ST. VINCENT'S MEDICAL CENTER
FACILITY ID NO.: 0310068
DUVAL COUNTY

AIR CONSTRUCTION PERMIT
FINAL PERMIT NO.: 0310068-009-AC

PERMITTING & COMPLIANCE AUTHORITY:
ENVIRONMENTAL AND COMPLIANCE DEPARTMENT
ENVIRONMENTAL QUALITY DIVISION
214 NORTH HOGAN STREET, 7TH FLOOR
JACKSONVILLE, FL 32202
TELEPHONE: (904) 255-7100
FAX: (904) 588-0518

AIR CONSTRUCTION PERMIT

FINAL Permit No.: 0310068-009-AC

Table of Contents

Section **Page Number**

Placard Page……...1

I. Facility Information……...2

A. Facility Description.
B. Summary of Emissions Unit ID No(s). and Brief Description(s).
C. Relevant Documents.

II. Facility-wide Conditions…….2 - 6

III. Emissions Unit(s) and Conditions…….6 - 8

Emission Unit ID No.	**Brief Description**
Emissions Unit 006	Power Generator No. 1

Permittee:
St. Vincent's Medical Center
1 Shircliff Way
Jacksonville, FL 32204

FINAL Permit No.: 0310068-009-AC
Facility ID No.: 0310068
SIC Nos.: 80
Project: Air Construction Permit
New Power Generator No. 1

This permit is for purpose of constructing a new power generator and the decommissioning of the existing Gas Turbine Cogenerator No. 1 (Emission Unit No. 005). In addition, the above referenced facility will be reclassified as a Synthetic Non-Title V Source Facility. This facility is located at 1 Shircliff Way, Jacksonville, Duval County; UTM Coordinates: Zone 17, 433.75 km East and 3358.7 km North; Latitude: 30° 18' 26" North and Longitude: 81° 41' 20" West.

This permit is issued under the provisions of Chapter 403, Florida Statutes (FS) and Chapters 62-4, 62-210, and 62-213, Florida Administrative Code (FAC). The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Operation Permit Application Due Date: **October 1, 2013**
Expiration Date: **December 31, 2013**

Environmental and Compliance Department
Environmental Quality Division

_____
Robert Steven Pace, P.E., Manager
Air Quality Branch

RSP/HDS

Section I. Facility Information.

Subsection A. Facility Description.

The applicant, St. Vincent's Medical Center, applied on November 17, 2011, to the Permitting Authority for a permit for the purpose of constructing new Power Generator No.1 and the decommissioning of the existing Gas Turbine Cogenerator No. 1 (Emission Unit No. 005). In addition, the above referenced facility will be reclassified as a Synthetic Non-Title V Source Facility. St. Vincent's Medical Center is located at 1 Shircliff Way, Jacksonville, Florida, 32204.

Power Generator No.1 will be utilized for the curtailment of power (load shedding) if requested by JEA, the local power utility, and will also be utilized for emergency power use during any unscheduled JEA power outages.

St. Vincent's Medical Center is a full care medical center which will include a hospital, three (3) boilers, and a new power generator upon completion of this project. The decommissioning of the gas turbine cogenerator No. 1 will occur after the successful startup of the new power generator.

Based on the air pollution source construction permit application received November 17, 2011, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

EU ID No.	Brief Description
006	Power Generator No. 1

Note: Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

Air Construction Permit Application received November 17, 2011

Section II. Facility-wide Conditions

Subsection A. General Conditions

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Permitting Authority 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 Permitting Authority.

3. The issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Permitting Authority permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement 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 Permitting Authority rules, unless specifically authorized by an order from the Permitting Authority.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Permitting Authority 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 Permitting Authority rules.

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

   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Permitting Authority 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 Permitting Authority with the following information:

   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Permitting Authority for penalties or 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 Permitting Authority may be used by the Permitting Authority as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Permitting Authority rules, except where such use is prescribed by Sections 403.111 and 403.73, Florida 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 Permitting Authority 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 Permitting Authority rules.

11. This permit is transferable only upon Permitting Authority approval in accordance with Rules 62-4.120 and 62-730.300, FAC, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Permitting Authority.

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

13. This permit also constitutes:

    ( ) Determination of Best Available Control Technology (BACT)
    ( ) Determination of Prevention of Significant Deterioration (PSD)
    (X) Compliance with New Source Performance Standards
    (X) Compliance with National Emissions Standards for Hazardous Air Pollutants

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Permitting Authority rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Permitting Authority.
    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 this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Permitting Authority 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 date(s) analyses were performed;
        4. The person responsible for performing the analyses;
        5. The analytical techniques or methods used;
        6. The results of such analyses.

15. When requested by the Permitting Authority, 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 Permitting Authority, such facts or information shall be corrected promptly.
    [Rule 62-4.160, FAC, and Rule 2.1401, Jacksonville Environmental Protection Board (JEPB)]

Subsection B. Specific Conditions

1. Any revision(s) to a permit (and application) shall be submitted to and approved by the Permitting Authority prior to implementing.
   [Rule 62-4.080(2), FAC, and Rule 2.1401, JEPB]

2. Permittee shall notify the Permitting Authority fifteen (15) days prior to EU testing.
   [Rule 62-297.310(7)(a)(9), FAC, and Rule 2.1201, JEPB.]

3. Testing of emissions shall be conducted with the EU operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then EU may be tested at less than capacity; in this case subsequent EU operation is limited to 110 percent of the test load until a new test is conducted. Once the EU is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
   [Rule 62-297.310(2), FAC, and Rule 2.1201, JEPB]

4. Copies of the test report(s) shall be filed with the Permitting Authority within forty-five (45) days of completion of testing.
   [Rule 62-297.310(8)(b), FAC, and Rule 2.1201, JEPB]

5. Stack sampling facilities shall comply with the requirements of Rule 62-297.310(6), FAC, and Rule 2.1201, JEPB.

6. Control equipment shall be provided with a method of access that is safe and readily accessible.
   [Rule 62-297.310(6), FAC, and Rule 2.1201, JEPB]

7. The facility shall be subject to City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

8. The facility shall be subject to JEPB Rule 2, Part Nos. I through VII, and Part Nos. IX through XIV.

9. Excess emissions resulting from startup, shutdown, or malfunction of any emission 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 Permitting Authority for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Permitting Authority in accordance with Rule 62-4.130, FAC and Rule 2.1401, JEPB. A full written report on the malfunctions shall be submitted to the Permitting Authority in a quarterly report, if requested by the Permitting Authority.
   [Rule 62-210.700, FAC, and Rule 2.301, JEPB]

10. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an Air Operation Permit. The permittee shall submit the application fee, along with compliance records and test results, to the Department ninety (90) days prior to the expiration date of the construction permit but no later than 90 days after completion of construction, whichever occurs first. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.
    [Rule 62-210.300(2), FAC, and Rule 2.301, JEPB]

11. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter emissions from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include the following:

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

g. Confining abrasive blasting where possible.
h. Enclosure or covering of conveyor systems.
[Rule 62-296.320(4)(c)2. & 3., FAC, and Rule 2.1101, JEPB]

12. Permittee shall submit an annual operation report to the Permitting Authority for this (these) emission unit(s) on the form(s) supplied for each calendar year on or before April 1 of the following year.
[Rule 62-210.370(3), FAC, and Rule 2.301, JEPB]

13. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), FAC, and Rule 2.1101, JEPB]

14. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Permitting Authority. Such permit shall be obtained prior to beginning construction or modification.
[Rule 62-210.300(1), FAC, Rule 62-212.300(1)(a), FAC, Rule 2.301, JEPB, and Rule 2.401, JEPB]

15. The permittee shall submit all compliance related notifications and reports required of this permit to:

Environmental and Compliance Department
Environmental Quality Division
214 North Hogan Street, 7th Floor
Jacksonville, FL 32202
Telephone: (904) 255-7100
Fax: (904) 588-0518

Section III. Emission Units and Conditions

Emissions Unit No. 006 – Power Generator No. 1

Emissions Unit Description: This emission unit is a Catepillar Model No. 3516C, 2000 kW compression ignition engine with a Brake Horsepower of 2937. This engine has 16 cylinders with a total displacement of 4,211 cu inches or 4.31 liters per cylinder. The primary fuel is diesel with a duel fuel of 25% diesel and 75% natural gas as a back-up. This unit is a nonemergency engine.

Description of Engine	Year Built	Displacement/ Horsepower	Rule Applicability
2000 kW Catepillar Power Generator	2011 or 2012	4.31 Liters/Cylinder & 2937 Brake Horse Power	40 CFR Part 60, Subpart IIII 40 CFR Part 63, Subpart ZZZZ

Emission Limitations and Standards

1. This project is subject to 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. A new Reciprocating Internal Combustion Engines (Power Generator No. 1) at an area source must meet the requirements of this subpart by meeting the requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 60, Subpart A, General Provisions.
[40 CFR 63.6590(c), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

2. The hours of operation for this emissions unit shall not exceed 1,000 hours per year (hrs/yr).
[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB]

3 The maximum heat input shall not exceed 19 x 10^6 Btu/hr of No. 2 Fuel Oil or the duel fuel comprised of 25% diesel fuel and 75% natural gas.
[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB]

4. The engine in this emission unit shall not exceed the following standards of non-methane hydrocarbon + NO_X, carbon monoxide, and particulate matter:

Engine	Non-Methane Hydrocarbon + NO_x	CO	PM
2000 kW Catepillar Power Generator	6.4 grams/kW-hr	3.5 grams/kW-hr	0.20 grams/kW-hr

[40 CFR 89.112, Table 1, Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

5. Beginning October 1, 2010, owners and operators of stationary combustion ignition internal combustion engines subject to 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. The sulfur content for nonroad diesel fuel shall not exceed 15 ppm. The nonroad diesel cetane index shall not be less than 40 or the aromatic content shall not exceed 35 volume percent.
[40 CFR 60.4207(b), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

6. The owner or operator must operate and maintain the stationary combustion ignition internal combustion engine that achieves the emission standards as required in 40 CFR 60.4204, FAC over the entire life of the engine.
[40 CFR 60.4206, Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Monitoring Requirements

7. The owner or operator stationary combustion ignition internal combustion engine equipped with a diesel particulate filter must comply with the emission standards in 40 CFR 60.4204, FAC. The diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
[40 CFR 60.4209(b), Rule 62-204.800, FAC and Rule 2.201, JEPB]

8. The owner or operator must operate the stationary combustion ignition internal combustion engines and control devices according to the manufacturer's emission-related written instructions.
[40CFR 60.4211(a)(1), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

9. The owner or operator shall only change those emission-related settings that are permitted by the manufacturer.
[40CFR 60.4211(a)(2), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Compliance Requirements

10. If the owner or operator of a stationary combustion ignition internal combustion engine greater than 500 HP does not install, configure, operate and maintain the stationary combustion ignition internal combustion engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the owner or operator must demonstrate compliance performing the following:

a. Keep a maintenance plan and records of conducted maintenance
b. Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
c. Conduct an initial performance test to demonstrate compliance with the applicable emission standards:

   (i) Within 1 year of startup or
   (ii) Within 1 year after an engine and control device is no longer installed, configured, operated and maintained in accordance with the manufacturer's emission-related written instructions or
   (iii) Within 1 year after the owner or operator changes emission-related settings in a way that is not permitted by the manufacturer.

d. Conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.
[40 CFR 60.4211(g), Rule 62-204.800, FAC and Rule 2.201, JEPB]

{**Permitting Note:** The engine listed above is currently demonstrating compliance with the emissions limitations of the applicable federal rule through the retention of a **manufacturer's certification statement. As long as the certification is able to be retained, no additional compliance demonstration is required.**}

<u>Recordkeeping and Reporting Requirements</u>

11. If the stationary combustion ignition internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high back pressure limit of the engine is approached.
[40 CFR 60.4214(c), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

12. The owner/operator shall maintain records of the monthly operating hours of Power Generator No. 1. These records shall be kept and maintained for a minimum period of five (5) years. Records shall be made available to the Permitting Authority upon request.
[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB]