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for the purposes of 40 CFR 61 353
 - 15. 40 CFR 61, Subpart FF, Benzene Waste Operations; amended October 17, 2000, at 65 FR 61744.
- (c) The National Emission Standards for Hazardous Air Pollutants adopted by reference in this rule shall be controlling over other standards in the air pollution rules of the Department, except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a National Emission Standard, or which regulates pollutants or emissions units not regulated by an applicable National Emission Standard, shall apply.
- (d) General Provisions Adopted. The general provisions of 40 CFR Part 61, Subpart A, revised as of July 1, 1996, and amended February 24, 1997, 62 FR 8314; and January 6, 1998, 63 FR 414; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended Ocotober 17, 2000, at 65 FR 62150; amended December 14, 2000, at 65 FR 78268; are adopted and incorporated by reference except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.08, 40 CFR 61.11, and 40 CFR 61.18.
- (e) Appendices Adopted. The following appendices of 40 CFR Part 61, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
- 1. 40 CFR 61 Appendix A, National Emission Standards for Hazardous Air Pollutants Compliance Status Information, amended February 12, 1999, 64 FR 7458 (effective August 1, 1999).
- 2. 40 CFR 61, Appendix B, Test Methods, except Method 111 for Polonium 210, Method 114 for Radionuclides and Method 115 for Radon-222, amended February 9, 1998, 63 FR 6493; and February 12, 1998, 63 FR 7199.
 - 3. 40 CFR 61 Appendix C, Quality Assurance Procedures.
- (10) Chapter 40, Code of Federal Regulations, Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories.
- (a) Definitions. For the purposes of subsection 62-204.800(10), F.A.C., the definitions contained in the various provisions of 40 CFR Part 63 adopted herein shall apply, except that the term, "Administrator," when used in any provisions of 40 CFR Part 63 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.

- (b) Standards Adopted. The following National Emission Standards for Hazardous Air Pollutants contained in 40 CFR Part 63, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
- 1. 40 CFR 63, Subpart F, Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry; amended December 5, 1996, 61 FR 64572; January 17, 1997, 62 FR 2722; and May 12, 1998, 63 FR 26078; amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended May 8, 2000, 65 FR 26491 (effective October 1, 2000); amended January 22, 2001, at 66 FR 6922.
- 2. 40 CFR 63, Subpart G, Organic Hazardous Air Pollutants From the Synthetic Organic Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater; amended December 5, 1996, 61 FR 64572; January 17, 1997, 62 FR 2722; and December 9, 1998, 63 FR 67787 (effective April 1, 1999); amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; amended January 22, 2001, at 66 FR 6922.
- 3. 40 CFR 63, Subpart H, Organic Hazardous Air Pollutants for Equipment Leaks; amended January 17, 1997, 62 FR 2722; amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended December 14, 2000, at 65 FR 78268; amended January 22, 2001, at 66 FR 6922.
- 4. 40 CFR 63, Subpart I, Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks, amended January 17, 1997, 62 FR 2722.
 - 5. 40 CFR 63, Subpart L, Coke Oven Batteries; amended October 17, 2000, at 65 FR 61744.
 - 6. 40 CFR 63, Subpart M, Perchloroethylene Dry Cleaning Facilities, amended September 19, 1996, 61 FR 49263.
- 7. 40 CFR 63, Subpart N, Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, amended January 30, 1997, 62 FR 4463; and August 11, 1997, 62 FR 42918.
- 8. 40 CFR 63, Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities, amended December 9, 1997, 62 FR 64736, December 4, 1998, 63 FR 66990 (effective April 1, 1999); and December 3, 1999, 64 FR 67789 (effective April 1, 2000).
 - 9. 40 CFR 63, Subpart Q, Industrial Process Cooling Towers, amended July 23, 1998, 63 FR 39516 (effective April 1, 1999).
- 10. 40 CFR 63, Subpart R, Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), amended February 28, 1997, 62 FR 9087.
- 11. 40 CFR 63, Subpart S, Pulp and Paper Industry; promulgated April 15, 1998, 63 FR 18504; amended August 7, 1998, 63 FR 42238; September 16, 1998, 63 FR 49455; and December 28, 1998, 63 FR 71385 (effective April 1, 1999); amended April 12, 1999, 64 FR 17555 (effective October 1, 1999); amended December 22, 2000, at 65 FR 80755; amended May 14, 2001, 66 FR 24270; except that the Secretary is not the Administrator for the purposes of 40 CFR 63.453(m), 40 CFR 63.457(b)(5)(iii), and 40 CFR 63.457(c)(3)(ii).
- 12. 40 CFR 63, Subpart T, Halogenated Solvent Cleaning; amended May 5, 1998, 63 FR 24749; December 11, 1998, 63 FR 68397 (effective April 1, 1999); August 19, 1999, 64 FR 45187; and December 3, 1999, 64 FR 67793 (effective April 1, 2000); amended September 8, 2000, at 65 FR 54419.
- 13. 40 CFR 63, Subpart U, Group I Polymers and Resins, amended January 14, 1997, 62 FR 1835; and July 15, 1997, 62 FR 37720; amended March 9, 1999, 64 FR 11536 (effective July 1, 1999); amended May 7, 1999, 64 FR 24511, and June 30, 1999, 64 FR 35023 (effective October 1, 1999); amended June 19, 2000, 65 FR 38029 (effective October 1, 2000).
- 14. 40 CFR 63, Subpart W, Epoxy Resins Production and Non-Nylon Polyamides Production, amended May 8, 2000, 65 FR 26491 (effective October 1, 2000).
- 15. 40 CFR 63, Subpart X, Secondary Lead Smelters, amended December 12, 1996, 61 FR 65334; June 13, 1997, 62 FR 32209; and August 24, 1998, 63 FR 45007 (effective April 1, 1999), amended January 29, 1999, 64 FR 4570 (effective July 1, 1999).
 - 16. 40 CFR 63, Subpart Y, Marine Tank Vessel Loading Operations.
- 17. 40 CFR 63, Subpart AA, Phosphoric Acid Manufacturing Plants, promulgated June 10, 1999, 64 FR 31358 (effective October 1, 1999).
- 18. 40 CFR 63, Subpart BB, Phosphate Fertilizers Production Plants, promulgated June 10, 1999, 64 FR 31358 (effective October 1, 1999).
- 19. 40 CFR 63, Subpart CC, Petroleum Refineries; amended February 21, 1997, 62 FR 7937; March 20, 1998, 63 FR 13533; May 18, 1998, 63 FR 27212; June 9, 1998, 63 FR 31358; and August 18, 1998, 63 FR 44135 (effective April 1, 1999); amended May 8, 2000, 65 FR 26491 (effective October 1, 2000); amended May 25, 2001, at 66 FR 28840.
- 20. 40 CFR 63, Subpart DD, Off-Site Waste and Recovery Operations; promulgated July 1, 1996, 61 FR 34140; amended July 20, 1999, 64 FR 38950 (effective April 1, 2000); amended January 8, 2001, at 66 FR 1263.
- 21. 40 CFR 63, Subpart EE, Magnetic Tape Manufacturing Operations, amended April 9, 1999, 64 FR 17460 (effective October 1, 1999).
- 22. 40 CFR 63, Subpart GG, Aerospace Manufacturing and Rework Facilities; amended December 17, 1996, 61 FR 66226; March 27, 1998, 63 FR 15006; April 10, 1998, 63 FR 17930; and September 1, 1998, 63 FR 46525 (effective April 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 23. 40 CFR 63, Subpart HH, Oil and Natural Gas Production Facilities; promulgated June 17, 1999, 64 FR 32610 (effective October 1, 1999); amended June 29, 2001, at 66 FR 34548.

- (35) "Baseline Concentration" The ambient concentration level, or set of levels, that is predicted to occur at each point within a baseline area for conditions existing at the time of the applicable minor source baseline date. The concentration is comprised of the predicted impact of the baseline emissions using an appropriate air quality model and meteorological data that are generally representative of the baseline area, plus a representative background concentration. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and for each averaging time for which a maximum allowable increase is established in Rule 62-204.260, F.A.C.
- (a) For the annual average, the baseline concentration is the average concentration that is predicted to occur at each point within the area for each calendar year modeled.
- (b) For shorter term averages, the baseline concentration is the set of all such short-term concentrations predicted to occur at each point within the area for each calendar year modeled.
- (36) "Baseline Emissions" The emissions of each pollutant for which maximum allowable increases have been established under Rule 62-204.260, F.A.C., that are used to predict a baseline concentration. Baseline emissions are quantified as specified in Rule 62-212.400(4), F.A.C.
- (37) "Batch Process" A process which takes in the basic raw materials at the beginning of a cycle and processes them in accordance with a predetermined scheme during which no more basic raw materials are added to the process. Two variations include:
- (a) Processes where some of the reactants (materials) are added at the beginning with the remainder added as the reaction progresses.
- (b) Processes where once the materials are added, one or more products are continuously removed as the reaction progresses. Such processes include production of super phosphate, basic oxygen furnaces, and cement batch plants.
- (38) "Best Available Control Technology" or "BACT" An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.
- (a) If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.
- (b) Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.
- (39) "Biological Waste" Solid waste that causes or has the capability of causing disease or infection and which includes biomedical waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals.
- (40) "Biological Waste Incineration Facility" One or more incinerators located on one or more contiguous or adjacent properties which is/are operated or utilized for the disposal or treatment of biological waste and is/are owned or operated by the same person or by persons under common control.
- (41) "Biomedical Waste" Any solid or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and discarded sharps. The following are also included:
- (a) Used absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and absorbent materials saturated with blood or blood products that have dried.
- (b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids, or secretions or excretions visibly contaminated with blood, but have not been treated by a method listed in Section 381.0098, F.S., or a method approved pursuant to Rule 64E-16, F.A.C.
- (42) "Black Liquor Oxidation System" The vessels used to oxidize, with air or oxygen, the black liquor, and associated storage tank(s).
 - (43) "Black Liquor Solids" The dry weight of the solids which enter the kraft recovery furnace in the black liquor.
- (44) "Brown Stock Washer System" Brown stock washers and associated knotters, vacuum pumps, and filtrate tanks used to wash the pulp following the digester system.
- (45) "Bubble Baseline Emissions" or "Bubble Baseline" For purposes of establishing an air emissions bubble, the sum of emissions of each pollutant from the emissions units included within the bubble, expressed both on a short-term and long-term basis.
- (a) On a short-term basis, the bubble baseline shall be calculated by summing the allowable emissions of each unit after converting the allowable emissions to the equivalent pounds per hour.
- (b) On a long-term basis the bubble baseline shall be calculated in tons per year by multiplying the allowable emissions times the actual capacity of each unit, actual capacity being determined as the average of the highest two out of the last five calendar years prior to the permit application for the bubble. For steam generating units, the actual capacity shall be expressed as million British Thermal Units per year.

- (114) "Federally Enforceable" Pertaining to limitations and conditions which are enforceable by the Administrator, including any requirements developed pursuant to Title 40 of the Code of Federal Regulations, any requirements within the State Implementation Plan, and any requirements established pursuant to permits issued under:
 - (a) The state's Title V operation permit program, consistent with 40 C.F.R. Part 70.
 - (b) Rule 62-210.300(2)(b), F.A.C.;
 - (c) 40 C.F.R. 52.21; or
- (d) Rule 62-204.800(10)(d)2., F.A.C.; Rule 62-212.300, F.A.C. (formerly 17-212.300, formerly 17-2.520); Rule 62-212.400, F.A.C. (formerly 17-212.400, formerly 17-2.500); Rule 62-212.500, F.A.C. (formerly 17-212.500, formerly 17-2.510); Rule 17-2.17, F.A.C. (repealed); or Rule 62-4.210, F.A.C. (formerly 17-4.210, formerly 17-4.21).
- (115) "Final Permit" The version of a Title V source permit issued by the Department for which all review procedures required by Rule 62-213.450, F.A.C., have been completed.
- (116) "Firebox" The chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.
 - (117) "Flashoff Area" The space between the application area and the oven.
- (118) "Flexographic Printing" The application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
 - (119) "Fossil Fuel" Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.
- (120) "Fossil Fuel Steam Generators" A furnace or boiler which produces steam by combustion of oil, coal, or gas of fossil origin.
 - (121) "Freeboard Height" -
 - (a) For heated vapor degreasers is the distance from the top of the vapor zone to the top of the degreaser tank.
 - (b) For cold cleaning degreasers is the distance from the solvent to the top edge of the cold cleaner.
 - (122) "Freeboard Ratio" The freeboard height divided by the width of the degreaser.
- (123) "Fugitive Emissions" Those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
- (124) "Gas/Gas Method" Either of two EPA methods for determining capture efficiency which rely only on gas phase measurements. One method, prescribed in Rule 62-297.450(2)(a), F.A.C., requires construction of a temporary total enclosure to assure all otherwise unconfined air pollutant emissions are measured. The other method, prescribed in Rule 62-297.450(2)(c), F.A.C., uses the room or building which houses the emissions activity, process, or source as an enclosure.
 - (125) "Gasoline" Any petroleum distillate having a Reid vapor pressure of 4 psia (27.6 kilopascals) or greater.
- (126) "Gasoline Dispensing Facility" Any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
 - (127) "Green Liquor Sulfidity" The sulfidity of the liquor which leaves the smelt dissolving tank.
- (128) "Hardboard" A panel manufactured primarily from inter-felted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.
 - (129) "Hardwood Plywood" Plywood whose surface layer is a veneer or hardwood.
 - (130) "Hazardous Air Pollutant (HAP)" An air pollutant:
 - (a) Identified by the CAS number or chemical name from the following list:

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		CAS Number	Chemical Name		
	1.	75070	Acetaldehyde		
	2.	60355	Acetamide		
	3.	75058	Acetonitrile		
	4.	98862	Acetophenone		
	5.	53963	2-Acetylaminofluorene		
	6.	107028	Acrolein		
	7.	7906 1	Acrylamide		
	8.	79107	Acrylic acid		
	9.	107131	Acrylonitrile		
	10.	107051	Allyl chloride		
	11.	92671	4-Aminobiphenyl		
	12.	62533	Aniline		
	13.	90040	o-Anisidine		
	14.	0	Antimony Compounds		
	15.	0	Arsenic Compounds (inorganic including arsine)		
	16.	1332214	Asbestos		
	17.	71432	Benzene (including benzene from gasoline)		
	18.	92875	Benzidine		
	19.	98077	Benzotrichloride		

- (149) "Lease Custody Transfer" The transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- (150) "Lime Kiln" An inclined rotary drum device used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.
- (151) "Liquid/Gas Method" Either of two EPA methods for determining capture efficiency which require both gas phase and liquid phase measurements and analysis. One liquid/gas method, prescribed in Rule 62-297.450(2)(b), F.A.C., requires construction of a temporary enclosure. The other, prescribed in Rule 62-297.450(2)(d), F.A.C., uses the room or building which houses the emissions activity, process, or source as an enclosure.
- (152) "Liquid Mounted Seal" A primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.
- (153) "Loading Rack" An aggregation or combination of loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer.
- (154) "Low Solvent Coating" Coatings which contain less organic solvent than the conventional coatings used by the industry. Low solvent coatings include water-borne, higher solids, electrodeposition and powder coatings.
- (155) "Lowest Achievable Emission Rate" or "LAER" An allowable emission rate determined in accordance with the provisions of Rule 62-212.500, F.A.C. This term applied to a modification means the lowest achievable emission rate for that portion of the facility which is modified.
- (156) "Magnet Wire Coating" The process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.
 - (157) "Major Facility" Any facility which emits, or has the potential to emit:
 - (a) 5 tons per year or more of lead or lead compounds, measured as elemental lead;
 - (b) 30 tons per year or more of acrylonitrile; or
 - (c) 100 tons per year or more of any other air pollutant subject to regulation under Chapter 403, Florida Statutes.
- (158) "Major Source Baseline Date" Pursuant to 40 C.F.R. 51.166(b)(14)(i), adopted and incorporated by reference in Rule 62-204.800, F.A.C.:
 - (a) In the case of particulate matter and sulfur dioxide, January 6, 1975; and
 - (b) In the case of nitrogen dioxide, February 8, 1988.
- (159) "Major Source of Air Pollution" or "Title V Source" A facility containing an emissions unit, or any group of emissions units, which is or includes any of the following:
- (a) For pollutants other than radionuclides, any emissions unit or group of emissions units that emits or has the potential to emit, in the aggregate, 10 tons per year or more of any one hazardous air pollutant (HAP), 25 tons per year or more of any combination of HAPs, or any lesser quantity of a HAP as established through EPA rulemaking. Notwithstanding the preceding sentence, HAP emissions from any oil or gas exploration or production well (with its associated equipment) and HAP emissions from any pipeline compressor or pump station shall not be aggregated with HAP emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are Title V sources.
- (b) An emissions unit or group of emissions units, all belonging to the same two-digit Major Group as described in the Standard Industrial Classification Manual, 1987, that directly emits or has the potential to emit, 100 tons per year or more of any regulated air pollutant. The fugitive emissions of an emissions unit or group of emissions units shall not be considered in determining whether it is a Title V source for purposes of this paragraph unless the emissions unit or group of emissions units belongs to one of the following categories:
 - 1. Coal cleaning plants (with thermal dryers).
 - 2. Kraft pulp mills.
 - 3. Portland cement plants.
 - 4. Primary zinc smelters.
 - 5. Iron and steel mills.
 - 6. Primary aluminum ore reduction plants.
 - 7. Primary copper smelters.
 - 8. Municipal incinerators capable of charging more than 250 tons of refuse per day.
 - 9. Hydrofluoric, sulfuric, or nitric acid plants.
 - 10. Petroleum refineries.
 - 11. Lime plants.
 - 12. Phosphate rock processing plants.
 - 13. Coke oven batteries.
 - 14. Sulfur recovery plants.
 - 15. Carbon black plants (furnace process).
 - 16. Primary lead smelters.
 - 17. Fuel conversion plant.
 - 18. Sintering plants.
 - 19. Secondary metal production plants.

- (ss) Methyl acetate.
- (281) "Waste-to-Energy Facility" A facility that uses an enclosed device using controlled combustion to thermally break down solid, liquid or gaseous combustible solid waste to an ash residue that contains little or no combustible material, and that produces electricity, steam, or other energy as a result. The term does not include facilities that primarily burn fuels other than solid waste, even if the facilities also burn some solid waste as a fuel supplement. The term also does not include facilities that burn vegetative, agricultural, or silvicultural wastes, bagasse, clean dry wood, methane or other landfill gas, wood fuel derived from construction or demolition debris, or waste tires, alone or in combination with fossil fuel. For the purposes of Rule 62-296.416, F.A.C., the term does not include facilities that primarily burn biohazardous or hazardous waste and industrial boilers that burn pelletized paper waste as a supplemental fuel.
- (282) "Waxy, Heavy Pour Crude Oil" A crude oil with a pour point of 50 degrees or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils." A copy of the above referenced document is available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, and may be examined at the Department's Tallahassee office.
- (283) "Yard Trash" Vegetative matter resulting from landscaping and yard maintenance operations which includes materials such as tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps.

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History-Formerly 17-2.100, Amended 2-9-93, 11-28-93, Formerly 17-210.200, Amended 11-23-94, 4-18-95, 1-2-96, 3-13-96, 3-21-96, 8-15-96, 10-7-96, 10-15-96, 5-20-97, 11-13-97, 2-5-98, 2-11-99, 4-16-01.

62-210.220 Small Business Assistance Program.

A "Small Business Stationary Source Technical and Environmental Compliance Assistance Program," or "Small Business Assistance Program," is established as an organizational unit of the Department's Division of Air Resources Management. The purpose of this rule is to establish procedures for notifying small business stationary sources of their rights and to assure an opportunity for public comment on any petition filed by any facility seeking inclusion on the list of small business stationary sources maintained by the Small Business Assistance Program.

- (1) Notification of Rights. The Department shall provide, at a minimum, notice to small business stationary sources as identified pursuant to Rule 62-210.220(2), F.A.C., of state requirements.
- (a) The Small Business Assistance Program shall provide notice of those rules related to air pollution which have been proposed by the Department and published in the Florida Administrative Weekly. Each notice shall contain:
 - 1. The subject matter of the rule:
 - 2. The publication date;
 - 3. Any published effective date:
 - 4. The Florida Administrative Weekly location, by volume and page number; and
 - 5. The Small Business Assistance Program Hotline telephone number.
- (b) The Department shall provide those small business stationary sources identified pursuant to Rule 62-210.220(2), F.A.C., which are also Title V sources with notice of any requirements of Chapter 62-213, F.A.C., in accordance with the provisions of Chapter 62-213, F.A.C.
- (2) Public Notice and Comment. The Small Business Assistance Program shall create and maintain a list of interested entities to receive the notices identified in Rule 62-210.220(1), F.A.C.
 - (a) The Small Business Assistance Program shall create a list of small business stationary sources as follows:
- 1. The program shall identify, using existing Department air pollutant emitting facility computerized records, all permitted facilities that have the potential to emit not more than 100 tons per year of all regulated air pollutants. The program shall request of each such facility:
- a. The total number of full-time and part-time employees, including temporary employees, employed by the person, corporation or partnership which owns or operates the facility;
 - b. The type of business in which the facility is engaged; and
 - c. The total amount of annual receipts for the most recently completed fiscal year.
- 2. Each facility desiring consideration as a small business stationary source shall provide the information listed in Rule 62-210.220(2)(a)1., F.A.C. The Small Business Assistance Program shall review the information and determine, based upon the information submitted by the facility and upon the air pollutant emission information contained in the Department's computerized air facility records, whether the facility is a "small business stationary source" as defined in Rule 62-210.200, F.A.C.
- (b) Any facility may petition for inclusion on the list described at Rule 62-210.220(2)(a), F.A.C. Each petitioning facility must publish notice of such petition in a newspaper of general circulation in each county in which the facility operates. No less than 30 days after receipt of both the notice of publication and a petition meeting the requirements of this paragraph, the Small Business Assistance Program shall add to the list the name and address of any such facility which conforms to the requirements of paragraph (b) of the definition of "small business stationary source" at Rule 62-210.200, F.A.C. Each petition for inclusion must provide factual data showing:
 - 1. Name;

- 2. Mail address;
- 3. Facility address;
- 4. County;
- 5. Standard Industrial Classification (SIC) code;
- 6. Description of operation;
- 7. Data showing the facility is owned or operated by an individual person, a corporate entity or a partnership entity employing no more than 100 employees including full and part-time employees and permanent and temporary employees during any pay period of the past 12 calendar months preceding application;
- 8. Data showing the facility does not exceed the size standards, as expressed in dollars, established in 13 C.F.R. 121.601, hereby adopted and incorporated by reference; and
 - 9. Data showing the facility does not emit more than 100 tons per year, in the aggregate, of all regulated air pollutants.
- (c) The Small Business Assistance Program shall notify each facility responding pursuant to Rule 62-210.220(2)(a)2., F.A.C., or petitioning pursuant to Rule 62-210.220(2)(b), F.A.C., that the responding facility does or does not conform to the definition of "small business stationary source" at Rule 62-210.200, F.A.C., or that the petitioning facility does or does not conform to the requirements of paragraph (b) of the definition of "small business stationary source" at Rule 62-210.200, F.A.C. The determination shall constitute agency action for purposes of Chapter 28-106, F.A.C. Any person who has provided comments to the Small Business Assistance Program in response to the published notice described at Rule 62-210.220(2)(b), F.A.C., shall be provided written notice of the determination. The facility shall be considered an applicant for purposes of Chapter 28-106, F.A.C.
- (d) The Department shall include on the list described at Rule 62-210.220(1)(a), F.A.C., each facility that has submitted a petition pursuant to Rule 62-210.220(2)(b), F.A.C., and which the Department has determined conforms to the definition of "small business stationary source" at Rule 62-210.200, F.A.C.
- (e) The Department shall maintain the list described at Rule 62-210.220(1)(a), F.A.C., annually. The Department shall delete from the list the name and address of any facility which has requested deletion or from which the Department's notice has been returned as not deliverable.

Specific Authority 403.8052 FS. Law Implemented 403.8052 FS. History-New 10-15-96, Amended 2-11-99.

62-210.300 Permits Required.

The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

- (1) Air Construction Permits.
- (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
- 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
 - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;

- b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
- c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 C.F.R. 52.21, Rule 62-204.800(10)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(10)(d)2., F.A.C., 62-212.400 or 62-212.500, F.A.C., as appropriate.
- 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.
- 3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in this chapter or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or air general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of this chapter, Chapter 62-213 (if the facility is a Title V source), and Chapter 62-4, F.A.C.
 - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
- 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
- 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
- 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
- a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
- b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

- c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.
- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.i. through iii., F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.
 - (b) Additional Requirements for Federally Enforceable State Operation Permits (FESOPs) for Non-Title V Sources.
- 1. An operation permit for a non-Title V source, including a synthetic non-Title V source, shall be considered federally enforceable only if it is issued, renewed, or revised in accordance with the following provisions:
 - a. At the time of initial application for the permit, the applicant requests that the permit be made federally enforceable.
- b. A notice of proposed agency action on the initial application, any renewal application involving material changes from the existing permit, and any application for permit revision is published in accordance with the provisions of Rules 62-210.350(1) and (4), F.A.C., except as provided in Rule 62-210.300(2)(b)3., F.A.C.
 - c. The permit is a facility-wide permit.
- d. The permit is conditioned such that the owner or operator is legally obligated to adhere to the terms and limitations of such permit, including any condition or limitation assumed by the owner or operator upon acceptance of such permit.

- e. The permit is conditioned such that any emissions limitation, control requirement, or other requirement assumed by the owner or operator upon acceptance of such permit shall be quantifiable and enforceable as a practical matter.
- 2. Once a synthetic non-Title V source has been issued a federally enforceable state operation permit (FESOP), it shall remain subject to the requirements of Rule 62-210.300(2)(b), F.A.C., unless:
 - a. The owner or operator accepts a higher limit and the facility becomes a Title V source; or
- b. The owner or operator demonstrates to the Department that it no longer needs a federally enforceable operation permit to be classified as a non-Title V source (i.e., the facility is naturally "minor" without any federally enforceable limits) and specifically requests exemption from these requirements.
- 3. If all of the permitted emissions units within a facility have been issued one or more air construction permits which have undergone public notice in accordance with procedures at least as stringent as those provided in Rule 62-210.350(4), F.A.C., and the applicant requests that the conditions of such construction permit(s) be transferred without material change to a federally enforceable state operation permit (FESOP), the Department shall waive the requirements of Rules 62-210.300(2)(b)1.b. and 62-210.350(4)(a)3., F.A.C., for publication of a notice of proposed agency action; provided, however, that the remaining provisions of Rule 62-210.350(4), F.A.C., shall apply, including the requirement that notice be given to the U.S. Environmental Protection Agency and any local air pollution control program.
- 4. If an applicant requests that existing, multiple air operation permits for a facility be consolidated into a single federally enforceable state operation permit (FESOP), the Department shall reduce the permit processing fee required pursuant to Rule 62-4.050, F.A.C., by an amount equal to the sum of the processing fees paid for the existing permits prorated by the number of years remaining until expiration of each such permit.
- (3) Exemptions. A facility, emissions unit or pollutant-emitting activity shall be exempt from the permitting requirements of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C., if it satisfies the applicable criteria of Rule 62-210.300(3)(a) or (b), F.A.C., or if it has been exempted from permitting pursuant to Rule 62-4.040, F.A.C. Failure of a facility, emissions unit or activity to satisfy the exemption criteria of Rule 62-210.300(3)(a) or (b), F.A.C., does not preclude such facility, unit or activity from being considered for exemption pursuant to Rule 62-4.040, F.A.C. Emissions units and pollutant-emitting activities exempt from permitting under this rule shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.300(2)(a)1. or 62-213.430(6)(b), F.A.C. Any proposed new emissions unit or activity that would be exempt from permitting under this rule shall not be required to obtain an air construction permit pursuant to this chapter, Chapter 62-212, F.A.C., or Chapter 62-4, F.A.C., even if such unit or activity would be contained within a Title V source. No emissions unit shall be entitled to an exemption from permitting under this rule if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source. Neither shall any emissions unit be entitled to an exemption from permitting under this rule if it would be subject to any unit-specific applicable requirement. Notwithstanding its exemption from air permitting, an exempt emissions unit or activity shall be subject to any general, facility-level applicable requirements, and its emissions shall be considered in determining the applicability of permitting requirements to other emissions units at the facility or to the facility as a whole.
 - (a) Categorical Exemptions.
- 1. One or more fossil fuel steam generators and hot water generating units located within a single facility; collectively having a total rated heat input equaling 100 million BTU per hour or less; and collectively burning annually no more than 145,000 gallons of fuel oil containing no more than 1.0 percent sulfur, or no more than 290,000 gallons of fuel oil containing no more than 0.5 percent sulfur, or an equivalent prorated amount of fuel oil if multiple fuels are used, provided none of the generators or hot water generating units is subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
- 2. Any individual fossil fuel steam generator and hot water generating unit with a rated heat input equaling 100 million BTU per hour or less and burning annually no more than 150 million standard cubic feet of natural gas or no more than one million gallons of propane or no more than one million gallons of fuel oil containing no more than 0.05 percent sulfur, or an equivalent prorated amount if multiple fuels are used, provided:
- a. The total annual fuel consumption for all units exempted by Rules 62-210.300(3)(a)2. and 3., F.A.C., at a facility does not exceed 375 million standard cubic feet of natural gas or 2.5 million gallons of propane or 2.5 million gallons of fuel oil containing no more than 0.05 percent sulfur, or an equivalent prorated amount if multiple fuels are used and;
- b. The unit is not subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
- 3. One or more fossil fuel steam generators and hot water generating units located within a single facility, collectively having a total rated heat input equaling 10 million BTU per hour or less, and fired exclusively by natural gas or propane, provided:
 - a. During periods of natural gas curtailment, only propane or fuel oil containing no more than 1.0 percent sulfur is fired; and,
- b. None of the generators or hot water heating units is subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
 - 4. Home heating and comfort heating with a gross maximum heat output of less than one million Btu per hour.
 - 5. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.

- 6. Incinerators in one or two family dwellings or in multi-family dwellings containing four or less family units, one of which is owner-occupied.
 - 7. Noncommercial and nonindustrial vacuum cleaning systems used exclusively for residential housekeeping purposes.
- 8. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 C.F.R. Part 82.
 - 9. Vacuum pumps in laboratory operations.
 - 10. Equipment used for steam cleaning.
- 11. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
 - 12. Equipment used exclusively for space heating, other than boilers.
 - 13. Noncommercial smoke houses used exclusively for smoking food products.
- 14. Bakery ovens located at any retail bakery facility which derives at least fifty percent of its revenues from retail sales on premises. Also, bakery ovens located at any commercial bakery facility utilizing only non-conveyor belt ovens operating on a single baking cycle in which a determinate amount of product is cooked at one baking (i.e., batch ovens).
 - 15. Laboratory equipment used exclusively for chemical or physical analyses.
 - 16. Brazing, soldering or welding equipment.
 - 17. Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents.
 - 18. Petroleum dry cleaning facilities with a solvent consumption of less than 3,250 gallons per year.
- 19. Portable air curtain incinerators except any air curtain incinerator intended to be continuously operated at one site for more than six months or at any Department-permitted landfill for any length of time; provided:
 - a. Only land clearing debris or clean dry wood is burned;
- b. Pit width, length, and side walls are properly maintained so that combustion of the waste within the pit is maintained at an adequate temperature and with sufficient air recirculation to provide enough residence time and mixing for complete combustion and control of emissions. Pit width shall not exceed twelve (12) feet, and vertical side walls shall be maintained:
 - c. No waste is positioned to be burned above the level of the air curtain in the pit;
 - d. Visible emissions do not exceed 40 percent opacity except for up to 30 minutes during periods of startup and shutdown;
- e. The air curtain incinerator is located at least 300 feet away from any occupied building if it has refractory-lined walls and forced underdraft air or otherwise at least 1,000 feet away from any occupied building; and
- f. The burning is ignited after 9:00 a.m. and extinguished at least one hour before sunset, except that, in the case of an air curtain incinerator with refractory-lined walls and forced underdraft air which is located at least 1,000 feet away from any off-site occupied building, the burning may commence at sunrise, and the air curtain incinerator may be charged until sunset provided it does not create a nuisance.
 - 20. One or more emergency generators located within a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
- b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 21. One or more heating units, general purpose internal combustion engines, or other combustion devices, all of which are located within a single facility, are not listed elsewhere in Rule 62-210.300(3)(a), F.A.C., and are not pollution control devices, provided:
- a. None of the heating units, general purpose internal combustion engines, or other combustion devices that would be exempted is subject to the Federal Acid Rain Program;
- b. Total fuel consumption by all such heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used; and
- c. Fuel for the heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to natural gas, diesel fuel, gasoline and propane.
 - 22. Fire and safety equipment.
- 23. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
- a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
 - 24. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 25. Phosphogypsum cooling ponds and inactive phosphogypsum stacks which have demonstrated compliance with the requirements of 40 C.F.R. Part 61, Subpart R, hereby adopted and incorporated by reference.
- 26. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

- 27. Volume reduction processes as defined in Rule 62-296.417, F.A.C., wherein the owner or operator manages only spent mercury-containing lamps removed from the facility where the volume reduction process is located.
- 28. Mercury recovery processes as defined in Rule 62-296.417, F.A.C., wherein the owner or operator manages only mercury-containing devices temporarily or permanently removed from service from the owner or operator's own facilities or installations.
 - 29. Bulk gasoline plants, provided:
- a. Such operations are not conducted at a facility that is subject to the permitting requirements of Chapter 62-213, F.A.C., and the emissions from such operations would not contribute to total emissions that would make the facility subject to those requirements:
 - b. The facility receives and distributes only petroleum-based lubricants, gasoline, diesel fuel, mineral spirits and kerosene;
 - c. The total storage capacity for gasoline at the facility does not exceed 100,000 gallons;
- d. The facility does not exceed a throughput rate (receive and distribute) of 1.3 million gallons of gasoline in any consecutive twelve-month period;
- e. The facility is not subject to any Standard of Performance for New Stationary Sources (NSPS) requirement adopted by reference in Rule 62-204.800, F.A.C.; and
- f. The facility is not subject to any volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.
 - 30. Petroleum lubrication systems.
 - 31. Application of fungicide, herbicide, or pesticide.
 - 32. Asbestos renovation and demolition activities.
- 33. Non-halogenated solvent storage and cleaning operations, provided the solvents contain none of the hazardous air pollutants listed at Rule 62-210.200, F.A.C.
 - 34. Vehicle refueling operations and associated fuel storage.
 - 35. Restaurants.
 - 36. Burning of drugs seized by law enforcement agencies in boilers with a heat input of 250 million BTU per hour or more.
 - 37. Relocatable screening-only operations, provided:
- a. The screening operation is not connected to a nonmetallic mineral processing plant subject to 40 CFR Part 60, Subpart OOO, adopted and incorporated by reference at Rule 62-204.800, F.A.C.;
 - b. No dry material is processed; and
 - c. No hazardous waste or toxic waste, as defined in Department rules, is processed.
- 38. Brownfield site remediation, as described at Rule 62-785.700, F.A.C., provided that the total volatile organic compounds in the air emissions from all onsite remediation equipment does not exceed 13.7 pounds per day.
 - (b) Generic and Temporary Exemptions.
- 1. Generic Emissions Unit Exemption. An emissions unit or pollutant-emitting activity that is not entitled to a categorical exemption pursuant to Rule 62-210.300(3)(a), F.A.C., shall be exempt from the permitting requirements of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C., if it meets all of the following criteria:
 - a. It would be subject to no unit-specific applicable requirement.
 - b. It would neither emit nor have the potential to emit:
 - (i) 500 pounds per year or more of lead and lead compounds expressed as lead;
 - (ii) 1,000 pounds per year or more of any hazardous air pollutant;
 - (iii) 2,500 pounds per year or more of total hazardous air pollutants; or
 - (iv) 5.0 tons per year or more of any other regulated pollutant.
- c. Its emissions, in combination with the emissions of other units and activities at the facility, would not cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.
- d. In the case of a proposed new emissions unit at an existing facility, the emissions of such unit, in combination with the emissions of any other proposed new or modified units and activities at the facility, would not result in a modification subject to the preconstruction review requirements of Rule 62-204.800(10)(d)2., 62-212.400 or 62-212.500, F.A.C.
- e. In the case of a proposed new pollutant-emitting activity, such activity would not constitute a modification of any existing non-exempt emissions unit at a non-Title V source or any existing non-insignificant emissions unit at a Title V source.
- 2. Generic Facility Exemption. A facility that is not entitled to a categorical exemption pursuant to Rule 62-210.300(3)(a), F.A.C., shall be exempt from the permitting requirements of this chapter, Chapters 62-212 and 62-213, F.A.C., and Chapter 62-4, F.A.C., if all of the emissions units and activities within the facility, including any proposed new emissions units and activities, meet the exemption criteria of Rule 62-210.300(3)(a), F.A.C., or Rule 62-210.300(3)(b)1., F.A.C., or if the facility meets all of the following criteria:
- a. No emissions unit or pollutant-emitting activity within the facility would be subject to any unit-specific applicable requirement.
 - b. The facility would neither emit nor have the potential to emit:
 - (i) 1,000 pounds per year or more of lead and lead compounds expressed as lead;
 - (ii) 1.0 ton per year or more of any hazardous air pollutant;

CHAPTER 62-212 STATIONARY SOURCES - PRECONSTRUCTION REVIEW (Effective 8/17/00)

62-212.100	Purpose and Scope.
62-212.200	Definitions. (Repealed)
62-212.300	General Preconstruction Review Requirements.
62-212.400	Prevention of Significant Deterioration (PSD).
62-212.410	Best Available Control Technology (BACT). (Repealed)
62-212.500	Preconstruction Review for Nonattainment Areas.
62-212.510	Lowest Achievable Emission Rate (LAER). (Repealed)
62-212.600	Sulfur Storage and Handling Facilities.
62-212.700	Emissions Unit Reclassification. (Repealed)
62-212.710	Air Emissions Bubble.

62-212.100 Purpose and Scope.

The Department of Environmental Protection adopts this chapter to establish the preconstruction review requirements for proposed new emissions units or facilities, and proposed modifications. The requirements of this chapter apply to those proposed activities for which an air construction permit is required pursuant to Chapter 62-210, F.A.C. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to prevention of significant deterioration (PSD) and nonattainment-area preconstruction review. It also includes preconstruction review requirements applicable to specific emissions unit types and provisions for authorizing the creation of or change to any air emissions bubble. Words and phrases used in this chapter, unless clearly indicated otherwise, are defined at Rule 62-210.200, F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087, 403.0875 FS. History—New 2-2-93, Formerly 17-212.100, Amended 11-23-94, 3-13-96, 5-20-97.

62-212.300 General Preconstruction Review Requirements.

This rule shall apply to the proposed construction or modification of all emissions units and facilities for which an air construction permit is required pursuant to Rule 62-210.300(1), F.A.C.

- (1) General Prohibitions.
- (a) No emissions unit or facility subject to this rule shall be constructed or modified without obtaining an air construction permit from the Department in accordance with the requirements of Rule 62-212.300(3), F.A.C.
- (b) Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard. The Department shall not permit the construction or modification of any emissions unit which would be located in a nonattainment area or area of influence if the proposed construction or modification would interfere with reasonable further progress toward attaining the ambient air quality standards.
- (c) Except as provided in Rule 62-212.400(3)(f) and (g), F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
 - (d) The Department shall include conditions in each permit issued to insure that the provisions of this rule are not violated.
 - (2) Applicability.
- (a) Relationship of General Preconstruction Review Requirements to Other Preconstruction Review Requirements. The requirements of Rule 62-212.300, F.A.C., shall apply in addition to any other preconstruction review requirements under Rules 62-204.800(10)(d)2., 62-212.400, 62-212.500, and 62-212.600, F.A.C.
- (b) Pollutants Subject to General Preconstruction Review. Pollutants subject to the general preconstruction review requirements of this rule are those pollutants not subject to preconstruction review under Rule 62-204.800(10)(d)2., 62-212.400, or 62-212.500, F.A.C. In determining applicability and implementing the provisions of Rule 62-204.800(10)(d)2., F.A.C., the Department shall rely on the definitions of terms contained in the applicable sections of 40 C.F.R. Part 63, adopted and incorporated by reference in Rule 62-204.800, F.A.C., wherever a difference in definitions or terminology exists between 40 C.F.R. Part 63 and Rule 62-210.200, F.A.C.
 - (3) Permitting Requirements.
- (a) Each applicant for an air construction permit for an emissions unit subject to this rule shall provide the Department, at a minimum, the following information:
 - 1. The nature and amounts of emissions from the emissions unit.
- 2. The location, design, construction, and operation of the emissions unit to the extent necessary to allow the Department to determine whether construction or modification of the emissions unit would result in violations of any applicable provisions of Chapter 403, Florida Statutes, or Department air pollution rules, or whether the construction or modification would interfere with the attainment and maintenance of any state or national ambient air quality standard.

(b) Each applicant for an air construction permit for an emissions unit subject to Rule 62-204.800(10)(d)2., F.A.C., shall provide the Department with the information required by 40 C.F.R. 63.43(e), adopted and incorporated by reference in Rule 62-204.800(10)(d)2., F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-Formerly 17-2.520, 17-212.300, Amended 11-23-94, 1-1-96, 10-28-97.

62-212.400 Prevention of Significant Deterioration (PSD).

The provisions of this rule generally apply to the construction or modification of air pollutant emitting facilities in those parts of the state in which the state ambient air quality standards are being met.

The provisions of this rule also establish various requirements for existing emissions units and facilities in such areas, including specific construction/operation permit requirements.

- (1) General Prohibitions.
- (a) Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard.
- (b) Except as provided in Rule 62-212.400(3)(f) and (g), F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
 - (c) The Department shall include conditions in each permit issued to insure that the provisions of this rule are not violated.
- (2) Applicability. This subsection establishes the criteria for determining whether or not a proposed new facility or modification to a facility is subject to the preconstruction review requirements of this rule, either in whole or in part. The preconstruction review requirements of this rule include the applicable provisions of: Rules 62-212.400(4), F.A.C., General Provisions; 62-212.400(5), F.A.C., Preconstruction Review Requirements; 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and 62-212.400(7), F.A.C., Construction/Operation Permit Requirements; all as modified by the applicable provisions of Rule 62-212.400(3), F.A.C., Exemptions and Exclusions. A proposed new facility or modification that is not subject to the preconstruction review requirements of this rule, either in whole or in part, may be subject to review requirements under other rules of this chapter.
 - (a) Facility and Project Exemptions.
- 1. Nonprofit Health and Educational Facilities Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if the new or modified facility would be a nonprofit health or nonprofit educational institution.
 - 2. Pollution Control Project Exemptions.
- a. A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule.
- b. A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the hazardous air pollutant emission reduction requirements of 40 CFR Part 63, Subpart S, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule, provided the owner or operator demonstrates to the Department that such increase would not cause or contribute to a violation of any ambient air quality standard, maximum allowable increase, or visibility limitation.
- c. A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the non-methane organic compound emission reduction requirements of 40 CFR Part 60, Subpart Cc or WWW, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule, provided the owner or operator demonstrates to the Department that such increase would not cause or contribute to a violation of any ambient air quality standard, maximum allowable increase, or visibility limitation.
- 3. Temporary Clean Coal Technology Demonstration Project Exemption. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project that meets the requirements of 40 CFR 52.21(b)(2)(iii)(i), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule. A temporary clean coal technology demonstration project shall have the meaning provided in 40 CFR 52.21(b)(36), adopted and incorporated by reference at Rule 62-204.800, F.A.C.
- 4. Permanent Clean Coal Technology Demonstration Project Exemption. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering shall not be subject to the preconstruction review requirements of this rule, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis. A clean coal technology demonstration project shall have the meaning provided in 40 CFR 52.21(b)(35), adopted and incorporated by reference at Rule 62-204.800, F.A.C.

- 5. Very Clean-Coal Fired Electric Utility Steam Generating Unit Exemption. The reactivation of a very clean-coal fired electric utility steam generating unit, as defined under 40 CFR 52.21(b)(38), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule.
- (b) Fugitive Emissions Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if:
- 1. The affected facility would not belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories, or any other facility category which, as of August 7, 1980, is being regulated under 40 CFR 60 or 40 CFR 61; and
- 2. The facility or modification would be subject to the preconstruction review requirements of this rule only if fugitive emissions, to the extent quantifiable, are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it is or were itself a proposed new facility.
 - (c) Alternative Fuel or Raw Material Exemption.
- A modification that is to occur for any of the following reasons shall not be subject to the preconstruction review requirements of this rule:
- 1. Use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - 2. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
 - 3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- 4. Use of an alternative fuel or raw material which the facility was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975; or
- 5. Use of an alternative fuel or raw material which the facility is approved to use under any permit issued under 40 CFR 52.21 or Rule 17-2.500 (transferred) or 62-212.400, F.A.C.
 - (d) New and Modified Facilities.
 - 1. New Minor Facilities.
- A proposed new minor facility shall not be subject to the preconstruction review requirements of this rule.
 - 2. New Major Facilities.
- Unless exempted under Rule 62-212.400(2)(a) or (b), F.A.C., a proposed new major facility shall be subject to the preconstruction review requirements of this rule if:
- a. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code (as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement; U.S. Government Printing Office, stock numbers 4101-006 and 003-005-00176-01, respectively) would be equal to or greater than 250 tons per year;
- b. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code would be equal to or greater than 100 tons per year; and the facility would belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories; or
- c. For lead or lead compounds, measured as elemental lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code would be equal to or greater than 5 tons per year.
 - 3. Modifications to Minor Facilities.
- Unless exempted under Rule 62-212.400(2)(a), (b) or (c), F.A.C., a proposed modification to a minor facility shall be subject to the preconstruction review requirements of this rule only if the modification would be a physical change which, in and of itself, would constitute a new major facility subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C.
 - 4. Modifications to Major Facilities.
- a. Unless exempted under Rule 62-212.400(2)(a), (b) or (c), F.A.C., a proposed modification to a major facility shall be subject to the preconstruction review requirements of this rule if:
- (i) The facility to be modified would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it were itself a proposed new facility; and
- (ii) The modification would result in a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.) of any pollutant regulated under the Act; or the facility to be modified is located within 10 kilometers of a Class I area and the modification would result in a net emissions increase (as set forth in Rule 62-212.400(2)(e)1., F.A.C.) of any pollutant regulated under the Act, which increase would have an impact on any Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- b. A proposed modification to a major facility shall be subject to the provisions of Rule 62-212.400(2)(d)3., F.A.C., Modifications to Minor Facilities, if the facility to be modified would not be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it were itself a proposed new facility.
 - (e) Emissions Increases.
 - 1. Net Emissions Increase.

A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

2. Significant Net Emissions Increase.

A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.

3. Contemporaneous Emissions Changes.

An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is contemporaneous with a particular modification if it occurs within the period beginning five years prior to the date on which the owner or operator of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified emissions unit(s) to begin operation. The date on which any increase in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase. The date on which any decrease in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility completes, or is committed to complete through a federally enforceable permit condition, a physical change in or change in the method of operation of the facility resulting in the decrease.

- 4. Creditable Emissions Changes.
- a. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable if:
- (i) The Department has not relied on it in issuing a permit under the provisions of Rule 17-2.500 (transferred), or 62-212.400, FAC, or EPA has not relied on it in issuing a permit under the provisions of 40 CFR 52.21, which permit is in effect when the increase in emissions of the modification occurs; and
- (ii) The Department has not relied on it in demonstrating attainment, defining reasonable further progress, or issuing a permit under the provisions of Rule 17-2.17 (repealed), 17-2.510 (transferred), 17-2.650 (transferred), 62-212.500, or 62-296.500 through 62-296.516, FAC, which permit is in effect when the increase in emissions of the modification occurs.
- b. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of sulfur dioxide, nitrogen dioxide, or particulate matter which occurs before the applicable minor source baseline date is creditable only to the extent that it must be considered in calculating the amount of any maximum allowable increase in ambient concentration remaining available. With respect to particulate matter, only PM10 emissions shall be used to evaluate the net emissions increase of PM10.
 - c. A decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable only if:
- (i) The old level of actual emissions, the old level of federally enforceable allowable emissions, or the old level of allowable emissions under Rule 62-296.500 through 62-296.516, 62-296.570, 62-296.600 through 605, or 62-296.700 through 62-296.712, F.A.C., whichever is lowest, exceeds the new level of actual emissions;
- (ii) It is federally enforceable on and after the date that the owner or operator obtains from the Department a permit to construct the new or modified facility; and
- (iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase in the emissions of the modification.
 - (f) Pollutants Subject to PSD Preconstruction Review.
- 1. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates; or for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be greater than zero when the facility is located within 10 kilometers of a Class I area and the potential and quantifiable fugitive emissions would have an impact on the Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- 2. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)4., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the modification would result in: a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.); or a net emissions increase (as set forth in Rule 62-212.400(2)(e)1., F.A.C.) when the facility to be modified is located within 10 kilometers of a Class I area and the net emissions increase would have an impact on the Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- 3. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an area designated as nonattainment for any pollutant other than ozone under Rule 62-204.340, F.A.C., the preconstruction review requirements of this rule shall not apply to emissions of the affected pollutant. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an ozone nonattainment area, the preconstruction review requirements of this rule shall not apply to emissions of volatile organic compounds; however, in such case the preconstruction review requirements of this rule shall apply to emissions of nitrogen oxides, even if the proposed new facility or modification would also be subject to the preconstruction review requirements of Rule 62-212.500, F.A.C., for nitrogen oxides.

(g) Relaxations of Restrictions on Pollutant Emitting Capacity.

If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.

(3) Limited Exemptions and Special Provisions.

The provisions of this subsection establish exemptions and exclusions from certain of the General Provisions of Rule 62-212.400(4), F.A.C., and PSD Review Requirements of Rule 62-212.400(5), F.A.C.

(a) Relocatable Facilities.

A relocatable facility which has a valid Department operation permit and which has previously been reviewed and issued a construction permit pursuant to 40 CFR 52.21 or to the preconstruction review requirements of this rule shall obtain permission to relocate and operate such facility at a new location through an amendment to the facility's operation permit, provided the following conditions are met:

- 1. The duration of emissions of the facility at the new location would not exceed two years;
- 2. The federally enforceable allowable emissions would not be increased at the new location and the emissions of the facility would not have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated:
- 3. The owner or operator has provided the Department with reasonable assurance that the emissions of the facility at the new location would not cause or contribute to a violation of ambient air quality standards; and
- 4. The owner or operator of the facility would obtain an amendment to the operating permit prior to beginning operation at the new location identifying the new location and the duration of operation.
 - (b) Voluntary Fuel Conversions (Reserved).
 - (c) Temporary Emissions.

A proposed facility or modification subject to the preconstruction review requirements of this rule shall be exempt from the requirements of Rules 62-212.400(5)(d), (e), (f), and (g), F.A.C., for a particular pollutant, provided:

- 1. The duration of emissions of the facility or net emissions increase of the modification would not exceed two years;
- 2. The owner or operator of the facility or modification has provided the Department with reasonable assurance that the emissions of the facility or net emissions increase of the modification would not cause or contribute to a violation of any ambient air quality standard or have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated.
 - (d) Modifications Under Fifty Tons Per Year.

If a proposed modification subject to the preconstruction review requirements of this rule would be made to a facility that was in existence on March 1, 1978, and would result in a net emissions increase of each pollutant listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates, of less than 50 tons per year after the application of BACT, such modification shall be exempt from the requirements of Rule 62-212.400(5)(d), (e), (f), and (g), F.A.C., as they relate to any maximum allowable increase for a Class II area.

(e) General Ambient Monitoring Exemption.

A proposed facility or modification subject to the preconstruction review requirements of this rule shall be exempt from the monitoring requirements of Rule 62-212.400(5)(f) and (g), F.A.C., with respect to a specific pollutant if:

- 1. The emissions of the pollutant from the new facility or the net emissions increase of the pollutant from the modification would not have an impact on any area equal to or greater than that listed in Table 212.400-3, De Minimis Ambient Impacts; or
- 2. The ambient concentration of the pollutant in the area that the proposed facility or modification would affect is less than the appropriate de minimis concentration listed in Table 212.400-3; or
 - 3. The pollutant is not listed in Table 212.400-3.
 - (f) Temporary Exclusions From Increment Consumption.
 - 1. Construction Related Emissions.

Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified facilities shall be excluded in determining compliance with any maximum allowable increase.

2. Mandatory Fuel Conversions.

By an Order issued by the Secretary, the following ambient concentrations shall be excluded in determining compliance with any maximum allowable increase, provided the addition of such concentrations shall not cause or contribute to a violation of any ambient air quality standard. No exclusion of such concentrations shall apply more than five years after the effective date of the latest applicable plan or order as set forth in Rule 62-212.400(3)(f)2.a. or b., F.A.C., below.

a. Concentrations attributable to the increase in emissions from facilities which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978 over the emissions from such facilities before the effective date of such an order.

- b. Concentrations attributable to the increase in emissions from facilities which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such facilities before the effective date of such plan.
 - 3. SIP Revision Related Temporary Emissions.

By an Order issued by the Secretary, concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen dioxide, or particulate matter from facilities which are affected by SIP revisions approved by the Administrator shall be excluded in determining compliance with any maximum allowable increase, provided such Order shall:

- a. Specify the time period over which the temporary emissions increase of sulfur dioxide, nitrogen dioxide, or particulate matter would occur (such time is not to exceed two years in duration unless a longer time is approved by the Administrator);
- b. Specify that the time period for excluding certain concentrations in accordance with Rule 62-212.400(3)(f)3.a., F.A.C., above, is not renewable;
- c. Allow no emissions increase from a facility which would:
- (i) Have a significant impact on a Class I area or area where an applicable maximum allowable increase is known to be violated; or
 - (ii) Cause or contribute to a violation of any ambient air quality standard.
- d. Require limitations to be in effect by the end of the time period specified in accordance with Rule 62-212.400(3)(f)3.a., F.A.C., above, which would ensure that the emissions levels from facilities affected by the SIP revision would not exceed those levels occurring from such facilities before the SIP revision was approved.
 - 4. Innovative Control Technology.

By an Order issued by the Secretary, concentrations attributable to any federally enforceable interim allowable emissions resulting from the use of innovative control technology that are in excess of the final allowable emissions based on the application of BACT, shall be excluded in determining compliance with any maximum allowable increase, provided such Order shall:

- a. Specify the time period over which the interim allowable emissions would occur (such time period shall not exceed four years, however such Order may be renewed for a period not to exceed an additional three years if the innovative control technology fails and the additional time period is needed to apply BACT through a demonstrated system of control).
 - b. Allow no emissions that would:
- (i) Have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated; or
 - (ii) Cause or contribute to a violation of any ambient air quality standard.
- c. Require limitations to be in effect by the end of the time period specified in Rule 62-212.400(3)(f)4.a., F.A.C., above, which would ensure that the emission levels from the emissions units using the innovative control technology would not exceed those that are equivalent to the application of BACT.
 - (g) Permanent Exclusions From Increment Consumption.

The increase in ambient concentrations attributable to new emissions units outside the United States over the concentrations attributable to emissions units which are included in the baseline emissions shall be excluded in determining compliance with any maximum allowable increase.

- (4) General Provisions.
- (a) Facilities or Modifications Affecting Class I Areas.
- 1. Additional Notification Requirements.
- a. The Department shall comply with the additional notification requirements of Rule 62-210.350(2)(h), FAC, for a proposed new facility or modification that would be located within 100 kilometers of, or whose emissions may affect, any Federal Class I area.
 - 2. Federal Land Manager Participation.
- a. The Federal Land Manager of any lands contained in a Class I area which may be affected by emissions from a proposed facility or modification may demonstrate to the Department that the emissions from the proposed facility or modification would have an adverse impact on the air quality-related values (including visibility) of the Federal Class I area, notwithstanding that the change in air quality resulting from emissions from such facility or modification would not cause or contribute to concentrations which would exceed any maximum allowable increase for a Class I area.
- b. If this demonstration is received by the Department within thirty (30) days after the Department has mailed or transmitted to the Federal Land Manager a complete application pursuant to Rule 62-210.350(2)(b), FAC, it shall be considered in the Department's preliminary determination and proposed agency action on the permit application. If this demonstration is received within the public comment period on the Department's proposed agency action, it shall be considered in the Department's final determination and final agency action on the permit application.
- c. If the Department finds that the Federal Land Manager's analysis does not demonstrate to the Department's satisfaction that an adverse impact on the air quality related values (including visibility) of a Class I area would occur, a written explanation of the reasons for such finding shall be included in the Department's preliminary or final determination as provided in Rule 62-212.400(4)(a)2.b., FAC. If the Department is satisfied that the Federal Land Manager has demonstrated an adverse impact on the air quality related values (including visibility) of a Class I area, the Department shall not issue the permit.
 - 3. Variances from Class I Increments.

The owner or operator of the proposed facility or modification may demonstrate to the Federal Land Manager that the emissions from such facility or modification would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such facility or modification would cause or contribute to concentrations which would exceed a maximum allowable increase for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the Department, the Department may (provided that all applicable requirements are otherwise met) issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, nitrogen dioxide, and particulate matter would not exceed the following maximum allowable increases, pursuant to 40 CFR 51.166(p)(4), over baseline concentration for such pollutants:

	Allowable
	Increase
Pollutant and	(micrograms per
Period of Exposure	cubic meter)
Particulate matter (PM10):	
Annual arithmetic mean	17.0
24-hr maximum	30.0
Sulfur dioxide:	
Annual arithmetic mean	20.0
24-hr maximum	91.0
3-hr maximum	325.0
Nitrogen dioxide:	
Annual arithmetic mean	25.0

4. Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence.

a. The owner or operator of a proposed facility or modification which cannot be approved under Rule 62-212.400(4)(a)3., F.A.C., above, may demonstrate to the Governor that the emissions unit or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility);

b. The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase; and

c. If such a variance is granted, the Department may issue a permit in accordance with the provision of Rule 62-212.400(4)(a)6., F.A.C., below, provided that all applicable requirements are otherwise met.

5. Sulfur Dioxide Variance by Governor with President's Concurrence.

a. The recommendations of the Governor and the Federal Land Manager shall be transferred to the President in any case where the Governor recommends a variance pursuant to Rule 62-212.400(4)(a)4., F.A.C., above, in which the Federal Land Manager does not concur:

b. The President may approve the Governor's recommendation if he finds that such variance is in the national interest; and

c. If such a variance is approved, the Department may issue a permit in accordance with provisions of Rule 62-212.400(4)(a)6., F.A.C., below, provided that all applicable requirements are otherwise met.

6. Emission Limitations for Gubernatorial Variances.

In the case of a permit issued under the procedures of Rule 62-212.400(4)(a)4. or 5., F.A.C., the facility or modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the emissions unit or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentrations and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum
Allowable
Increase
(micrograms per
cubic meter)
36.0
130.0

Mavimum

Period of Exposure 24-hr maximum 3-hr maximum (b) Baseline Related Provisions.

1. General.

The establishment of a minor source baseline date for a pollutant establishes the baseline area for that pollutant based on the designations of individual prevention of significant deterioration (PSD) areas under Rule 62-204.360, F.A.C. The boundary of the baseline area may be changed only by redesignating the boundaries of the affected PSD areas in accordance with the redesignation provisions of Rule 62-204.320, F.A.C. The minor source baseline date for an area may be disestablished or changed as the result of such redesignation of PSD areas.

The establishment of a baseline area requires the determination of the baseline emissions that affect the baseline area. The baseline emissions are determined for each pollutant for which maximum allowable increases are established under Rule 62-204.260, F.A.C., and are used to compute the baseline concentration levels for each point within the baseline area. The baseline concentration is the ambient concentration value to which the applicable maximum allowable increase is added to determine the maximum allowable ambient concentration for each point within the area.

2. Baseline Dates.

Within one year of the establishment of a minor source baseline date for a PSD area designated under Rule 62-204.360, FAC, the Department shall publish such date in the Florida Administrative Weekly.

- 3. Determination of Baseline Emissions.
- a. Except as provided under Rules 62-212.400(4)(b)3.b. through d., F.A.C., the baseline emissions shall be the actual emissions representative of all facilities in existence on the applicable minor source baseline date which are located within the baseline area or have a significant impact on the baseline area.
- (i) On an annual basis, the actual emissions representative of a facility shall be the sum of the actual emissions of each emissions unit within the facility.
- (ii) On a short-term basis, the actual emissions representative of a facility shall be the sum of the normal maximum emissions of each emissions unit within the facility, where normal maximum emissions are the emissions that would occur for each applicable averaging time if an emissions unit were operated at the lesser of its maximum or federally enforceable permitted capacity, using the normal types and amounts of fuels or materials processed, and operated for the lesser of the normal or federally enforceable permitted number of hours per day.
- b. The baseline emissions of a facility on which construction commenced on or before the major source baseline date but which was not in operation by the applicable minor source baseline date, shall be the federally enforceable allowable emissions of the facility, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility.
- c. The following emissions shall not be included in the baseline emissions but shall be considered in calculating the amount of any maximum allowable increase remaining available:
- (i) The actual emissions representative of a facility on which construction commenced after the major source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility;
- (ii) Any increase in the actual emissions representative of a facility resulting from a physical change in or change in the method of operation of the facility which occurred after the major source baseline date, but prior to the applicable minor source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility and such increase would not qualify for an exemption from the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(c), F.A.C.;
- (iii) Any decrease in the actual emissions representative of a facility resulting from a physical change in or change in the method of operation of the facility (including demolition or any otherwise permanent reduction in the productive capacity or the facility) which occurred after the major source baseline date, but prior to the applicable minor source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility; and
- (iv) Any increase or decrease in the actual emissions representative of all facilities occurring after the applicable minor source baseline date.
- d. Notwithstanding the provisions of Rules 62-212.400(4)(b)3.a. through c., F.A.C., any decrease in the actual emissions representative of a facility on which the Department has relied in demonstrating attainment, defining reasonable further progress, or issuing a permit under the provisions of Rule 17-2.17 (repealed), 17-2.510 (transferred), 17-2.650 (transferred), 62-212.500, 62-296.500 through 62-296.516, or 62-296.700 through 62-296.712, F.A.C., shall be included in the baseline emissions and shall not be considered in calculating the amount of any maximum allowable increase remaining available.
- e. For purposes of Rules 62-212.400(4)(b)3.c.(ii) and (iii), F.A.C., a physical change in or change in the method of operation of a facility shall not include:
 - (i) Routine maintenance, repair, or replacement of component parts of an emissions unit;
- (ii) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after the major source baseline date, pursuant to 40 CFR 52.21, or this section, or under regulations approved pursuant to 40 CFR 51.18; or
 - (iii) A change in ownership of an emissions unit or facility.
- f. The date on which any increase in the actual emissions representative of a facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase.

- g. The date on which any decrease in the actual emissions representative of a facility occurs is the date on which the owner or operator of the facility completes, or commits to complete through a federally enforceable permit condition, the physical change or change in the method of operation of the facility resulting in the decrease.
 - (c) Ambient Monitoring Quality Assurance Requirements.

The owner or operator of the proposed facility or modification shall meet the requirements of 40 CFR Part 58, Appendix B, during the operation of ambient air quality monitoring stations required pursuant to the provisions of Rule 62-212.400(5)(f) or (g), F.A.C. A copy of the above referenced document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., and may be inspected at the Department's Tallahassee office.

- (5) Preconstruction Review Requirements.
- (a) General.
- 1. A proposed facility or modification subject to the preconstruction review requirements of this subsection shall be reviewed and permitted in accordance with the provisions of Rules 62-212.400(5)(b) through (h), F.A.C., below, unless specifically exempted from one or more of those requirements pursuant to Rule 62-212.400(3), F.A.C., Exemptions and Exclusions.
- 2. No owner or operator of a facility or modification subject to the preconstruction review requirements of this subsection shall begin construction prior to obtaining a permit to construct in accordance with all applicable provisions of this rule and Rule 62-210.300, F.A.C.
- 3. Within 60 days after receipt of a complete application for a permit to construct, as required in Rule 62-212.400(5)(a)2., F.A.C., above, the Department shall make a preliminary determination as to whether the application should be approved or denied.
 - (b) Technology Review.

The proposed facility or modification shall comply with all applicable emission limitations contained in Part VI of this chapter and 40 CFR Parts 60 and 61.

(c) Best Available Control Technology.

The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.

(d) Ambient Impact Analysis.

The owner or operator of the proposed facility or modification shall demonstrate to the Department that the increase in federally enforceable allowable emissions from the proposed facility or modification, together with all other applicable increases and decreases in emissions resulting from the construction or modification (including secondary emissions), will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase.

- (e) Additional Impact Analyses.
- 1. The owner or operator of the proposed facility or modification shall provide the Department with analyses of:
- a. The impairment to visibility and soils, and to vegetation having a significant commercial or recreational value, that would occur as a result of the facility or modification and associated commercial, residential, industrial and other growth;
- b. The air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the facility or modification; and
- c. The impairment to visibility, if any, which would occur in any Federal Class I area within 100 kilometers of the facility or modification, with the exception of the Bradwell Bay National Wilderness Area, as a result of emissions from the facility or modification. (Federal Class I areas are designated in Rule 62-204.360(3)(b), F.A.C.)
 - 2. The analyses required under Rule 62-212.400(5)(e)1., FAC, shall be carried out using EPA-approved methods, if available.
- 3. The Department may require the owner or operator of a proposed facility or modification subject to the provisions of Rule 62-212.400(5)(e)1.c., FAC, to include as part of the required analysis such visibility monitoring data as are available from Federal or State visibility monitoring programs in the affected Class I area. If such data are not available or are demonstrated to be inadequate for a visibility analysis, the Department may require the applicant to collect up to one year of preconstruction visibility monitoring data and such postconstruction visibility monitoring data as are necessary to analyze the effect that emissions from the facility or modification may have, or are having, on visibility in the affected Class I area.
 - (f) Preconstruction Air Quality Monitoring and Analysis.

The owner or operator of the proposed facility or modification shall provide the Department with an analysis of ambient air quality in the area that the facility or modification would affect for each pollutant subject to NSR requirements as set forth in Rule 62-212.400(2)(f), F.A.C.

- 1. The analysis shall include:
- a. For any pollutant for which no national or state ambient air quality standards have been established, such air quality monitoring data as the Department determines are necessary to assess ambient air quality for that pollutant in any area that the emissions of the pollutant would affect; and
- b. For any pollutant (other than nonmethane hydrocarbons) for which national or state ambient air quality standards have been established, continuous air quality monitoring data sufficient to determine whether emissions of that pollutant would cause or contribute to a violation of any ambient air quality standard or any applicable maximum allowable increase.

- 2. The continuous air quality monitoring data required under Rule 62-212.400(5)(f)1., F.A.C., shall have been gathered over the twelve month period immediately preceding the filing of the application for a permit under this rule unless the Department determines that monitoring data gathered over a period shorter than twelve months, but in no case shorter than four months, are acceptable for purposes of Rule 62-212.400(5)(f)1., F.A.C.
- 3. Any air quality monitoring data required under Rule 62-212.400(5)(f)1., F.A.C., shall be gathered in general accordance with the applicable procedures specified in the Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA 450/4-87-007, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1987). A copy of the above referenced document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., and may be inspected at the Department's Tallahassee office.
 - (g) Postconstruction Monitoring.

The Department may require the owner or operator of the facility or modification to conduct postconstruction air quality monitoring and provide the data to the Department if the Department finds that such monitoring is necessary to determine the effect that emissions from the facility or modification may have, or are having, on air quality in any area.

(h) Permit Application Information Required.

At a minimum, the owner or operator of the facility or modification shall provide the following information to the Department:

- 1. A description of the nature, location, design capacity and typical operating schedule of the facility or modification, including specifications and drawings showing its design and plant layout;
 - 2. A detailed schedule for construction of the facility or modification;
- 3. A detailed description of the system of continuous emissions reduction proposed by the facility or modification as BACT, emissions estimates and any other information as necessary to determine that BACT would be applied to the facility or modification;
- 4. Information relating to the air quality impact of the facility or modification, including meteorological and topographical data necessary to estimate such impact; and
- 5. Information relating to the air quality impacts of, and the nature and extent of, all general commercial, residential, industrial and other growth which has occurred since August 7, 1977, in the area the facility or modification would affect.
- 6. A good-engineering-practice stack height, or other dispersion techniques, analysis to demonstrate compliance with Rule 62-210.550, FAC.
 - (6) Best Available Control Technology (BACT).
- (a) BACT Determination. Following receipt of a complete application for a permit to construct an emissions unit or facility which requires a determination of Best Available Control Technology (BACT), the Department shall make a determination of Best Available Control Technology during the permitting process. In making the BACT determination, the Department shall give consideration to:
- 1. Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169 of the Clean Air Act, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
 - 2. All scientific, engineering, and technical material and other information available to the Department.
 - 3. The emission limiting standards or BACT determinations of any other state.
 - 4. The social and economic impact of the application of such technology.
- (b) Phased Construction Projects For phased construction projects, the determination of BACT shall be reviewed and modified in accordance with 40 CFR 51.166(j)(4), adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (c) Use of Innovative Control Technology. With the consent of the Governor(s) of other affected state(s), the Department shall approve, through the permitting process, the use of a system of innovative control technology if the proposed system would comply with the requirements of 40 CFR 51.166(s)(2)(i) through (v).
- 1. The permit shall provide that the system of innovative control technology be discontinued under the conditions set forth in 40 CFR 51.166(s)(3)(i) through (iii).
- 2. If a system of innovative control technology must be discontinued, the facility's permit shall be amended to require the application of BACT through the use of a demonstrated system of control as expeditiously as practicable but no later than three years after amendment of the permit.
- (d) Test Methods and Procedures. All emissions tests performed pursuant to the requirements of this rule shall comply with the following requirements.
- 1. Pollutants for Which a Standard has Been Established Pursuant to 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63. The test methods shall be as specified in 40 CFR Part 60, Appendix A, 40 CFR Part 61, Appendix B, or 40 CFR Part 63, Appendix B, adopted and incorporated by reference in Rule 62-204.800(7), (8), (9), F.A.C.
- 2. Pollutants for Which No Standard has Been Established Pursuant to 40 CFR 60, 40 CFR 61, or 40 CFR 63. The test methods shall be as specified in the BACT determination.
 - (7) Construction/Operation Permit Requirements.
 - (a) Construction Permits.

Any construction permit issued pursuant to this rule shall contain all of the conditions and provisions necessary to insure that the construction and operation of the facility or modification shall be in accordance with the requirements of this rule.

(b) Operation Permits.

Any operation permit issued for a facility or modification shall include all operating conditions and provisions required under Rule 62-212.400(7)(a), F.A.C., above, and set forth in the original or amended construction permit.

(8) Future Statutory and Regulatory Changes.

Within 60 days following any substantive changes in the PSD provisions of the Clean Air Act (including Title I, Part C) or EPA regulations contained in 40 CFR 51.24, the Department shall publish a notice in the Florida Administrative Weekly identifying the changes and any new substantive differences created thereby in the state regulations. At the next regularly scheduled meeting of the Environmental Regulation Commission, not sooner than 14 days after the notice required above, the Department shall notify the Commission of the changes.

(9) Effective Date.

The provisions of Rule 62-212.400, F.A.C., shall become effective on November 1, 1981.

TABLE 212.400-1 MAJOR FACILITY CATEGORIES (LIST OF 28)

Fossil fuel fired steam electric plants of more than 250 million Btu/hr 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 acid plants

Sulfuric acid plants

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 Btu/hr heat input

Petroleum storage and transfer units with total storage capacity exceeding 300,000 barrels

Taconite ore processing plants

Glass fiber processing plants

Charcoal production plants

TABLE 212.400-2 REGULATED AIR POLLUTANTS – SIGNIFICANT EMISSION RATES

	Significant
	Emission Rate
Pollutant	(Tons Per Year)
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Ozone	40 VOC
Particulate matter	25
PM10	15
Total reduced sulfur (including H2S)	10
Reduced sulfur compounds	
(including H2S)	10
Sulfuric acid mist	7

Significant

Lead		(Pounds Per Year) 1200
Mercury Municipal waste combustor organics (measured as total tetra- through		200
octa-chlorinated dibenzo-p-dioxins and dibenzofurans)		(Megagrams per Year) 3.2 x 10-6
		(Tons per Year) 3.5 x 10-6
Municipal waste combustor metals (measured as particulate matter)	. '	(Megagrams per Year)
		(Tons per Year)
Municipal waste combustor acid gases (measured as sulfur dioxide and		(Magazina a nar Voor)
hydrogen chloride)		(Megagrams per Year) 36 (Tons per Year)
Municipal solid waste landfill emissions		40
(measured as nonmethane organic compounds)		(Megagrams per Year) 45
		(Tons per Year) 50
	TABLE 212.400-3 DE MINIMIS AMBIENT IMPACTS Concentration	
Pollutant	(Micrograms Per Cubic Meter)	Averaging Period
Nitrogen dioxide	14	Averaging renou Annual
Lead	0.1	Quarterly
Sulfur dioxide	13	24-hour
PM10	10 0.25	24-hour 24-hour
Fluorides Mercury	0.25	24-hour
Carbon monoxide	575	8-hour
Hydrogen sulfide	0.2	1-hour
Ozone	No de minimis air	
	quality level is provided	
	for ozone. However, any	
	net increase of 100 tons	
	per year or more of	
	volatile organic compounds	

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History–Formerly 17-2.500, Amended 2-2-93, Formerly 17-212.400, Amended 11-23-94, 1-1-96, 3-13-96, 2-5-98, 8-15-99.

subject to preconstruction review would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

62-212.500 Preconstruction Review for Nonattainment Areas.

(1) General Prohibitions.

Fluorides

3

62-212.400 Prevention of Significant Deterioration (PSD).

- (2)(a)2. Pollution Control Project Exemption. A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h) shall not be subject to the preconstruction review requirements of this rule.
- (2)(d)4. Modifications to Major Facilities.

 a(ii) The modification would result in a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.) of any pollutant regulated under the Act;
- (2)(e)1 **Net Emissions Increase.**A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.
- (2)(e)2. **Significant Net** Emissions Increase. A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in **Table 212.400-2**, Regulated Air Pollutants Significant Emission Rates.
- (2)(e)3. Contemporaneous Emissions Changes. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is contemporaneous with a particular modification if it occurs within the period beginning five years prior to the date on which the owner or operator of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified emissions unit(s) to begin operation. The date on which any increase in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase. The date on which any decrease in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility completes, or is committed to complete through a federally enforceable permit condition, a physical change in or change in the method of operation of the facility resulting in the decrease.
- (2)(e)4. Creditable Emissions Changes.
- An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable if:
- b. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of sulfur dioxide, nitrogen dioxide,

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- or particulate matter which occurs before the applicable minor source baseline date is creditable only to the extent that it must be considered in calculating the amount of any maximum allowable increase in ambient concentration remaining available. With respect to particulate matter, only PM₁₀ emissions shall be used to evaluate the net emissions increase of PM10.
- (i) The Department has not relied on it in issuing a permit under the provisions of Rule 17-2.500 (transferred), or 62-212.400, F.A.C., or EPA has not relied on it in issuing a permit under the provisions of 40 CFR 52.21, which permit is in effect when the increase in emissions of the modification occurs; and
- (2)(f) Pollutants Subject to PSD Preconstruction Review.
 Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates;
- 2. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)4., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the modification would result in: a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.,
- (2)(g) Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.
- (3)(f)2. Mandatory Fuel Conversions.

 By an Order issued by the Secretary, the following ambient concentrations shall be excluded in determining compliance with any maximum allowable increase, provided the addition of such concentrations shall not cause or contribute to a violation of any ambient air quality standard. No exclusion of such concentrations shall apply more than five years after the effective date of the

- latest applicable plan or order as set forth in Rule 62-212.400(3)(f)2.a. or b., F.A.C., below.
- a. Concentrations attributable to the increase in emissions from facilities which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978 over the emissions from such facilities before the effective date of such an order.

(4)(a)2. Federal Land Manager Participation.

- a. The Federal Land Manager of any lands contained in a Class I area which may be affected by emissions from a proposed facility or modification may demonstrate to the Department that the emissions from the proposed facility or modification would have an adverse impact on the air quality-related values (including visibility) of the Federal Class I area, notwithstanding that the change in air quality resulting from emissions from such facility or modification would not cause or contribute to concentrations which would exceed any maximum allowable increase for a Class I area.
- b. If this demonstration is received by the Department within thirty (30) days after the Department has mailed or transmitted to the Federal Land Manager a complete application pursuant to Rule 62-210.350(2)(b), F.A.C., it shall be considered in the Department's preliminary determination and proposed agency action on the permit application. If this demonstration is received within the public comment period on the Department's proposed agency action, it shall be considered in the Department's final determination and final agency action on the permit application.
- c. If the Department finds that the Federal Land Manager's analysis does not demonstrate to the Department's satisfaction that an adverse impact on the air quality related values (including visibility) of a Class I area would occur, a written explanation of the reasons for such finding shall be included in the Department's preliminary or final determination as provided in Rule 62-212.400(4)(a)2.b., F.A.C. If the Department is satisfied that the Federal Land Manager has demonstrated an adverse impact on the air quality related values (including visibility) of a Class I area, the Department shall not issue the permit.
- (4)(a)3. Variances from Class I Increments. The owner or operator of the proposed facility or modification may demonstrate to the Federal Land Manager that the emissions from such facility or modification would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such facility or modification would cause or contribute to concentrations which would exceed a maximum allowable increase for a Class I area. If the Federal Land Manager concurs with such

demonstration and so certifies to the Department, the Department may (provided that all applicable requirements are otherwise met) issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, nitrogen dioxide, and particulate matter **would not exceed the following maximum allowable increases**, pursuant to 40 CFR 51.166(p)(4), over baseline concentration for such pollutants:

- (4)(b)3. Determination of Baseline Emissions.
- a. Except as provided under Rules 62-212.400(4)(b)3.b. through d., F.A.C., the baseline emissions shall be the actual emissions representative of all facilities in existence on the applicable minor source baseline date which are located within the baseline area or have a significant impact on the baseline area.
- (5)(a)3. Within 60 days after receipt of a complete application for a permit to construct, as required in Rule 62-212.400(5)(a)2., F.A.C., above, the Department shall make a preliminary determination as to whether the application should be approved or denied.
- (5)(c) **Best Available Control Technology**. The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.
- (5)(d) Ambient Impact Analysis.

 The owner or operator of the proposed facility or modification shall demonstrate to the Department that the increase in federally enforceable allowable emissions from the proposed facility or modification, together with all other applicable increases and decreases in emissions resulting from the construction or modification (including secondary emissions), will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase.
- (5)(h) **Permit Application Information Required**. At a minimum, the owner or operator of the facility or modification shall provide the following information to the Department:
- A description of the nature, location, design capacity and typical operating schedule of the facility or modification, including specifications and drawings showing its design and plant layout;
- 2. A detailed schedule for construction of the facility or modification;
- A detailed description of the system of continuous emissions reduction proposed by the facility or modification as BACT, emissions estimates and any other information as necessary to determine that BACT would be applied to the facility or modification;
- (6)(a) **BACT Determination**. Following receipt of a complete application for a permit to construct an emissions unit or facility which

- requires a determination of Best Available Control Technology (BACT), the **Department shall make a determination of Best Available Control Technology during the permitting process.** In making the BACT determination, the Department shall give consideration to:
- 1. Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169 of the Clean Air Act, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- 2. All scientific, engineering, and technical material and other information available to the Department.
- 3. The emission limiting standards or BACT determinations of any other state.
- 4. The social and economic impact of the application of such technology.
- (6)(b) Phased Construction Projects -- For phased construction projects, the determination of BACT shall be reviewed and modified in accordance with 40 CFR 51.166(j)(4), adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (7)(a) Construction Permits. Any construction permit issued pursuant to this rule shall contain all of the conditions and provisions necessary to insure that the construction and operation of the facility or modification shall be in accordance with the requirements of this rule.

TABLE 212.400-2 REGULATED AIR POLLUTANTS --SIGNIFICANT EMISSION RATES

Significant Emission Rate
Tons Per Year)
100
40
40
40 VOC
25
15
10
10
7
3
ınds Per Year)
1200
200

62-212.400 Prevention of Significant Deterioration (PSD).

- (2) Applicability.
- **(b)** Fugitive Emissions Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if:
- 1. The affected facility would not belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories, or any other facility category which, as of August 7, 1980, is being regulated under 40 CFR 60 or 40 CFR 61; and
- 2. The facility or modification would be subject to the preconstruction review requirements of this rule only if fugitive emissions, to the extent quantifiable, are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it is or were itself a proposed new facility.
 - (d) New and Modified Facilities.
- 2. New Major Facilities. Unless exempted under Rule 62-212.400(2)(a) or (b), F.A.C., a proposed new major facility shall be subject to the preconstruction review requirements of this rule if:
- a. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code (as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement; U. S. Government Printing Office, stock numbers 4101-006 and 003-005-00176-01, respectively) would be equal to or greater than 250 tons per year;
 - (f) Pollutants Subject to PSD Preconstruction Review.
- 1. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates
- 3. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an area designated as nonattainment for any pollutant other than ozone under Rule 62-204.340, F.A.C., the preconstruction review requirements of this rule shall not apply to emissions of the affected pollutant.