

March 24, 2006

Hand Delivered

Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 5500
Tallahassee, Florida 32399

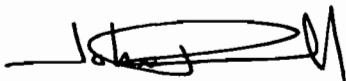
Re: Application for Title V Air Operation Permit Revision
Incorporation of Unit Nos. HC3 (EU-031) and HC4 (EU-032)
City of Tallahassee Resource Addition Project
Arvah B. Hopkins Electric Generating Station
Air Construction Permit No. 0730003-005-AC

Dear Ms. Vielhauer:

Please find enclosed a completed Florida Department of Environmental Protection Form No. 62-210.900(1), Florida Administrative Code. The City of Tallahassee is requesting a revision to the Arvah B. Hopkins Electric Generating Station Title V Air Operation Permit for incorporation of two General Electric LM6000 PC Sprint Combustion Turbines and associated equipment previously permitted pursuant to Air Construction Permit No. 0730003-005-AC.

Please do not hesitate to contact me at (850) 891-8851 if you have any questions or would like additional information regarding this application.

Sincerely,



John K. Powell, P.E.

cc: Rob McGarrah, COT
Cynthia Barber, COT
Triveni Singh, COT
Phil Bucci, COT
Jennette Curtis, COT

RECEIVED

MAR 24 2006

BUREAU OF AIR REGULATION





Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

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I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: City of Tallahassee, Electric Utilities	
2. Site Name: Arvah B. Hopkins Electric Generating Station	
3. Facility Identification Number: 0730003	
4. Facility Location... Street Address or Other Locator: Route 4, Box 450, 1125 Geddie Rd. (C.R. 1585) City: Tallahassee County: Leon Zip Code: 32304	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Robert E. McGarrah	
2. Application Contact Mailing Address... Organization/Firm: City of Tallahassee, Electric Utilities Street Address: 2602 Jackson Bluff Road City: Tallahassee State: Florida Zip Code: 32304	
3. Application Contact Telephone Numbers... Telephone: (850) 891 - 5534 ext. Fax: (850) 891 - 5162	
4. Application Contact Email Address: McGarraR@Talgov.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 3-24-06	3. PSD Number (if applicable):
2. Project Number(s): 0130003 - 0118 - A1	4. Siting Number (if applicable):

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

- ☐ Air construction permit.
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- ☐ Initial Title V air operation permit.
- ☒ Title V air operation permit revision.
- ☐ Title V air operation permit renewal.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- ☐ Air construction permit and Title V permit revision, incorporating the proposed project.
- ☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- ☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application requests to incorporate two GE LM6000 combustion turbines denominated as Unit Nos. HC3 (EU-031) and HC4 (EU-032), and a Detroit Diesel Emergency Black Start Generator (EU-033), which were previously permitted and constructed pursuant to PSD Permit No. 0730003-005-AC, into the existing City of Tallahassee Arvoh B. Hopkins Electric Generating Station's Title V Air Operation Permit No. 0730003-007-AV. The Black Start Generator meets the generic exemption thresholds of Rule 62-210.300(3)(b), F.A.C.

FACILITY INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
EU-031	GE LM6000 Turbine (Unit No. HC3)	AV02	N/A
EU-032	GE LM6000 Turbine (Unit No. HC4)	AV02	N/A
EU-033	Emergency Black Start Generator	AV02	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: \$ _____ ☒ Not Applicable

FACILITY INFORMATION

Owner/Authorized Representative Statement


Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ext. Fax:
4. Owner/Authorized Representative Email Address:
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i> _____ Signature _____ Date

FACILITY INFORMATION

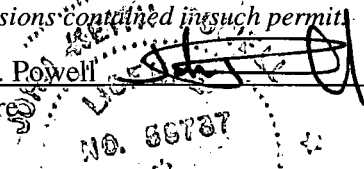
Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Robert E. McGarrah Manager of Power Production
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: City of Tallahassee, Electric Utilities Street Address: 2602 Jackson Bluff Road City: Tallahassee State: Florida Zip Code: 32304
4. Application Responsible Official Telephone Numbers... Telephone: (850) 891 - 5534 ext. Fax: (850) 891 - 5162
5. Application Responsible Official Email Address: McGarraR@Talgov.com
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plans submitted with this application.</i>  Signature _____ Date _____

FACILITY INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: John K. Powell Registration Number: 58737
2. Professional Engineer Mailing Address... Organization/Firm: City of Tallahassee, Environmental Resources Division Street Address: 300 South Adams Street City: Tallahassee State: Florida Zip Code: 32301
3. Professional Engineer Telephone Numbers... Telephone: (850) 891 - 8851 ext. Fax: (850) 891 - 8277
4. Professional Engineer Email Address: PowellJ@Talgov.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> (1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> (2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> (4) <i>If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> (5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> <div style="display: flex; justify-content: space-between;"><div>John K. Powell Signature (seal)</div><div> 3/23/06 Date</div></div>

* Attach any exception to certification statement.

*** I certify that, to the best of my knowledge, the engineering features in this application provide reasonable assurance of compliance with the applicable provisions of the Department's rules. The City of Tallahassee continues to work closely with General Electric and the Florida Department of Environmental Protection to address elevated NOx levels previously recorded on Hopkins Combustion Turbine Unit Nos. HC3 (EU-031) and HC4 (EU-032). I do not certify aspects of the application outside my area of expertise (including but not limited to electrical, mechanical, or structural features).**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 16 East (km) 749.53 North (km) 3371.7		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 30/27/08 Longitude (DD/MM/SS) 84/24/00	
3. Governmental Facility Code: 4	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: Triveni Singh, Hopkins Plant Manager
2. Facility Contact Mailing Address... Organization/Firm: City of Tallahassee, Electric Utilities Street Address: 1125 Geddie Road City: Tallahassee State: Florida Zip Code: 32304
3. Facility Contact Telephone Numbers: Telephone: (850) 891 - 5807 ext. Fax: () -
4. Facility Contact Email Address: SinghT@Talgov.com

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
--

FACILITY INFORMATION

2. Facility Primary Responsible Official Mailing Address...
Organization/Firm:
Street Address:
City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers...
Telephone: () - ext. Fax: () -
4. Facility Primary Responsible Official Email Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
NSPS – 40 CFR Part 60, Subpart GG applies to the GE LM6000 turbines included in this application.	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter – PM	A	N
Particulate Matter with an aerodynamic diameter less than 10 microns – PM₁₀	A	N
Sulfur Dioxide – SO₂	A	N
Nitrogen Oxides - NO_x	A	N
Carbon Monoxide - CO	A	N
Volatile Organic Compounds - VOCs	A	N
Total Hazardous Air Pollutants - HAPs	A	N

FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>08/13/04</u>
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>08/13/04</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>08/13/04</u>

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable. (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____
3. Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for FESOP Applications

- ## **Additional Requirements for Title V Air Operation Permit Applications**

- ### **Additional Requirements Comment**

[illegible]

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application - Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Nominal 50MW natural gas and oil-fired combustion turbine denominated as Unit No. HC3 and identified in Air Construction Permit No. 0730003-005-AC as EU-031

3. Emissions Unit Identification Number: **EU-031**

4. Emissions Unit Status Code: A	5. Commence Construction Date: 02/04/05	6. Initial Startup Date: 07/31/05	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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9. Package Unit:

Manufacturer: **General Electric**

Model Number: **LM6000 Sprint**

10. Generator Nameplate Rating: **Nominal 50 MW**

11. Emissions Unit Comment:

This emissions unit section represents information for one GE LM6000 Sprint Combustion Turbine denominated as Unit No. HC3 (EU-031).

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

028 – Water Injection

109 – Catalytic Oxidizer

139 – Selective Catalytic Reduction (SCR)

2. Control Device or Method Code(s): **028, 109, 139**

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate: 50 MW (nominal)
3. Maximum Heat Input Rate: 445 million Btu/hr (LHV)
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day weeks/year days/week 5,840 hours/year
6. Operating Capacity/Schedule Comment: Maximum heat input for natural gas firing. Oil firing is 434 MMBtu/hr. Maximum heat input based on 29°F turbine inlet estimated performance. Heat input varies based on inlet temperature and performance. Heat input curves were submitted to the Department on November 1, 2005.

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: One exhaust stack.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 85 feet	7. Exit Diameter: 10 feet	
8. Exit Temperature: 825°F	9. Actual Volumetric Flow Rate: 601,200 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 16 East (km): 749.829 North (km): 3371.678		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Information for 68°F ambient with inlet chilling to 48°F and natural gas firing.			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): Internal Combustion Engine – Electric Generation; Turbine, Natural Gas		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 0.477	5. Maximum Annual Rate: 2,694	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,034
10. Segment Comment: Maximum hourly rate at 29°F ambient. Maximum annual rate is based on a total of 5,840 hours of operation at 68°F and inlet chilling.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Internal Combustion Engine – Electric Generation; Turbine, Distillate Oil		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: 1,000 gallons
4. Maximum Hourly Rate: 3.56	5. Maximum Annual Rate: 13,846	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130
10. Segment Comment: Maximum hourly rate at 29°F ambient. Maximum annual rate is based on a total of 4,000 hours of operation at 68°F and inlet chilling.		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

E. EMISSIONS UNIT POLLUTANTS**List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM ₁₀			EL
SO ₂			EL
NO _x	028	139	EL
CO	109		EL
VOCs	109		EL
SAM			EL

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION

Page [1] of [6]

Particulate Matter

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS****(Optional for unregulated emissions units.)****Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM/PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 15.4 lb/hour 32.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
Section [1] of [2]
Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION
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Particulate Matter

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10% Opacity	4. Equivalent Allowable Emissions: 2.5 lb/hour 7.2 tons/year
5. Method of Compliance: EPA Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10% Opacity	4. Equivalent Allowable Emissions: 15.4 lb/hour 29.9 tons/year
5. Method of Compliance: EPA Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

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POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 10.6 lb/hour 21.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION

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POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2 grains S / 100 SCF	4. Equivalent Allowable Emissions: 1.2 lb/hour 3.4 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% Sulfur	4. Equivalent Allowable Emissions: 10.6 lb/hour 20.6 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

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POLLUTANT DETAIL INFORMATION

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Nitrogen Oxides

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 8.7 lb/hour 25.3 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

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POLLUTANT DETAIL INFORMATION
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Nitrogen Oxides

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 5 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 8.6 lb/hour 25.2 tons/year
5. Method of Compliance: EPA Method 7E or 20; CEMS 24-hour block average	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 5 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 8.7 lb/hour 17.4 tons/year
5. Method of Compliance: EPA Method 7E or 20; CEMS 24-hour block average	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION

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Carbon Monoxide

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 6.3 lb/hour 18.5 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on gas firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
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POLLUTANT DETAIL INFORMATION
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Carbon Monoxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 6 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 6.3 lb/hour 18.3 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 6 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 6.4 lb/hour 12.7 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

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POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2.7 lb/hour 7.0 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 2.8 lb/hour 5.3 tons/year
5. Method of Compliance: EPA Method 25A, initial test only	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 2.7 lb/hour 5.3 tons/year
5. Method of Compliance: EPA Method 25A, initial test only	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION

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Sulfuric Acid Mist

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SAM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 9.9 lb/hour 40.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

POLLUTANT DETAIL INFORMATION

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Sulfuric Acid Mist

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2 grains S / 100 scf	4. Equivalent Allowable Emissions: 1.2 lb/hour 3.3 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% Sulfur	4. Equivalent Allowable Emissions: 9.9 lb/hour 19.3 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Rule 62-296.320(4)(b). Excess emissions allowed for startup, shutdown, and malfunction for 2 hours per 24 hours, pursuant to Rule 62-210.700(1).	

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Spectrum Systems, Inc. / Thermo Electron Corp. Model Number: 42CLS Serial Number: 0435709735	
5. Installation Date:	6. Performance Specification Test Date: 09/21/2005
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: O₂ or CO₂	2. Pollutant(s): Oxygen or Carbon Dioxide
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Spectrum Systems, Inc. / M&C Products Model Number: PMA100-L Serial Number: 0502188	
5. Installation Date:	6. Performance Specification Test Date: 09/21/2005
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC3 (EU-031)

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application) <i>Available in various manuals on-site.</i>
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable <i>Available in various manuals on-site</i>
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>11/01/2005</u> Test Date(s)/Pollutant(s) Tested: <u>NOx, CO, VOC, NH3, and VE</u> <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Hopkins Unit No. HC3 (EU-031)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input checked="" type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) Submitted 08/10/04 <input type="checkbox"/> Copy Attached, Document ID: _____ <input checked="" type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: 07/01/04 <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application - Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

A. GENERAL EMISSIONS UNIT INFORMATION**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Nominal 50MW natural gas and oil-fired combustion turbine denominated as Unit No. HC4 and identified in Air Construction Permit No. 0730003-005-AC as EU-032

3. Emissions Unit Identification Number: **EU-031**

4. Emissions Unit Status Code: A	5. Commence Construction Date: 02/04/05	6. Initial Startup Date: 09/27/05	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
--	---	---	--	--

9. Package Unit:

Manufacturer: **General Electric**

Model Number: **LM6000 Sprint**

10. Generator Nameplate Rating: **Nominal 50 MW**

11. Emissions Unit Comment:

This emissions unit section represents information for one GE LM6000 Sprint Combustion Turbine denominated as Unit No. HC4 (EU-032).

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

028 – Water Injection

109 – Catalytic Oxidizer

139 – Selective Catalytic Reduction (SCR)

2. Control Device or Method Code(s): **028, 109, 139**

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate: 50 MW (nominal)
3. Maximum Heat Input Rate: 445 million Btu/hr (LHV)
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day weeks/year days/week 5,840 hours/year
6. Operating Capacity/Schedule Comment: Maximum heat input for natural gas firing. Oil firing is 434 MMBtu/hr. Maximum heat input based on 29°F turbine inlet estimated performance. Heat input varies based on inlet temperature and performance. Heat input curves were submitted to the Department on December 22, 2005.

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC4 (EU-032)

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: One exhaust stack.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 85 feet	7. Exit Diameter: 10 feet	
8. Exit Temperature: 825°F	9. Actual Volumetric Flow Rate: 601,200 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 16 East (km): 749.906 North (km): 3371.678		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Information for 68°F ambient with inlet chilling to 48°F and natural gas firing.			

EMISSIONS UNIT INFORMATION

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Hopkins Unit No. HC4 (EU-032)

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): Internal Combustion Engine – Electric Generation; Turbine, Natural Gas		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 0.477	5. Maximum Annual Rate: 2,694	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,034
10. Segment Comment: Maximum hourly rate at 29°F ambient. Maximum annual rate is based on a total of 5,840 hours of operation at 68°F and inlet chilling.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Internal Combustion Engine – Electric Generation; Turbine, Distillate Oil		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: 1,000 gallons
4. Maximum Hourly Rate: 3.56	5. Maximum Annual Rate: 13,846	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130
10. Segment Comment: Maximum hourly rate at 29°F ambient. Maximum annual rate is based on a total of 4,000 hours of operation at 68°F and inlet chilling.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

E. EMISSIONS UNIT POLLUTANTS**List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM ₁₀			EL
SO ₂			EL
NO _x	028	139	EL
CO	109		EL
VOCs	109		EL
SAM			EL

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [1] of [6]
Particulate Matter

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM/PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 15.4 lb/hour 32.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION

Page [1] of [6]

Particulate Matter

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10% Opacity	4. Equivalent Allowable Emissions: 2.5 lb/hour 7.2 tons/year
5. Method of Compliance: EPA Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10% Opacity	4. Equivalent Allowable Emissions: 15.4 lb/hour 29.9 tons/year
5. Method of Compliance: EPA Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION

Page [2] of [6]

Sulfur Dioxide

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 10.6 lb/hour 21.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [2] of [6]
Sulfur Dioxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2 grains S / 100 SCF	4. Equivalent Allowable Emissions: 1.2 lb/hour 3.4 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% Sulfur	4. Equivalent Allowable Emissions: 10.6 lb/hour 20.6 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION
 Section [2] of [2]
 Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
 Page [3] of [6]
 Nitrogen Oxides

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 8.7 lb/hour 25.3 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [3] of [6]
Nitrogen Oxides

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 5 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 8.6 lb/hour 25.2 tons/year
5. Method of Compliance: EPA Method 7E or 20; CEMS 24-hour block average	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 5 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 8.7 lb/hour 17.4 tons/year
5. Method of Compliance: EPA Method 7E or 20; CEMS 24-hour block average	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [4] of [6]
Carbon Monoxide

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 6.3 lb/hour 18.5 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on gas firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [4] of [6]
Carbon Monoxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 6 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 6.3 lb/hour 18.3 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 6 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 6.4 lb/hour 12.7 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [5] of [6]
Volatile Organic Compounds

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2.7 lb/hour 7.0 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION
Section [2] of [2]
Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
Page [5] of [6]
Volatile Organic Compounds

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 2.8 lb/hour 5.3 tons/year
5. Method of Compliance: EPA Method 25A, initial test only	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 2.7 lb/hour 5.3 tons/year
5. Method of Compliance: EPA Method 25A, initial test only	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION
 Section [2] of [2]
 Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION
 Page [6] of [6]
 Sulfuric Acid Mist

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SAM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 9.9 lb/hour 40.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Lb/hr based on oil firing. TPY based on 4,000 hours of oil firing and 1,840 hours of gas.			

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

POLLUTANT DETAIL INFORMATION

Page [6] of [6]

Sulfuric Acid Mist

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2 grains S / 100 scf	4. Equivalent Allowable Emissions: 1.2 lb/hour 3.3 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Natural gas firing	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% Sulfur	4. Equivalent Allowable Emissions: 9.9 lb/hour 19.3 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Distillate Oil Firing	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Rule 62-296.320(4)(b). Excess emissions allowed for startup, shutdown, and malfunction for 2 hours per 24 hours, pursuant to Rule 62-210.700(1).	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Spectrum Systems, Inc. / Thermo Electron Corp. Model Number: 42CLS Serial Number: 0436610038	
5. Installation Date:	6. Performance Specification Test Date: 09/22/2005
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: O₂ or CO₂	2. Pollutant(s): Oxygen or Carbon Dioxide
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Spectrum Systems, Inc. / M&C Products Model Number: PMA100-L Serial Number: 0502194	
5. Installation Date:	6. Performance Specification Test Date: 09/22/2005
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>8/13/04</u>
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application) <i>Available in various manuals on-site.</i>
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable <i>Available in various manuals on-site.</i>

6. Compliance Demonstration Reports/Records

☐ Attached, Document ID: _____

Test Date(s)/Pollutant(s) Tested: _____

☒ Previously Submitted, Date: 12/22/2005

Test Date(s)/Pollutant(s) Tested: NOx, CO, VOC, NH3, and VE

☐ To be Submitted, Date (if known): _____

Test Date(s)/Pollutant(s) Tested: _____

☐ Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

☐ Attached, Document ID: _____

☐ Not Applicable

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Hopkins Unit No. HC4 (EU-032)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input checked="" type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <i>submitted 08/10/2004</i> <input type="checkbox"/> Copy Attached, Document ID: _____ <input checked="" type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>07/01/04</u> <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable

Additional Requirements Comment

ATTACHMENT RMP I

Verification of Risk Management Plan Submission to EPA

Facility Name: Arvah B. Hopkins Electric Generating Station
EPA ID: 1000 0019 2524



Triveni Singh
City of Tallahassee
300 South Adams Street
Tallahassee, FL 32301

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

2005 JUL 25 P 3:09

HOPKINS PLANT OFFICE

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

July 18, 2005

EPA Facility ID#: 1000 0019 2524
Postmark Date: 07/12/2005
Anniversary Date: 07/12/2010

NOTIFICATION LETTER: COMPLETE RMP

The U.S. Environmental Protection Agency (EPA) received your Risk Management Plan (RMP) dated with the above postmark date. **This letter notifies you that your RMP is "complete" according to EPA's completion check.** The completion check is a program implemented by EPA to determine whether a submitted RMP includes the minimum amount of information every RMP must provide. The completion check does not assess whether a submitted RMP should have provided additional information or whether the information it provides is accurate or appropriate. In other words, it does not indicate that the RMP meets the requirements of 40 CFR Part 68.

Please note the anniversary date indicated above. Your RMP must be revised and updated by this date or earlier as required by 40 CFR §68.190. Please also note your EPA Facility ID number as identified at the top of this letter; all future Risk Management Plan submissions, corrections and other correspondence must include this number.

If you have any questions, please call one of the following numbers:

(1) For RMP rule interpretation questions, call the EPCRA Hotline at (800) 424-9346 or (703) 412-9810 (in the D.C. Metro area).

(2) For RMP*Submit installation and software questions, or information on the status of your RMP, contact the RMP Reporting Center at (301) 429-5018, or write to the:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515

(3) For more information on the Risk Management Program, you can contact your Implementing Agency. Your Implementing Agency is

**Florida Department of Community Affairs, 2555 Shumard Oak Boulevard,
Tallahassee, FL, 32399, Phone: 850-413-9970.**

Thank you for your cooperation in this matter.

Sincerely,

RMP Reporting Center

Enclosure:
Risk Management Plan (if submitted on paper)