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Mr. Jorge S. Rodriquez, P.E.
Miami-Dade Water and Sewer
Department
Post Office Box 330316
Miami, Florida 33233

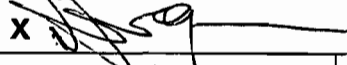
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Mr. Jorge S. Rodriquez, P.E.
Miami-Dade Water and Sewer
Department
Post Office Box 330316
Miami, Florida 33233

A. Signature
X  Agent
 Addressee

B. Received by (Printed Name)
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C. Date of Delivery

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Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

September 16, 2005

Mr. Jorge Rodriguez, Assistant Director of Water
Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

Re: Air Construction Permit No. 0250314-009-AC
Miami-Dade WASD - Alexander Orr Jr. Water Treatment Plant
Addition of New Backup Standby Generator Units 5 and 6

Dear Mr. Rodriguez:

The Department reviewed your application requesting the addition of two new backup standby generating units to the existing standby generating bank of four units at the Alexander Orr Jr. Water Treatment Plant located in Miami at 6800 SW 87th Street in Dade County, Florida. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit".

The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a Draft Permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jeff Koerner, at 850/921-9536.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

Air Permit No. 0250314-009-AC
Alexander Orr Jr. Water Treatment Plant
Backup Standby Generator Units 5 and 6
Dade County, Florida

Authorized Representative:

Mr. Jorge Rodriguez, Assistant Director of Water

Facility Location: The Miami-Dade Water & Sewer Department operates the existing Alexander Orr Jr. Water Treatment Plant located in Miami at 6800 SW 87th Street in Dade County, Florida.

Project: The applicant proposes to add two new backup standby generating units to the existing standby generating bank of four units. Details of the project are provided in the in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

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

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

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

Miami-Dade WASD
Alexander Orr Water Treatment Plant

Air Permit No. 0250314-009-AC
Backup Standby Generator Units 5/6

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

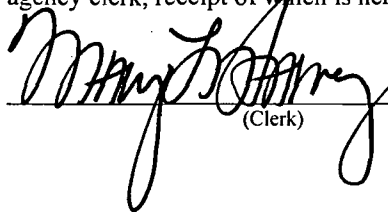
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/16/05 to the persons listed below.

Mr. Richard O'Rourke, P.E., Miami-Dade WASD
Mr. Laxmana Tallam, P.E., SED Office
Ms. Mallika Muthiah, P.E., Miami-Dade DERM
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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



(Clerk)

9/16/05

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection

Draft Air Permit No. 0250314-009-AC

Miami-Dade Water & Sewer Department
Alexander Orr Jr. Water Treatment Plant

Dade County, Florida

Applicant: The applicant for this project is the Miami-Dade Water & Sewer Department. The applicant's authorized representative and mailing address is: Mr. Jorge Rodriguez, Assistant Director of Water; P.O. Box 330316 Miami, Florida 33233-0316.

Facility Location: The Miami-Dade Water & Sewer Department operates the Alexander Orr Jr. Water Treatment Plant, which is located in Miami at 6800 SW 87th Street in Dade County, Florida.

Project: The applicant proposes to install two new standby generator units to provide redundant capacity for the existing standby generator bank of four units and ensure an uninterrupted potable water supply and pressure. Proposed new generator Units 5 and 6 will each consist of a General Motors EMD Model No. 20-645F4B standby generator set rated at 2685 kW. These units are more modern versions of the existing standby generators and include CBOI (constant beginning of injection) injectors and 4-pass combustion air after-coolers to reduce NOx emissions.

The draft air construction permit includes the following operational restrictions: only diesel fuel with a maximum sulfur content of 0.05% sulfur by weight or less shall be fired; NOx emissions shall not exceed 4.12 lb/MMBtu; the two new units shall not be used for peak shaving; no more than four of the six standby generators shall operate at any given time; total fuel consumption of the standby generating bank of six engines shall not exceed 1,415,000 gallons during any consecutive 12 months; total fuel consumption of the two new standby generators shall not exceed 660,000 gallons during any consecutive 12 months.

The restrictions in the draft permit ensure that there will be no increase capacity or utilization of the standby generating bank caused by the addition of Units 1 and 2. The fuel consumption limit for Units 5 and 6 is based on an average fuel consumption of 660,230 gallons per year for the two most operated existing standby generators (Units 1 and 2) for 2003 and 2004. Operation of a new backup standby generator would displace operation of an existing standby generator. Therefore, there will be no net increase in NOx emissions and the project is not subject to PSD preconstruction review.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

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

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

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available for this proceeding.

(Public Notice to be Published in the Newspaper)

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Alexander Orr Jr. Water Treatment Plant
ARMS Facility ID No. 0250314
Project No. 0250314-009-AC
Addition of Two Backup Standby Generators

COUNTY

Dade County

APPLICANT

Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Air Permitting North
2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399-2400



September 14, 2005

1. GENERAL PROJECT INFORMATION

Application Processing Schedule

- 12-27-05 Received application.
- 01-21-05 Requested additional information.
- 06-30-05 Received additional information.
- 07-29-05 Requested additional information.
- 09-06-05 Received additional information. Application is complete.

Facility Description and Location

The facility is an existing water treatment plant located in Miami at 6800 SW 87th Street in Dade County, Florida. The UTM coordinates are Zone 17, 565.9 km East, and 2843.3 km North.

Regulatory Categories

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

Project Description

The existing water treatment plant includes a bank of four 2865 kW standby generators that are used to provide power generation capacity during the following periods: load-sharing with the local utility (FPL); power failure events; or as needed under other circumstances including severe weather warnings and events of potential electric utility power losses or reductions. The existing standby generators are regulated under Permit No. PSD-FL-249, which was issued in 1999 to authorize an increase in operation for the existing units. The permit restricts combined operation of the generators to no more than 1,415,000 gallons of diesel per year. At this level, the standby generators triggered PSD preconstruction review only for nitrogen oxide (NOx) emissions. The Department established a NOx BACT limit of 4.12 lb/MMBtu based on fuel injection timing retardation and 4-pass turbocharger after-cooling. An Air Quality Analysis indicated satisfactory compliance with the PSD requirements based on the potential annual NOx emissions resulting from the BACT limit and the restricted fuel consumption.

In combination with existing backup diesel and gas fired high-service pump engines, the existing standby generator bank is capable of supporting the entire water treatment plant in the event of an emergency, power loss from the local utility, or for peak shaving purposes. All four standby generator engines would be needed to provide sufficient power under the most extreme conditions, which would include full utility power loss along with a major distribution water main break requiring the use of the backup diesel and gas engines for the pumps. The applicant proposes to install two new standby generators to provide redundant capacity for the existing standby generator bank and ensure an uninterrupted potable water supply and pressure.

Proposed new Units 5 and 6 will consist of a General Motors EMD Model No. 20-645F4B standby generator set rated at 2865 kW. These units are more modern versions of the existing standby generators and include CBOI (constant beginning of injection) injectors and 4-pass combustion air after-coolers to reduce NOx emissions. Each unit shall be properly operated, tuned, and maintained to minimize NOx emissions. Each unit will be located in a separate enclosure and will include exhaust silencers on the stack with a rain cap. At peak load, the new units will fire approximately 195 gallons per hour of diesel fuel containing no more than 0.05% sulfur by weight. The new engine specification for the NOx emissions rate will be 2.47 lb/MMBtu. The proposed new generators will be approximately 2% more fuel efficient while providing 4000 bhp of power.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

Federal Regulations

The proposed project will not increase the potential emissions of any pollutant, including hazardous air pollutants (HAPs). Based on the current Title V air operation permit, the existing facility is not considered a major source of (HAPs). Therefore, NESHAP Subpart ZZZZ in 40 CFR 63 does not apply.

PSD Applicability and Draft Permit Conditions

The existing plant is located in Dade County, which is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS). Potential NO_x emissions at the plant exceed 250 tons per year. Therefore, the plant is a PSD major facility and new projects must be reviewed for PSD applicability.

The existing bank of four standby generators was permitted in 1999 in accordance with Permit No. PSD-FL-249. Only potential NO_x emissions exceeded the PSD significant emissions rates and required a BACT determination. For operational flexibility, the PSD permit regulated operation of the standby generators as a single bank by restricting fuel consumption to no more than 1,415,000 gallons per year. The fuel consumption rate is equivalent to approximately 7200 total engine operating hours per year or an average of 1800 hours per year per engine. Based on the fuel cap, the NO_x BACT limit (4.12 lb/MMBtu), the maximum allowable fuel sulfur content (0.05% sulfur by weight), and AP-42 emissions factors for other pollutants (CO, PM/PM₁₀, and VOC), the current potential emissions for the existing generating bank are: 82 tons per year of carbon monoxide (CO); 402 tons per year of nitrogen oxides (NO_x); 7 tons per year of particulate matter (PM/PM₁₀); 5 tons per year of sulfur dioxide (SO₂); and 10 tons per year of volatile organic compounds (VOC).

The applicant proposes to add two new standby generators to the existing bank of four standby generators. The new generators represent a more modern version of the existing engines, will include similar control components to minimize NO_x emissions, and will meet the NO_x BACT standards established for the existing standby generators. The two new units will provide surplus "backup" power generation. The purpose is not to increase capacity or utilization, but rather to provide redundancy for the previously permitted system to ensure that a safe drinking water supply is maintained. The two new units will not be used for peak shaving. No more than four of the six standby generators will operate at any given time.

In addition, the applicant proposes to limit total fuel consumption for the two new standby generators to no more than 660,000 gallons of diesel fuel during any consecutive 12 months. This figure is based on an average fuel consumption of 660,230 gallons per year for the two most operated existing standby generators (Units 1 and 2) for 2003 and 2004. Actual fuel consumption for the entire standby generator bank has averaged just above 700,000 gallons for the 5 years following the original PSD permit. This is about half the allowable fuel consumption limit for the standby generating bank of 1,415,000 gallons. Year-to-year fuel consumption has varied less than 10% from the average for the last 5 years. The applicant's proposed restriction will ensure that the new standby generators will truly function as backup units and not to increase capacity or utilization at the plant.

The Department will establish the following restrictions as part of the draft air construction permit for the two new standby generators: the only authorized fuel is distillate oil (0.05% sulfur by weight or less); NO_x emissions shall not exceed 4.12 lb/MMBtu; the two new units shall not be used for peak shaving; no more than four of the six standby generators shall operate at any given time; total fuel consumption of the standby generating bank of six engines shall not exceed 1,415,000

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

gallons during any consecutive 12 months; total fuel consumption of the two new standby generators shall not exceed 660,000 gallons during any consecutive 12 months. The new fuel consumption limit for Units 5 and 6 is equivalent to approximately 3350 total engine operating hours per year or an average of 1675 engine hours per year per engine. Presuming the allowable NOx BACT emission rate (4.12 lb/MMBtu) represents the past actual NOx emission rate, the restrictions ensure that there will be no increase capacity or utilization of the standby generating bank caused by the addition of Units 1 and 2. Operation of a new backup standby generator would displace operation of an existing standby generator. Therefore, there will be no net increase in NOx emissions and the project is not subject to PSD preconstruction review. The draft permit will also include the following PSD regulation:

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. [Rule 62-212.400(2)(g), F.A.C.]

This is a case-by-case determination based on the unique circumstances of the proposed project. It does not establish a precedent for any other projects regardless of the similarities. Each case must be reviewed and evaluated in accordance with the Department's regulations as well as the project-specific details.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer, Jeff Koerner, at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE:

Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

Air Permit No. 0250314-009-AC Facility ID No. 0250314 SIC No. 4941 Permit Expires: November 30, 2007

Authorized Representative:

Mr. Jorge Rodriguez, Assistant Director of Water

PROJECT AND LOCATION

This permit authorizes the addition of two, new backup standby generators rated at 2685 kW to the existing bank of four standby generators. The new equipment will be installed at existing Alexander Orr Jr. Water Treatment Plant located in Miami at 6800 SW 87th Street in Dade County, Florida.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment 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.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

(DRAFT)

Michael G. Cooke, Director
Division of Air Resource Management

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The project will add the following new emissions units.

ID	Emission Unit Description
024	4000 bhp backup standby diesel generator Unit 5
025	4000 bhp backup standby diesel generator Unit 6

REGULATORY CLASSIFICATION

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title IV: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Conditions

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. **Permitting Authority:** All documents related to applications for permits to operate shall be submitted to the Air Resources Section of the Department's Southeast District Office at 400 North Congress Avenue, West Palm Beach, Florida 33401. Copies of all such documents shall also be sent to the Miami-Dade County Department of Environmental Resources Management, Air Quality Management Division, 33 Southwest Second Avenue, Suite 900, Miami, Florida 33130-1540.
2. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resources Section of the Department's Southeast District Office at 400 North Congress Avenue, West Palm Beach, Florida 33401. Copies of all such documents shall also be sent to the Miami-Dade County Department of Environmental Resources Management, Air Quality Management Division, 33 Southwest Second Avenue, Suite 900, Miami, Florida 33130-1540.
3. **Appendices:** The following Appendices are attached as part of this permit: Appendix A (Citation Formats), Appendix B (General Conditions), and Appendix C (Common Conditions).
4. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. 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. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. **New or Additional Conditions:** For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. **Modifications:** The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. **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. [Rule 62-212.400(2)(g), F.A.C.]
8. **Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Backup Standby Generator Units 5 and 6

This section of the permit addresses the following emissions units.

Emissions Unit Nos. 24 and 25 – Backup Standby Generator Units 5 and 6

Units 5 and 6: Each backup standby generator is a General Motors EMD Model No. 20-645F4B standby generator set rated at 2865 kW. Each unit fires diesel fuel containing no more than 0.05% sulfur by weight.

{Permitting Note: Existing standby generator Units 1 - 4 (Emissions Units 009 – 012) remain subject to the requirements specified in Permit No. PSD-FL-249 (Project No. 0250314-002-AC).}

EQUIPMENT

1. **Backup Standby Generators:** The permittee is authorized to install two, diesel-fired backup standby generators consisting of a 4000 bhp diesel engine and a 2865 kW (continuous) electrical generator set. Each unit shall include CBOI (constant beginning of injection) injectors and 4-pass combustion air after-coolers to reduce NOx emissions. Each unit shall be properly operated, tuned, and maintained to minimize NOx emissions. The two new units shall be added to the existing bank of four standby generators. [Application; Design]

PERFORMANCE RESTRICTIONS

2. **Permitted Capacity:** The maximum heat input rate for each unit is 27 MMBtu per hour (approximately 197 gallons per hour). *{Permitting Note: The maximum heat input rate is based on a higher heating value of 19,640 Btu/lb and density of 7.034 pounds per gallon of diesel.}* [Rule 62-210.200(PTE), F.A.C.]
3. **Authorized Fuel:** Each unit shall fire only diesel fuel containing no more than 0.05% sulfur by weight. [Application; Rule 62-210.200(PTE), F.A.C.]
4. **Operational Restrictions, Standby Generating Bank Units 1 -6:**
 - a. The hours of operation of are not limited (8760 hours per year).
 - b. No more than four of the six units in the standby generator bank shall operate at any given time.
 - c. The total combined fuel consumption of the standby generating bank (Units 1 – 6) shall not exceed 1,415,000 gallons during any consecutive 12 months.
 - d. Backup standby generator Units 5 and 6 shall not be used for peak shaving.
 - e. The total combined fuel consumption of backup standby generator Units 5 and 6 shall not exceed 660,000 gallons during any consecutive 12 months.[Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(2)(g), F.A.C.]

EMISSIONS STANDARDS

5. **NOx Standard:** Emissions of nitrogen oxides (NOx) shall not exceed 4.12 lb/MMBtu as determined by the average of three 1-hour compliance test runs conducted in accordance with EPA Method 7 or 7E. *{Permitting Note: This is equivalent to a NOx emission rate of approximately 111 pounds per hour at 100% engine load for each unit. NOx emissions from the bank of six standby generators are limited to 403 tons per year by the conditions of this permit and Permit No. PSD-FL-249.}* [Application; Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Backup Standby Generator Units 5 and 6

EMISSIONS PERFORMANCE TESTING

6. NOx Compliance Tests: Each unit shall be tested to demonstrate compliance with the NOx emission standard specified in this permit in accordance with EPA Method 7 or 7E as specified in Appendix A of 40 CFR 60 and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also comply with the applicable test requirements specified in Appendix C of this permit. Sampling of the exhaust gas shall be via a rake probe placed into the engine exhaust outlet. Initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the NOx emission standard if the unit operated more than 400 hours during the previous 12 months. [Rules 62-4.070(3), 62-297.310(7)(a) and 62-212.400(2)g, F.A.C.]
7. Monitors: The owner or operator shall install, calibrate, operate and maintain monitoring devices to monitor and record the fuel flow and hours of operation. [Rule 62-4.070(3), F.A.C.]
8. Fuel Sulfur Content Tests: The owner or operator shall determine the sulfur content of each delivery of diesel fuel received for these emissions units using ASTM D 4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products; and one of the following test methods for sulfur in petroleum products: ASTM D 129-91, ASTM D 2622-94, or ASTM D 4294-90. These methods are adopted by Rule 62-297.440, F.A.C. The owner or operator may comply with this requirement by receiving records from the fuel supplier that indicate the sulfur content of the fuel delivered complies with the sulfur limit specified in this permit. [Rules 62-4.070(3) and 62-297.440, F.A.C.]

RECORDS AND REPORTS

9. Test Notification: The owner or operator shall notify the Compliance Authority, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
10. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the information required in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.]
11. Fuel Records: The owner or operator shall maintain records of the sulfur content of each delivery of diesel fuel received for these emissions units. The owner or operator shall make and maintain daily records of diesel fuel consumption for these emissions units at the end of each day. Within ten days of the end of each month, the owner or operator shall make records of monthly diesel fuel consumption from the daily records, and shall make records of the consecutive 12-month diesel fuel consumption to demonstrate compliance with the fuel consumption limits specified in this permit. [Rule 62-4.070(3), F.A.C.]
12. Records of Maintenance: The owner or operator shall maintain records of maintenance activities conducted on these units including periodic tuning. [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

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Appendix A. Citation Formats

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SECTION 4. APPENDIX A
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

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

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

New Permit Numbers

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

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number
“001” identifies the specific permit project
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

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

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

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX B
GENERAL CONDITIONS

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

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver 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.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

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

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GENERAL CONDITIONS

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (Not Applicable);
 - b. Determination of Prevention of Significant Deterioration (Not Applicable); and
 - c. Compliance with New Source Performance Standards (Not Applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

COMMON CONDITIONS

{Permitting Note: Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.}

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

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11. **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), F.A.C.]
12. **Calculation of Emission Rate:** For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
13. **Test Procedures:** Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. *Required Sampling Time.* Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.[Rule 62-297.310(4), F.A.C.]
14. **Determination of Process Variables**
 - a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight 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.]
15. **Sampling Facilities:** The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
16. **Test Notification:** The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
17. **Special Compliance Tests:** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
18. **Test Reports:** The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the

SECTION 4. APPENDIX C
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test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

19. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. Annual Operating Report: 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 Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

P.E. CERTIFICATION STATEMENT

PERMITTEE

Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

Air Permit No. 0250314-009-AC
SIC No. 4941
Backup Standby Generator Units 5 and 6
Dade County, Florida

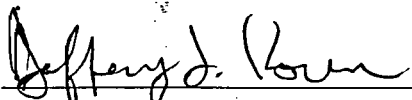
PROJECT DESCRIPTION

The applicant proposes to install two new standby generators to provide redundant capacity for the existing standby generator bank and ensure an uninterrupted potable water supply and pressure. Proposed new generator Units 5 and 6 will each consist of a General Motors EMD Model No. 20-645F4B standby generator set rated at 2685 kW. These units are more modern versions of the existing standby generators and include CBOI (constant beginning of injection) injectors and 4-pass combustion air after-coolers to reduce NOx emissions.

The draft air construction permit includes the following operational restrictions: only diesel fuel with a maximum sulfur content of 0.05% sulfur by weight or less shall be fired; NOx emissions shall not exceed 4.12 lb/MMBtu; the two new units shall not be used for peak shaving; no more than four of the six standby generators shall operate at any given time; total fuel consumption of the standby generating bank of six engines shall not exceed 1,415,000 gallons during any consecutive 12 months; total fuel consumption of the two new standby generators shall not exceed 660,000 gallons during any consecutive 12 months.

The restrictions in the draft permit ensure that there will be no increase capacity or utilization of the standby generating bank caused by the addition of Units 1 and 2. The fuel consumption limit for Units 5 and 6 is based on an average fuel consumption of 660,230 gallons per year for the two most operated existing standby generators (Units 1 and 2) for 2003 and 2004. Operation of a new backup standby generator would displace operation of an existing standby generator. Therefore, there will be no net increase in NOx emissions and the project is not subject to PSD preconstruction review.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).



Jeffery F. Koerner, P.E.
Registration Number: 49441


9-16-05

(Date)

Florida Department of Environmental Protection

Memorandum

TO: Trina Vielhauer, Chief
Bureau of Air Regulation

FROM: Jeff Koerner, Air Permitting North Program 

DATE: September 14, 2005

SUBJECT: Draft Air Permit No. 0250314-009-AC
Miami-Dade Water & Sewer Department (MDWASD) - Alexander Orr Jr. Water Treatment Plant
Two New Backup Standby Generators

Attached for your review are the following items:

- Intent to Issue Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- PE Certification

The draft permit authorizes the construction of two new standby generators to be added to the existing bank of four standby generators at the water treatment plant. The purpose of the project is not to increase capacity or utilization, but rather to provide redundancy for the previously permitted system and guarantee that a safe drinking water supply is maintained. The draft permit contains conditions to ensure that the proposed project does not trigger PSD preconstruction review.

The Technical Evaluation and Preliminary Determination provides a detailed description of the project, rule applicability, and emissions standards. The P.E. certification briefly summarizes the proposed project. Day #74 is November 18, 2005. I recommend your approval of the attached Draft Permit for this project.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

Miami-Dade Water & Sewer Department (MDWASD)
Alexander Orr Jr. Water Treatment Plant
P.O. Box 330316
Miami, Florida 33233-0316

Air Permit No. 0250314-009-AC
SIC No. 4941
Backup Standby Generator Units 5 and 6
Dade County, Florida

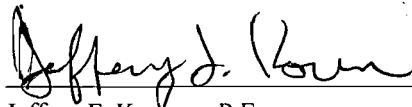
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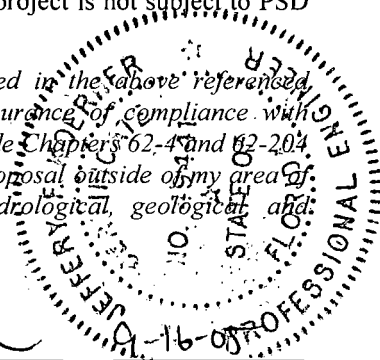
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Jeffery F. Koerner, P.E.
Registration Number: 49441



(Date)