Golder Associates Inc.

5100 West Lemon Street, Suite 114 Tampa, FL USA 33609 Telephone (813) 287-1717 Fax (813) 287-1716 www.golder.com



RECEIVED

JUL 05 2007

BUREAU OF AIR REGULATION

TITLE V RENEWAL APLICATION FOR NORTHERN STAR GENERATION SERVICES COMPANY MULBERRY COGENERATION FACILITY BARTOW, FLORIDA

> Prepared for: Northern Star Generation Services Company, LLC 2929 Allen Parkway, Suite 2200 Houston, TX 77019

> > Prepared by: Golder Associates Inc. 5100 West Lemon Street Suite 114 Tampa, Florida 33609

> > > **July 2007**

073-89510

DISTRIBUTION:

- 4 Copies FDEP
- 2 Copies Northern Star Generation Services Company, LLC
- 1 Copy -- Golder Associates, Inc.



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

MUL 05 2007
MUREAU OF AIR RE-

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.

<u>100</u>	Identification of Facility			
1.	Facility Owner/Company Name: Northern Sta	ar Generation Ser	vices Company, LLC	
2.	Site Name: Mulberry Cogeneration Facility			
3.	Facility Identification Number: 1050217			
4.	Facility Location			
	Street Address or Other Locator: 3600 County	y Road 555		
	City: Bartow County: Pol	k	Zip Code: 33831-0824	
5.	Relocatable Facility?	6. Existing Title	V Permitted Facility?	
	Yes X No	x Yes	☐ No	
<u>A</u> p	oplication Contact			
1.	Application Contact Name: Dave Kellermeye	r, Vice President,	EH&S	
2.	Application Contact Mailing Address			
	Organization/Firm: Northern Star Generation Services Company, LLC			
	Street Address: 2929 Allen Parkway, Suite 2200			
	City: Houston State	e: TX	Zip Code: 77019	
3.	Application Contact Telephone Numbers		-	
	Telephone: (713) 580 - 6368 ext.	Fax: (713) 580	- 6320	
4.	Application Contact Email Address: dave.kel	llermeyer@northe	rnstargen.com	
Application Processing Information (DEP Use)				
1.	Date of Receipt of Application:	3. PSD Number	(if applicable):	
2.	Project Number(s): 10502 1-00 -AV	4. Siting Number	er (if applicable):	

DEP Form No. 62-210.900(1) - Form

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 is for renewal of Title V permit No.1050217-005-AV for the Mulberry Cogeneration Facility, which expires on December 31, 2007.
This facility has a 126 MW combined cycle cogeneration unit which consists of 1 General Electric PG7111EA combustion turbine (CT), 1 Heat Recovery Steam Generator (HRSG) and 1 Secondary Boiler. The facility is fired with natural gas and No. 2 fuel oil, which natural gas being the primary fuel and new No. 2 fuel oil as backup fuel.

2

DEP Form No. 62-210.900(1) - Form

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Combustion Turbine with HRGS		
002	Secondary Boiler		·
	,		
	· · ·		

Application Processing Fee	
Check one: Attached - Amount: \$	x Not Applicable

3

DEP Form No. 62-210.900(1) - Form

APPLICATION INFORMATION

Owner/Authorized Representative Statement

$\mathbf{C}\mathbf{c}$	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:		
Str	eet 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:		

4

Date

DEP Form No. 62-210.900(1) - Form

Signature

APPLICATION 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: Allen Czerkiewicz, Plant Manager		
2.	options, as applicable):		
	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.		
	For a partnership or sole proprietorship, a general partner or the proprietor, respectively.		
	For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.		
	The designated representative at an Acid Rain source.		
3.	Application Responsible Official Mailing Address		
	Organization/Firm: Mulberry Cogeneration Facility		
	Street Address: 3600 County Road 555		
	City: Bartow State: FL Zip Code: 33831-0824		
4.	Application Responsible Official Telephone Numbers Telephone: (863) 533-9073 ext. Fax: (863) 533-4092		
5.	Application Responsible Official Email Address: allen.czerkiewicz@northernstargen.com		
6.	Application Responsible Official Certification:		
	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, escent sidentified in compliance plan(s) submitted with this application.		

DEP Form No. 62-210.900(1) - Form

BEST AVAILABLE COPY

APPLICATION INFORMATION

Pr	ofessional Engineer Certification
1.	Professional Engineer Name: Scott Osbourn, Senior Consultant
	Registration Number: 57557
2.	Professional Engineer Mailing Address
	Organization/Firm: Golder Associates, Inc.*
	Street Address: 5100 Lemon Street, Suite 114
	City: Tampa State: FL Zip Code: 33609
3.	Professional Engineer Telephone Numbers
	Telephone: (813) 287 - 1717 ext. 211 Fax: (813) 287 - 1716
4.	Professional Engineer Email Address: sosbourn@golder.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) 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
	(2) 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.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here x, 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.
	(4) If the purpose of this application is to obtain an air construction permit (check here, 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, 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.
	(5) 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, 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.
	6/29/37 WILL 0680
	Signature Date Control of the Contro
	(seal)
* B	oard of Professional Engineers Certificate of Authorization No. 00001670

DEP Form No. 62-210.900(1) - Form Effective: 2/2/06

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates Zone 17 East (km) 413.6 North (km) 3080.6		2. Facility Latitude/Longitude Latitude (DD/MM/SS) 27/50/56 Longitude (DD/MM/SS) 81/52/39		
3. Governmental Facility Code: 0 Code: (Not owned or operated by a Federal, State or Local Government)		5. Facility Major Group SIC Code: (49) Electric, Gas and Sanitary Services 6. Facility SIC(s): 4911		
7. Facility Comment:				

Facility Contact

1. Facility Contact Name: Gwynne L. Johnson, Plant Engineer

2. Facility Contact Mailing Address...

Organization/Firm: Mulberry Cogeneration Facility

Street Address: 3600 County Road 555

City: Bartow

3. Facility Contact Telephone Numbers:

Telephone: (863) 533 - 9073 ext. Fax: (863) 533 - 4092

4. Facility Contact Email Address:

Facility Primary Responsible Official

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

State: FL

1. Facility Primary Responsible Official Name: Allen Czerkiewicz, Plant Manager

2. Facility Primary Responsible Official Mailing Address...

Organization/Firm: Mulberry Cogeneration Facility

Street Address: 3600 County Road 555

City: Bartow State: FL

Zip Code: 33831-0824

Zip Code: 33831-0824

3. Facility Primary Responsible Official Telephone Numbers...

Telephone: (863) 533 - 9073

ext. Fax:

(863) 533 - 4092

4. Facility Primary Responsible Official Email Address:

allen.czerkiewicz@northernstargen.com

DEP Form No. 62-210.900(1) - Form

FACILITY INFORMATION

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. Small Business Stationary Source Unknown
2. Synthetic Non-Title V Source
3. x Title V Source
4. x Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5. Synthetic Minor Source of Air Pollutants, Other than HAPs
6. Major Source of Hazardous Air Pollutants (HAPs)
7. Synthetic Minor Source of HAPs
8. x One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9. One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)
10. One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)
11. x Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))
12. Facility Regulatory Classifications Comment:
Combined cycle CT (EU001) is subject to NSPS subpart GG, Standards of performance for stationary gas turbines.

DEP Form No. 62-210.900(1) - Form

FACILITY INFORMATION

List of Pollutants Emitted by Facility

Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
СО	A	
NO _x	A	
SO ₂	В	
·		
·		

DEP Form No. 62-210.900(1) - Form

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

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
	-			
	Wide Cap [Y or N]?	Wide Unit ID No.s Cap Under Cap [Y or N]? (if not all	Wide Unit ID No.s Cap Cap Under Cap (lb/hr) [Y or N]? (if not all	Wide Unit ID No.s Cap Cap Cap Under Cap (lb/hr) (ton/yr) [Y or N]? (if not all

10

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

DEP Form No. 62-210.900(1) - Form

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

	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) X Attached, Document ID: MC-FI-C1 Previously Submitted, Date:
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) X Attached, Document ID: See EU sections Previously Submitted, Date:
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) X Attached, Document ID: MC-FI-C3 Previously Submitted, Date:
Ad	Iditional Requirements for Air Construction Permit Applications – N/A
1.	Area Map Showing Facility Location: Attached, Document ID: Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): Attached, Document ID:
3.	Rule Applicability Analysis: Attached, Document ID:
4.	List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): Attached, Document ID: Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: Attached, Document ID: Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): Attached, Document ID: Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): Attached, Document ID: Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): Attached, Document ID: Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): Attached, Document ID: Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Attached, Document ID: Not Applicable

11

DEP Form No. 62-210.900(1) - Form

FACILITY INFORMATION

Additional Requirements for FESOP Applications - N/A

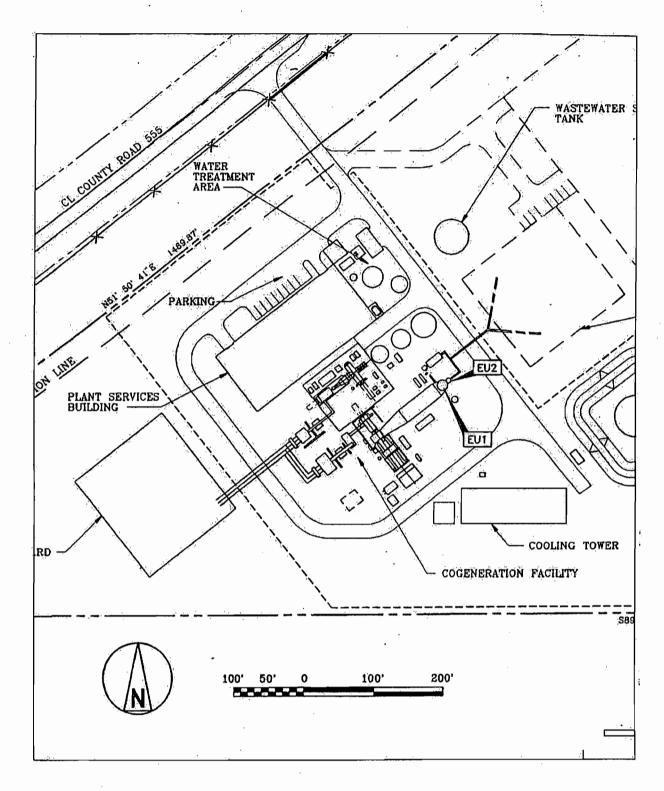
1.	List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): Attached, Document ID: Not Applicable (no exempt units at facility)				
Ac	Additional Requirements for Title V Air Operation Permit Applications				
1.	List of Insignificant Activities (Required for initial/renewal applications only): X Attached, Document ID: MC-FI-CV1 Not Applicable (revision application)				
2.	Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought): x Attached, Document ID: MC-FI-CV2 Not Applicable (revision application with no change in applicable requirements)				
3.	X Attached, Document ID: MC-FI-CV3 Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.				
4.	List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only): Attached, Document ID: Equipment/Activities On site but Not Required to be Individually Listed Not Applicable				
5.	Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only):				
	Attached, Document ID: X Not Applicable				
6.	Requested Changes to Current Title V Air Operation Permit: Attached, Document ID: MC-FI-CV6 X Not Applicable				
Ad	Iditional Requirements Comment				

12

DEP Form No. 62-210.900(1) - Form

FACILITY ATTACHMENTS

Attachment MC-FI-C1 Facility Plot Plan



Source: 1996 Title V Permit Application. Attachment MB-FI-E2

Polk Power Partners. L.P. Mulberry Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL



Foster Wheeler Environmental Corporation

Scale: As Shown Prepared: MI Date: 4/5/02 Approved: DJG

File: MB-FI-002.doc Document ID: MB-FI-002 Attachment MC-FI-C3
Precautions to Prevent Emissions of Unconfined Particulate Matter

Precautions to Prevent Emissions of Unconfined Particulate Matter

Unconfined particulate matter emissions associated with the operation and maintenance of the Mulberry Cogeneration Facility include the following sources and activities:

- Cooling Tower Drift Losses;
- Abrasive Blast Activities;
- Surface Coating Activities (Spray Painting);
- Dry Chemical Handling & Storage;
- Lawn & Ground Maintenance;
- Parking Areas: and
- Paved & Unpaved Roads.

Reasonable precautions to prevent and/or control unconfined particulate matter emissions include the following:

- Cooling Tower Drift Losses Maintain proper water chemistry (pH & TDS) and equipment in accordance with the manufacturer's design specifications.
- Abrasive Blast Activities When practical, use of partial or total enclosures and use of grit
 materials versus sand. Limit annual activities.
- Surface Coating Activities When practical, use of partial or total enclosures and limiting outdoor activities to times of favorable weather conditions to avoid off site impacts.
- Dry Chemical Handling & Storage Clean-up spills immediately, good. Housekeeping practices.
- Lawn & Ground Maintenance Application of water to non-vegetative areas as needed, landscaping and grass in other areas as necessary.
- Parking Areas Application of water as needed.
- Paved and Unpaved Roads As needed, application of water, the removal of particulate matter from paved roads, limited site access to vehicles, and vehicle speed limitations.

Attachment MC-FI-CV1
List of Insignificant Activities

List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-21..300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

- 1. Comfort heating < 1 MMBtu/hr
- 2. Internal combustion engines mobile sources
- 3. Non-industrial vacuum cleaning
- 4. Refrigeration equipment
- 5. Vacuum pumps for labs
- 6. Steam cleaning equipment
- 7. Sanders < 5 sq. ft.
- 8. Lab equipment used for chemical or physical analyses
- 9. Brazing, soldering or welding equipment
- 10. Emergency generators < 32,000 gal/yr
- 11. General purpose engines < 32,000 galiyr
- 12. Fire and safety equipment
- 13. Surface coating > 5% VOC; 6 gal/month
- 14. Surface coating > 5% VOC
- 15. Freshwater cooling towers. The cooling towers do not use chromium-based treatment chemicals.
- 16. Emergency Diesel Fire Pump and Storage Tank

List of Unregulated Emissions Units and/or Activities

<u>Unregulated Emissions Units and/or Activities</u>. An emission unit which emits "no emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither "regulated emissions units" nor "insignificant emissions units".

E.U. ID No.	Brief Description of Emission Unit(s) and/or Activity		
-003	New No. 2 Fuel Oil Tank (720,000 gal)		

and the second of the second o

Attachment MC-FI-CV2 Identification of Applicable Requirements

ATTACHMENT MC-FI-CV2 TITLE V CORE LIST

Effective: 03/01/02

(Updated based on current version of FDEP Air Rules)

[Note: The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal:

(description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State:

(description)

CHAPTER 62-4, F.A.C.: PERMITS, effective 02-07-06

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits; Application.

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review.

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 05-09-07

62-210.300, F.A.C.: Permits Required.

62-210.300(1), F.A.C.: Air Construction Permits.

62-210.300(2), F.A.C.: Air Operation Permits.

62-210.300(3), F.A.C.: Exemptions.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.300(7), F.A.C.: Transfer of Air Permits.

ATTACHMENT MC-FI-CV2 TITLE V CORE LIST

Effective: 03/01/02

(Updated based on current version of FDEP Air Rules)

- 62-210.350, F.A.C.: Public Notice and Comment.
- 62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.400, F.A.C.: Emission Estimates.
- 62-210.650. F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions.
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit Title V Source, Form and Instructions.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 02-02-06

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-14-03

- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213,440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.
- 62-213,900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
- 62-213.900(7), F.A.C.: Statement of Compliance Form.

ATTACHMENT MC-FI-CV2 TITLE V CORE LIST

Effective: 03/01/02

(Updated based on current version of FDEP Air Rules)

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 05-09-07

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 2-12-04

62-297.310, F.A.C.: General Test Requirements.

62-297.310(4), F.A.C.: Applicable Test Procedures.

62-297.310(7), F.A.C.: Frequency of Compliance Tests.

62-297.310(6), F.A.C.: Repaired Stack Sampling Facilities.

62-297.310(5), F.A.C.: Determination of Process Variables.

62-297.510(8), F.A.C.: Test Report.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

Attachment MC-FI-CV3
Compliance Report and Plan

ATTACHMENT MC-FI-CV3

COMPLIANCE CERTIFICATION

Compliance with the conditions set forth in this operation permit will be certified on an annual basis by the submittal of the Statement of Compliance – Title V Source DEP Form No. 62-213.900(7). The facility and emission units identified in this application are in compliance with the Applicable Regulations identified in the application form and attachments referenced in the section. The compliance report for this facility will be submitted by March 1 of each year for the prior calendar year. The compliance statement is as follows:

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Signature, Responsible Official

Allen Czerkiewicz, Plant Manager and Authorized Representative

Attachment MC-FI-CV6
Requested Changes to Current TV Permit

List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-21..300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

- 1. Comfort heating < 1 MMBtu/hr
- 2. Internal combustion engines mobile sources
- 3. Non-industrial vacuum cleaning
- 4. Refrigeration equipment
- 5. Vacuum pumps for labs
- 6. Steam cleaning equipment
- 7. Sanders < 5 sq. ft.
- 8. Lab equipment used for chemical or physical analyses
- 9. Brazing, soldering or welding equipment
- 10. Emergency generators < 32,000 gal/yr
- 11. General purpose engines < 32,000 galiyr
- 12. Fire and safety equipment
- 13. Surface coating > 5% VOC; 6 gal/month
- 14. Surface coating > 5% VOC
- 15. Freshwater cooling towers. The cooling towers do not use chromium-based treatment chemicals.
- 16. Emergency Diesel Fire Pump and Storage Tank

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.

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [1] of [2]

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. 					
En	nissions Unit	Description and S	<u>Status</u>			
1.	Type of Emi	ssions Unit Addres	ssed 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: Combustion Turbine (CT) with HRSG (EU 001)						
3.	Emissions U	nit Identification N	Number: 001			
4.	Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 10-AUG-94	7. Emissions Unit Major Group SIC Code: 49.	8. Acid Rain Unit? X Yes No	
9.	Package Uni		_			
10	Manufacturer: General Electric Model Number: PG7111 EA					
10. Generator Nameplate Rating: 82 MW						
11. Emissions Unit Comment: No. 2 fuel oil is used as back-up fuel; limited to firing no more than 720 hours per year. NOx emissions are controlled by dry low-NOx combustors and waterinjection. The HRSG services a 44 MW steam generator and furnishes steam to other facilities. This emissions unit is not subject to the CAM requirements of 40 CFR 64 because the applicant has chosen to use the Acid Rain NOx CEMS as a continuous compliance determination method.						

14

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [1] of [2]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Natural Gas Firing - Emissions control strategy includes the use of Dry-Low NO_x Combustors for NO_x emissions coupled with good combustion practices for CO, and PM/PM_{10} emissions, and Clean Pipeline Quality Natural Gas for SO_2 emissions. The control strategy ensures compliance with the BACT emission limitations.

Distillate Oil Firing - Emissions control strategy includes low sulfur fuel oil firing as a back-up fuel, use of water injection for NO_x emissions coupled with good combustion practices for CO, and PM/PM_{10} emissions, and low sulfur distillate oil (0.1% Sulfur by weight) for SO_2 emissions. The control strategy ensures compliance with the BACT emission limitations.

15

2. Control Device or Method Code(s): 025 and 028

DEP Form No. 62-210.900(1) - Form

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:			
3.	Maximum Heat Input Rate: 912 million Btu/hr			

4. Maximum Incineration Rate: pounds/hr

tons/day

5. Requested Maximum Operating Schedule:

24 hours/day

7 days/week

52 weeks/year

8,760 hours/year

6. Operating Capacity/Schedule Comment:

Requested maximum heat input of 912 MMBtu/hr when firing natural gas, based on lower heating value (LHV) at 59°F and 60 percent relative humidity (ISO conditions).

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [1] of [2]

C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units)

Emission Point Description and Type

1. Identification of Point on Flow Diagram: EU1	Identification of Point on Plot Plan or Flow Diagram: EU1		2. Emission Point Type Code: 3		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Stack - EU01 is the primary exhaust point. A portion of the exhaust gases can also be directed to the Secondary Boiler and exhausted though Stack - EU2 (Emission Unit 002).					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Stack – EU2 Stack parameters are provided in Emission Unit Section 2.					
5. Discharge Type Code: V	6. Stack Height 125 feet	:	7. Exit Diameter: 15 feet		
8. Exit Temperature: 220 °F	9. Actual Volum 679,324 acfm	netric Flow Rate: 10. Water Vapor: %			
11. Maximum Dry Standard F Dscfm	low Rate:	12. Nonstack Emission Point Height: feet			
13. Emission Point UTM Coo Zone: 17 East (km): North (km)	413.6	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) 27/50/56 Longitude (DD/MM/SS) 81/53/11			
15. Emission Point Comment:					
Annual emission calculations assume base load conditions at 59°F for natural gas firing.					
	·		•		

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION

Section [1]

of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):

Internal Combustion Engine; Electric Generation; Distillate Oil; Turbine

2. Source Classification Code (SCC):
2-01-001-013. SCC Units:
1,000 Gallons Distillate Oil (Diesel Burned)4. Maximum Hourly Rate:
8.25. Maximum Annual Rate:
5,7976. Estimated Annual Activity
Factor:7. Maximum % Sulfur:
0.108. Maximum % Ash:9. Million Btu per SCC Unit:
132

10. Segment Comment:

Max hourly rate based on 20°F inlet temperature (1,082 MMBtu/hr at fuel LHV presented above). Permit condition (Specific Condition A.2) limits annual fuel oil usage to no more than 40.0 MM lb/yr and 720 hours per year of operation.

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type):

Internal Combustion Engine; Electric Generation; Natural Gas Turbine

2. Source Classification Code (SCC):

2-01-002-01

4. Maximum Hourly Rate:
1.064

5. Maximum Annual Rate:
8. Maximum % Ash:

9. Million Btu per SCC Unit:
946

10. Segment Comment:

Max hourly rate based on 20°F inlet temperature (1,064 MMBtu/hr at fuel LHV presented above). Permit condition (Specific Condition A.2) limits annual natural gas usage to no more than 8,877.4 MM ft³/yr. Max allowable sulfur content equals 1 gr/100 scf.

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [1] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):					
·					
2. Source Classification Cod	le (SCC):	3. SCC Units		·	
2. Source Classification Cod	ic (Sec).	5. See onits.			
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:	
10. Segment Comment:				-	
Segment Description and Ra	ate: Segment	of		·	
1. Segment Description (Pro	cess/Fuel Type):				
2. Source Classification Cod	le (SCC):	3. SCC Units	•		
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:	
10. Segment Comment:					
				•	
				·	
	·	·			

19

DEP Form No. 62-210.900(1) - Form

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
NO _x	Low NO _x Burners	Water Injection	EL
SO ₂			EL
	,		

DEP Form No. 62-210.900(1) - Form

POLLUTANT DETAIL INFORMATION Page [1] of [3]

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:	2. Total Pero	ent Efficien	cy of Control:
CO - Carbon Monoxide	N/A		
3. Potential Emissions:		4. Synthe	tically Limited?
75.3 lb/hour 23 .	2 tons/year	x Y	es 🔲 No
5. Range of Estimated Fugitive Emissions (as	s applicable):		
to tons/year			
6. Emission Factor:		,	7. Emissions
			Method Code:
Reference: BACT Determination			0
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month F	Period:
tons/year	From: To:		•
9.a. Projected Actual Emissions (if required):	9.b. Projected	d Monitoring	g Period:
tons/year	5 years	□ 10 yea	rs
10 C 1 1 4 CF : :			
10. Calculation of Emissions:		•	
Potential hourly emissions are based on fuel			s. Potential annual
			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel			s. Potential annual
Potential hourly emissions are based on fuel emissions are based on natural gas firing at ISO	conditions for 8		s. Potential annual
Potential hourly emissions are based on fuel	conditions for 8		s. Potential annual
Potential hourly emissions are based on fuel emissions are based on natural gas firing at ISO	conditions for 8		s. Potential annual
Potential hourly emissions are based on fuel emissions are based on natural gas firing at ISO	conditions for 8		s. Potential annual

DEP Form No. 62-210.900(1) - Form

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 1 of 2

Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 75.3 lb/hour	4. Equivalent Allowable Emissions: 75.3 lb/hour 27.1 tons/year
5. Method of Compliance: EPA Reference Method 10 testing.	

6. Allowable Emissions Comment (Description of Operating Method):

While firing fuel oil. Basis for allowable: AC 53-211670 and BACT determination dated February 21, 1994.

Annual CO = 75.3 lbs/hr x 720 hr/yr / 2,000 lb/ton = 27.1 TPY

Allowable Emissions 2 of 2

Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:
 Allowable Emissions and Units: ppmdv @ 15% O₂ 	4. Equivalent Allowable Emissions: 53.0 lb/hour 232 tons/year

5. Method of Compliance:

EPA Reference Method 10 testing.

6. Allowable Emissions Comment (Description of Operating Method):

While firing natural gas. Basis for allowable: AC 53-211670 and BACT determination dated February 21, 1994.

22

Annual CO = $53.0 \, \text{lbs/hr} \times 8,760 \, \text{hr/yr} / 2,000 \, \text{lb/ton} = 232.1 \, \text{TPY}$

DEP Form No. 62-210.900(1) - Form

POLLUTANT DETAIL INFORMATION
Page [2] of [3]

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.

 Pollutant Emitted: NO_x - Nitrogen Oxides 	2. Total Perce	ent Efficie	ency of Control:
3. Potential Emissions:		4. Synth	etically Limited?
164 lb/hour 230.7	tons/year	Y	es x No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		·
6. Emission Factor: 42 ppmvd @ 15% O ₂			7. Emissions
Reference:			Method Code: 0
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 2	24-month	Period:
tons/year	From: To	:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
tons/year	5 years	□ 10 ye	ears
10. Calculation of Emissions:			
Potential hourly emissions are based on fuel emissions are based on natural gas firing at ISO	9		
N. Communication of the Commun			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

DEP Form No. 62-210.900(1) - Form

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

Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 42 ppmvd @ 15% O ₂	4. Equivalent Allowable Emissions: 164 lb/hour 59 tons/year

5. Method of Compliance:

EPA Reference Method 20 or 7E.

6. Allowable Emissions Comment (Description of Operating Method):

Based on 4-hour rolling average as measured by the NO_x CEMS while firing fuel oil, excluding periods of startup and shutdown. Basis for allowable: AC 53-211670 and BACT determination dated February 21, 1994; and 1050217-004-AC.

Annual $NO_x = 164 \text{ lbs/hr} \times 720 \text{ hr/yr} / 2,000 \text{ lb/ton} = 59.04 \text{ TPY}$

Allowable Emissions 2 of 2

Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 15 ppmvd @ 15% O ₂	4. Equivalent Allowable Emissions: 52.7 lb/hour 230.8 tons/year

5. Method of Compliance:

6. Allowable Emissions Comment (Description of Operating Method):

Based on 4-hour rolling average as measured by the NO_x CEMS while firing natural gas, excluding periods of startup and shutdown. Basis for allowable: AC 53-211670 and BACT determination dated February 21, 1994; and 1050217-004-AC.

Annual $NO_x = 52.7$ lbs/hr x 8,760 hr/yr / 2,000 lb/ton = 230.8 TPY

DEP Form No. 62-210.900(1) - Form

POLLUTANT DETAIL INFORMATION
Page [3] of [3]

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:		ficiency of Control:
SO ₂ – Sulfur Dioxide	N/A	
3. Potential Emissions:	4. S	ynthetically Limited?
95.1 lb/hour 416.5	95.1 lb/hour 416.5 tons/year	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor:		7. Emissions Method Code:
Reference:		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-mc	nth Period:
Tons/year	From:	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Moni	toring Period:
Tons/year		0 years
10. Calculation of Emissions:		
11 8		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

DEP Form No. 62-210.900(1) - Form

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 1 of 1

1. Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.10 percent in fuel oil	4. Equivalent Allowable Emissions:			
5. Method of Compliance: Fuel analysis for sulfur content, each fuel oil delivery.				
6. Allowable Emissions Comment (Description of Operating Method): While firing No. 2 fuel oil. Basis for allowable: AC 53-211670 and BACT determination dated February 21, 1994.				
Allowable Emissions Allowable Emissions	_ of			
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
5. Method of Compliance:				
6. Allowable Emissions Comment (Description	on of Operating Method):			
Allowable Emissions Allowable Emissions	_ of			
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: Lb/hour tons/year			
5. Method of Compliance:				
6. Allowable Emissions Comment (Description of Operating Method):				

26

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION [2]

Section [1]

of

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 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE 10 – Visible Emission – 10% Opacity	Rule X Other
3. Allowable Opacity:	
	cceptional Conditions: %
Maximum Period of Excess Opacity Allow	ed: min/hour
4. Method of Compliance:	
EPA Method 9	
5. Visible Emissions Comment:	-
While firing natural gas. Permit AC 53-211670.	
White thing natural gast 1 or mat 120 55 2110 100	
Excess Emissions allowed per condition C.3. of t	he Title V Operating Permit and Rule 62-
210.700(1) & (5), F.A.C.	
	·
Visible Emissions Limitation: Visible Emissions	ions Limitation 2 of 2
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE 20 – Visible Emission – 20% Opacity	Rule X Other
3. Allowable Opacity:	
Normal Conditions: 20% Ex	cceptional Conditions: %
Maximum Period of Excess Opacity Allow	ed: min/hour
4. Method of Compliance:	
EPA Method 9	
6 William C	
5. Visible Emissions Comment: While firing fuel oil. Permit AC 53-211670.	
white thing fuelou. Termit AC 33-2110/0.	
Excess Emissions allowed per condition C.3. of t	he Title V Operating Permit and Rule 62-
210.700(1) & (5), F.A.C.	

DEP Form No. 62-210.900(1) - Form

Section [1]

of

[2]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 5

1. Parameter Code:	2. Pollutant(s):
EM - Emission	NO _x
3. CMS Requirement:	Rule X Other
4. Monitor Information	
Manufacturer: ACME	
Model Number: 951C	Serial Number: 1000195
5. Installation Date:	6. Performance Specification Test Date: 27-DEC-95
7. Continuous Monitor Comment: Status is in	active.
Continuous Monitoring System: Continuous	Monitor <u>2</u> of <u>5</u>
1. Parameter Code:	2. Pollutant(s):
EM - Emission	NO_x
3. CMS Requirement:	Rule Other
4. Monitor Information	
Manufacturer: ROSEMOUNT	
Model Number: 951C	Serial Number: 1000195
5. Installation Date:	6. Performance Specification Test Date:
18-DEC-95	27-DEC-95
7. Continuous Monitor Comment:	
System installed in accordance with AC Permit,	AC 53-211670. Status is active.
I *	

DEP Form No. 62-210.900(1) - Form

Section [1]

of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: O ₂ – Oxygen	2. Pollutant(s):
3. CMS Requirement:	Rule Other
4. Monitor Information Manufacturer: SERVOMEX	
Model Number: 1400 B	Serial Number: 1420B/697
5. Installation Date: 18-DEC-95	6. Performance Specification Test Date: 27-DEC-95
7. Continuous Monitor Comment: System installed in accordance with AC Permit,	, AC 53-211670. Status is active.
Continuous Monitoring System: Continuous	Monitor 4 of 5
 Parameter Code: O₂ - Oxygen 	2. Pollutant(s):
3. CMS Requirement:	Rule Other
4. Monitor Information Manufacturer: ANARAD Model Number: AR-22	Serial Number:
5. Installation Date: 11-NOV-94	6. Performance Specification Test Date: 21-FEB-95
7. Continuous Monitor Comment: System installed in accordance with AC Permit,	AC 53-211670. Status is inactive.

DEP Form No. 62-210.900(1) - Form

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 5 of 5

Parameter Code: 1 - Emission	2.	Pollutant(s): NOx
CMS Requirement:		Rule Other
Monitor Information Manufacturer: ANARAD		
Model Number: AR-880		Serial Number: 1234
Installation Date: 11-NOV-94	6.	Performance Specification Test Date: 21-FEB-95
,		
ontinuous Monitoring System: Continuous	Mon	onitor of
Parameter Code:		2. Pollutant(s):
CMS Requirement:		Rule Other
Monitor Information Manufacturer:		
Model Number:		Serial Number:
Installation Date:		6. Performance Specification Test Date:
Continuous Monitor Comment:		
	CMS Requirement: Monitor Information Manufacturer: ANARAD Model Number: AR-880 Installation Date: 11-NOV-94 Continuous Monitor Comment: hission is NOx. Status is inactive. Ontinuous Monitoring System: Continuous Parameter Code: CMS Requirement: Monitor Information Manufacturer:	CMS Requirement: Monitor Information Manufacturer: ANARAD Model Number: AR-880 Installation Date: 11-NOV-94 Continuous Monitor Comment: hission is NOx. Status is inactive. Ontinuous Monitoring System: Continuous Monitoring System: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:

DEP Form No. 62-210.900(1) - Form

Section [1]

of [2]

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) X Attached, Document ID: MC-EU1-I1 Previously Submitted, Date
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) X Attached, Document ID: MC-EU1-I2 Previously Submitted, Date
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) Attached, Document ID: N/A Previously Submitted, Date
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) X Attached, Document ID: MC-EU1-I4 Previously Submitted, Not Applicable (construction application)
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) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records X Attached, Document ID: MC-EU1-I6 Test Date(s)/Pollutant(s) Tested:
	Test Date(s)/Pollutant(s) Tested:
	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: x Not Applicable

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION

Section [1]

of

[2]

Additional Requirements for Air Construction Permit Applications -N/A
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))
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.) Attached, Document ID: Not Applicable
Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) Attached, Document ID: Not Applicable
Additional Requirements for Title V Air Operation Permit Applications
1. Identification of Applicable Requirements x Attached, Document ID: MC-EU1-IV1
2. Compliance Assurance Monitoring Attached, Document ID: x Not Applicable
3. Alternative Methods of Operation x Attached, Document ID: MC-EU1-IV3 Not Applicable
4. Alternative Modes of Operation (Emissions Trading) Attached, Document ID: x Not Applicable
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) Copy Attached, Document ID: X Acid Rain Part (Form No. 62-210.900(1)(a))

X Attached, Document ID: MC-EU1-IV4 Previously Submitted, Date:

Attached, Document ID: Previously Submitted, Date:

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)

Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)

DEP Form No. 62-210.900(1) - Form

☐ Not Applicable

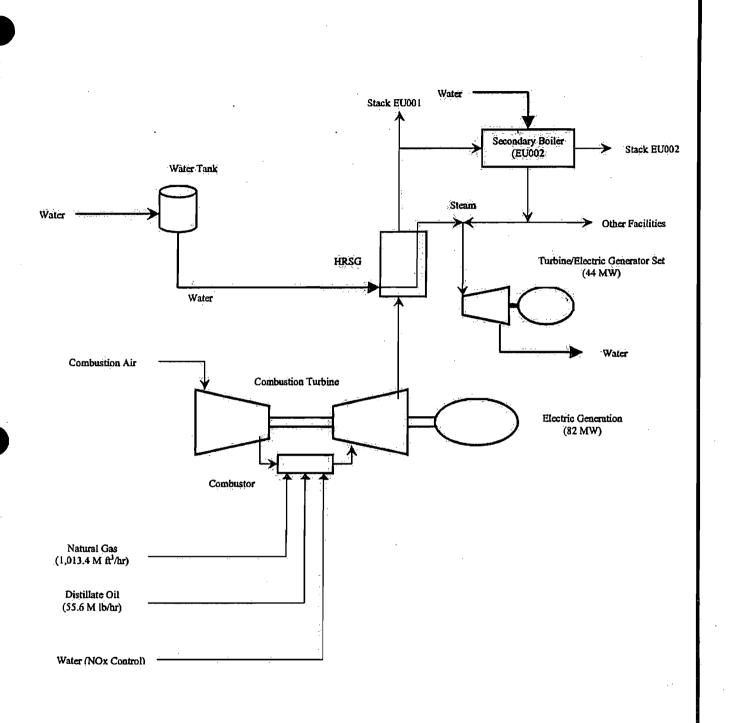
Additional Requirements Comment							

DEP Form No. 62-210.900(1) - Form

Effective: 2/2/06

33

Attachment MC-EU1-I1 Process Flow Diagram



Polk Power Partners. L.P.
Mulberry Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL



Scale: N/A

Date: 4/5/02

Foster Wheeler Environmental Corporation

•

Prepared: MI Approved: DJG File: MB-EU001-001.doc Document ID: MB-EU001-001

Source: 1996 Title V Permit Application, Attachment MB-EU01-L1, Title V Operating Permit & AC/PSD Permits Attachment MC-EU1-I2 Fuel Analysis or Specification

Fuel Analysis or Specification Emission Unit 1 and 2 - Natural Gas

Date: July 2, 2007 Station: Perry Stream #1

Source: Florida Gas Transmission Line web site

(http://www.hottap.panhandleenergy.com/index.jsp?companyName=FGT&pg=dailyAverage)

Heat Content: 1033 Btu/SCF Carbon Dioxide: 0.864% Nitrogen (N): 0.404% Methane: 95.802% Ethane: 2.203% Propane: 0.424% Iso-Butane: 0.089% N-Butane: 0.087% Iso-Pentane: 0.038% N-Pentane: 0.024% C6: 0.063%

Total Sulfur:

0.037 gr/hcf

The above analysis is subject to the following disclosures from the FGT website:

The data contained herein is preliminary data and therefore should be used for contemporaneous operational purposes only and may be subject to change at month end. This data is provided to assist out customers in tracking their gas usage as closely as possible on a real time basis. The information contained on this web page is not to be considered billable information. This data will be subject to additional verification and possible modification prior to billing.

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information provided. This information is provided on a best efforts basis and is an estimate. The information is not used for billing purposes. Florida Gas is not responsible for any reliance on this information by any party.

FGT

6/19/2007 9:00 Last Updated Total Sulfur Total Sulfur Previous Day Avg Previous Day Avg ppm Grains/hcf 06/18/2007 Station Name 06/18/2007 Perry 36" Stream #1 0.585 0.037 Perry 30" Stream #2 2.308 0.144 Perry 24" Stream #3 0.167 2.680 Brooker 24" Stream 3.862 0.241

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the This information is provided on a best efforts basis and is an estimate.

The information is not used for billing purposes.

Florida Gas is not responsible for any reliance on this information by any party.

Stream History

		Perry 36" Stream #1	Perry 36" Stream #1	Perry 30" Stream #2	Perry 30" Stream #2
Gas Day	Index	15SA36PSUL.A	OCICAM WI	15SA30PSUL.A	SCICAM #2
2		Avg ppm	Avg Grains/hcf	Avg ppm	Avg Grains/h
06/17/2007	33	0.000	0.000	0.000	0.000
06/16/2007	32	0.000	0.000	0.000	0.000
06/15/2007	31	0.000	0.000	0.000	0.000
06/14/2007	30	0.000	0.000	0.000	0.000
06/13/2007	29	0.000	0.000	0.000	0.000
06/12/2007	28	0.000	0.000	0.000	0.000
06/11/2007	27	0.000	0.000	0.000	0.000
06/10/2007	26	0.000	0.000	0.000	0.000
06/09/2007	25	0.000	0.000	0.000	0.000
06/08/2007	24	0.000	0.000	0.000	0.000
06/07/2007	23	0.000	0.000	0.000	0.000
06/06/2007	22	0.000	0.000	0.000	0.000
06/05/2007	21	0.000	0.000	0.000	0.000
06/04/2007	20	0.000	0.000	0.000	0.000
06/03/2007	19	0.000	0.000	0.000	0.000
06/02/2007	18	0.000	0.000	0.000	0.000
06/01/2007	17	0.000	0.000	0.000	0.000
05/31/2007	16	0.000	0.000	0.000	0.000
05/30/2007	15	0.000	0.000	0.000	0.000
05/29/2007	14	0.000	0.000	0.000	0.000
05/28/2007	13	0.585	0.037	2.308	0.144
05/27/2007	12	0.585	0.037	2.308	0.144
05/26/2007	11	0.585	0.037	2.308	0.144
05/25/2007	10	0.585	0.037	2.308	0.144
05/24/2007	9	0.585	0.037	2.308	0.144
05/23/2007	8	0.585	0.037	2.308	0.144
05/22/2007	7	0.585	0.037	2.308	0.144
05/21/2007	6	0.585	0.037	2.308	0.144
05/20/2007	5	0.585	0.037	2.308	0.144
05/19/2007	4	0.585	0.037	2.308	0.144
05/18/2007	3	0.585	0.037	2.308	0.144
05/17/2007	2	0.585	0.037	2.308	0.144
05/16/2007	1	0.585	0.037	2.308	0.144

\\gthou-apgc01p\GCUsers\fgt\fgtscada.txt



Analysis Report

Lab Number:

2005-0775

Job Number:

T5104561

Date Sampled:

10/26/2005

Date Submitted: 10/26/2005

Date Tested:

Product:

10/27/2005

Taken From:

No. 2 Fuel Oil Submitted Sample

Location: Sample Tested: Mulberry Cogen

By: **GE Energy Services**

To: GE Energy Services

Customer Reference: Our Reference: T510-4561

Submitted Sample

Test Sediment and Water Viscosity @ 40 deg C Micro-Organisms Gross Heat of Combustion Method **ASTM D2709**

ASTM D445 **EASI-CULT** ASTM D240

2.93 Negative 19511 139737

cSt BTU/lb BTU/gal

5868954 0.0824

Result

0

BTU/bbls

Sulfur

ASTM D4294

wt %

Unit

vol %

Daniel Thompson Intertek Caleb Brett Attachment MC-EU1-I4
Procedures for Startup and Shutdown

Procedures for Startup/Shutdown - Emission Unit 001

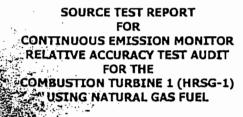
Start-up for the combustion turbine (CT) begins with "lighting off" of the machine on natural gas. A period of from one to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, during this time the unit is placed "on the line" and begins sending electrical power to the grid at reduced loads to allow equipment to come up to pressures and temperatures.

 NO_x emissions are controlled by use of dry-low NO_x combustors during start-up and shutdown and continuously monitored along with O_2 concentrations. If excess emissions occur during start-up or shutdown, the nature and cause of the event are identified and recorded. Corrective actions are taken when necessary to correct problems and preventative measures adopted to avoid future problems. At all times, including start-up and shutdown, Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (Electrical Production) to a minimum level, opening the breaker, which disconnects the unit from the electrical grid, shutting off the fuel and coasting down to stop.

Reference: 1996 Title V Permit Application

Attachment MC-EU1-I6
Compliance Demonstration Report



POLK POWER PARTNERS, L.P.
MULBERRY COGENERATION FACILITY
BARTOW, FLORIDA

FDEP PERMIT NUMBER 1050217-005-AV

FEBRUARY 22, 2007

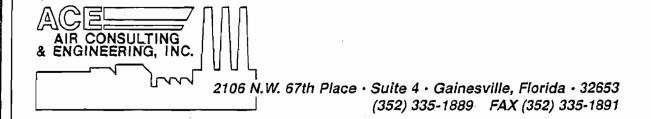
* PREPARED FOR:

POLK POWER PARTNERS, L.P., INC.
MULBERRY COGENERATION FACILITY
3600 HIGHWAY 555
BARTOW, FLORIDA 33830

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC. 2106 NW 67TH PLACE, SUITE 4 GAINESVILLE, FLORIDA 32653 (352) 335-1889

3436-07-01



REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Dagmar Fick, Staff Engineer

Date

1.0 INTRODUCTION

On February 22, 2007, Air Consulting and Engineering, Inc. (ACE) performed a Relative Accuracy Test Audit (RATA) for the Continuous Emission Monitoring System (CEMS) serving the Unit 1 Combustion Turbine (HRSG-1) at the Mulberry Cogeneration Facility of Polk Power Partners, L.P. in Bartow, Florida.

EPA Reference Methods 7E/3A were utilized for measuring Oxides of Nitrogen (NO_x) and Oxygen (O₂) emissions.

The unit was firing natural gas.

Ms. Gwynne Johnson of Northern Star Generation served as Project Director.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Table 1 demonstrates the relative accuracy test results for the combustion turbine CT-1.

CT-1 showed a relative accuracy of 7.22% with the reference method testing in terms of pounds per million BTU (lbs/MMBTU) of NO_x emission and is thus in compliance with the annual compliance specification. The bias adjustment factor was 1.000 for CT-1. The <u>Code of Federal Regulations Title 40 Part 75</u> Specifications call for a relative accuracy of $\pm 7.5\%$ for annual testing or, for sources with low NO_x emissions rates (≤ 0.200 lbs/MMBTU), when a NO_x-diluent CEMS fails to achieve the relative accuracy of $\le 7.5\%$, the CEMS pass if the monitoring systems' mean value from the RATA is within ± 0.015 lbs/MMBTU of the reference method mean value.

The source qualifies as a "low emitter" with emissions less than or equal to 0.20 pounds per million BTU (lbs/MMBTU). As a low emitter, the source also demonstrated a mean difference from the RM testing of -0.0014 lbs/MMBTU, which is less than the 0.015 lbs/MMBTU difference necessary to qualify for annual RATA demonstration.

The unit was operated on natural gas.

Complete emission summaries and data logger records are presented in Appendices B and C.

Table 1. Relative Accuracy Test Audit Data
Combined Cycle Combustion Turbine with HRSG 1 - CT (EU 001)
Polk Power Partners, L.P.
Mulberry Cogeneration Facility
Bartow, Florida
February 22, 2007

NOx as ppm dry

Run No. Time		Reference Method NOx O2 ppm % lbs/MMBTU			CEMS NOx Ibs/MMBTU	Difference NOx Ibs/MMBTU
1 2 3 4 5 6 7 8 9	0853-0917 0930-0954 1024-1048 1100-1124 1135-1159 1755-1819 1832-1856 1908-1932 1944-2008	7.68 7.77 7.98 7.57 7.59 8.31 7.71 7.94 7.83	14.88 14.67 14.89 14.79 14.81 14.88 15.04 14.84 14.32	0.0277 0.0280 0.0289 0.0269 0.0271 0.0300 0.0286 0.0285 0.0280	0.0288 0.0288 0.0291 0.0293 0.0295 0.0310 0.0293 0.0296 0.0306	-0.0011 -0.0008 -0.0002 -0.0024 -0.0010 -0.0007 -0.0011 -0.0026
Averages: 0.028 0.030 -0.0014 Number of Runs: 9 -0.0014 Average Difference: -0.0014 -0.0014 Average Difference of Corrected Runs: -0.0014 Standard Deviation: 0.0009 Confidence Coefficient: 0.0007 t-Value: 2.306 Relative Accuracy (%): 7.22 Bias Adjustment Factor (BAF): 1.000						

SOURCE TEST REPORT
FOR
CARBON MONOXIDE
AND VISIBLE EMISSIONS

ANNUAL COMPLIANCE DEMONSTRATION
COMBUSTION TURBINE WITH HRSG (EU001)
NATURAL GAS FIRING

POLK POWER PARTNERS, L.P. MULBERRY COGENERATION FACILITY BARTOW, FLORIDA

FDEP PERMIT NUMBER 1050217-005-AV

FEBRUARY 22, 2007

PREPARED FOR:

POLK POWER PARTNERS, L.P., INC. MULBERRY COGENERATION FACILITY 3600 HIGHWAY 555 BARTOW, FLORIDA 33830

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC. 2106 NW 67TH PLACE, SUITE 4 GAINESVILLE, FLORIDA 32653 (352) 335-1889

436-07-01



REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Dagmar Fick, Staff Engineer

Date

1.0 INTRODUCTION

On February 22, 2007, Air Consulting and Engineering, Inc. (ACE) performed annual emissions compliance testing on the Combustion Turbine (EU001) at the Mulberry Cogeneration Facility of Polk Power Partners, L.P. in Bartow, Florida. Testing was conducted on the behalf of Northern Star Generation Services Co. LLC to satisfy conditions in Florida Department of Environmental Protection (FDEP) Permit Number 1050217-005-AV (see Appendix A).

The following United States Environmental Protection Agency's (EPA) Methods were used to measure pollutant emissions; EPA Method 3A Oxygen (O₂), EPA Method 10 for Carbon Monoxide (CO), and EPA Method 9 for Visible Emissions (VE).

The unit was fired with natural gas only.

Ms. Gwynne Johnson of Northern Star served as Project Director.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the emissions testing are provided in Table 1.

CO emissions averaged 1.02 ppm @ 15% O_2 and 2.23 lbs/hr. Allowable emissions are 25 ppm @ 15% O_2 and 53.0 lbs/hr. CO emissions were monitored concurrently with the NO_x RATA test. RATA runs 1, 2, and 3 equal Run 1 CO compliance, runs 4, 5 and 6 equal Run 2 and runs 7, 8 and 9 equal Run 3.

Visible emissions averaged 0.0% opacity for the highest six-minute period of the one-hour test, which is within the permitted standard of 10% opacity.

SO₂ emissions, calculated from the fuel analysis and fuel usage, averaged 0.085 lbs/hr. Actual total sulfur content in the fuel was 0.549 ppm (see Appendix E for SO₂ calculations).

Complete emission data, strip chart copies with data logger entries, and Visible Emission data are provided in Appendices B, C and D, respectively.

Table 1. Carbon Monoxide Emissions Summary
Combined Cycle Combustion Turbine with HRSG 1 - CT (EU 001)
Polk Power Partners, L.P.
Mulberry Cogeneration Limited Partnership
Bartow, Florida
February 22, 2007

Run	Time	Gas Flow	Heat Input	Oxygen		CO Emi	ssions	
Number		Kcuft/hr	MMBTUH HHV	%	ppmvd	ppmvd 15% O2	Ibs/MMBTU	lbs/hr
1	0853-1048	937.3	967.9	14.88	1.07	1.05	0.0024	2.32
2	1100-1124	916.3	951.1	14.83	1.02	0.99	0.0022	2.12
3	1832-1856	930.9	964.4	14.90	1.05	1.04	0.0023	2.25
Average		928.2	961.2	14.87	1.05	1.02	0.0023	2.23

Natural Gas Fd-Factor = 8710 MMBTU/dscf

 $lbs/MMBTU = ppm(2.595 \times 10E-9)MW (20.9/20.9-%O2)(Fd)$ lbs/hr = (lbs/MMBTU)(Heat Input HHV)

Heat Input (HHV) = (gas flow Kcuft/hr)(1032 dry Btu/cf)/10E3

SO2 Emissions = 0.085 lbs/hr

Attachment MC-EU1-IV1
Identification of Additional Applicable Requirements



Department of Environmental Protection

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

Colleen M. Castille Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Mr. David Kellermeyer, Vice President, EH&S Northern Star Generation Services Company LLC 2929 Allen Parkway, Suite 2200 Houston, TX 77019 DEP File No. 1050217-005-AV Mulberry Cogeneration Facility Polk County

Enclosed is Final Permit Number 1050217-005-AV. This Title V revision permit incorporates the following changes to the Title V permit for the Mulberry Cogeneration Facility in Polk County: 1) Turbine tuning as an allowed excess emission; 2) Revisions to the NO_X emission limit averaging time; 3) Incorporation of alternate startup/shutdown emission limits; 4) Removing the secondary boiler from applicability from Title IV (Acid Rain); and 5) Increasing the heat input limits for the gas turbine by 5 percent on oil- and gas-firing. The applicant did not request an increase in any of the current permitted allowable annual emission rates for any existing emissions unit. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida,

Trina L. Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this <u>Notice of Final Permit</u> (including the Final permit) was send by dertified mail (*) and copies were electronically mailed by Internet e-mail before the close of business on 8000 to the person(s) listed:

Mr. David Kellermeyer, Vice President, EH&S, Northern Star Generation Services, LLC* Scott Osbourn, P.E., Golder Associates
Jason Waters, SWD
U.S. EPA, Region 4

"More Protection, Less Process"

Printed on recycled paper.

3 1160 0004 3034 4882	U.S. Postal S CERTIFIEI (Domestic Mail Control Mr. David Ref. Postage Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees	MAIL IN Inly; No Insuration visit our	rance Coverag website at www.	e Provided)		
Sent To Mr. David Kellermeyer, Vice President, FHSS Street, Apt. No.: or PO Bax No. 2929 Allen Parkway, Suite 2200 City. State, ZIP+4 HOUSTON, TX 77019 PS Form 3800. June 2002 PS Form 3800. June						
1. Article Addressed to: Mr. David Kellerm EH&S Northern Star Gen 2929 Allen Parkwa Houston, TX 77019	erating Services y, Suite 2200	dent, Company I	If YES, enter de	ass different from Ite	—	
raceout, in 7701	; !		. Service Type XXI Certified Ma Registered Insured Mail Restricted Deliv	☐ Return Rec	all selpt for Merchandise	
Article Number (Transfer from service la	be()	7005	1760 00	04 3034	4882	
PS Form 3811, Februa	PS Form 3811, February 2004 Domestic Return Receipt 102595-02-##-1540					

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility Page 2 of 3 FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 \mathbb{Z}_{NM}

(Date)

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility Page 3 of 3 FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

FINAL Determination

Title V Air Operation Permit Renewal
FINAL Title V Air Operation Permit No.: 1050217-005-AV
Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility
Page 1 of 1

I. Comment(s).

No comments were received from the USEPA during their 45 day review period of the PROPOSED Permit.

II. Conclusion.

In conclusion, the permitting authority hereby issues the FINAL Permit.

To:

'sosbourn@golder.com'; watersj@epchc.org

Cc:

Holtom, Jonathan

Subject:

FINAL Title V Permit Revision No.: 1050217-005-AV - Northern Star Generation Services

Company, LLC-Mulberry Cogeneration

Attachments: 1050217.005.AV.F[1].zip

Attached for your records is a zip file for the subject FINAL Title V Permit Revision.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday Planner II Bureau of Air Regulation (850)921-9524 Barbara Friday@dep.state.fl.us

25 1 400

From: Sent:

Osbourn, Scott [Scott_Osbourn@golder.com] Thursday, August 03, 2006 11:17 AM

Read: FINAL Title V Permit Revision No.: 1050217-005-AV - Northern Star Generation Subject:

Services Company, LLC-Mulberry Cogeneration

Your message

To:

Scott_Osbourn@golder.com

Subject:

was read on 8/3/2006 11:17 AM.

From:

Exchange Administrator

Sent:

Thursday, August 03, 2006 11:16 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT191326.txt; FINAL Title V Permit Revision No.: 1050217-005-AV - Northern Star

Generation Services Company, LLC-Mulberry Cogeneration





(283 B)

ATT191326.bxt FINAL Title V Permit

Revision ...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

watersj@epchc.org

From:

Exchange Administrator

Sent:

Thursday, August 03, 2006 11:15 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT191317.txt; FINAL Title V Permit Revision No.: 1050217-005-AV - Northern Star

Generation Services Company, LLC-Mulberry Cogeneration





ATT191317.bxt FINAL Title V Permit (285 B)

Revision ...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

sosbourn@golder.com

STATEMENT OF BASIS

Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility
Facility ID No.: 1050217
Polk County

Title V Air Operation Permit Revision
FINAL Permit Project No.: 1050217-005-AV
Revision of Title V Air Operation Permit No.: 1050217-002-AV

The renewed Title V Air Operation Permit, No. 1050217-002-AV, was effective on January 1, 2003. This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. 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.

The subject of this permit is the revision of Title V Air Operation Permit No. 1050217-002-AV, to incorporate the changes authorized by permit No. 150217-004-AC (issued concurrently with this permit); and to replace the Title V general Conditions with the latest version (Appendix TV-5, Title V Conditions) dated 3/28/05.

The construction permit (1050217-004-AC) was processed at the applicant's request for the following changes: 1) Turbine tuning as an allowed excess emission; 2) Incorporation of alternate startup/shutdown emission limits; 3) Revisions to the NO_X emission limit averaging time; and, 4) Increasing the heat input limits for the gas turbine by 5 percent on oil- and gasfiring. In addition, the following changes are being made to the Title V permit at the applicant's request without the need for a corresponding change in the construction permit: 1) Removing the secondary boiler from applicability from Title IV (Acid Rain); 2) Removing the requirement for the secondary gas-fired boiler to perform an annual visible emissions test; and, adding the authority to use Method 7E for NO_X compliance as an option to using Method 20. The applicant did not request an increase in any of the current permitted allowable annual emission rates for any existing emissions unit.

The subject facility consists of a 126 MW combined-cycle cogeneration unit which is comprised of 1 General Electric PG7111EA combustion turbine (CT), 1 Heat Recovery Steam Generator (HRSG) and 1 Secondary Boiler. The combustion turbine is regulated under Acid Rain Phase II.

The combustion turbine (CT) is a GE PG7111EA model with a nameplate rating of 82 MW at ISO conditions. The CT is allowed to burn natural gas or new No. 2 fuel oil. Natural gas is the primary fuel and new No. 2 fuel oil can be used permanently as back-up fuel. NO_X emissions are controlled by dry low- NO_X combustors and water-injection. The HRSG services a 44 MW steam generator and furnishes steam to other facilities. The CT and HRSG began commercial operation on August 10, 1994. The secondary boiler is for auxiliary steam. It is fired by natural gas. A portion of the exhaust gas from the combustion turbine is vented through the secondary boiler. CAM does not apply.

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received July 5, 2002 and revision application dated September 19, 2005, this facility is not a major source of hazardous air pollutants (HAPs).

The following changes have been made to the Title V Air Operation permit as a result of this project:

- 1. To recognize excess emissions due to combustor tuning, a new excess emissions condition is added as Specific Condition C.5. The existing Specific Conditions C.5. - C.17. are renumbered as C.6. - C.18.
 - Excess emissions resulting from a combustor tuning session shall be permitted provided the tuning session is performed in accordance with the manufacturer's specifications and in no case shall exceed 72 hours in any calendar year. A "tuning session" would occur after a combustor change-out, a repair to a combustor, or as required to maintain proper operation. Prior to performing any tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least 1 day that details the activity and proposed tuning schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.

[Rule 62-210.700(1) & (5), F.A.C.; and, 1050217-004-AC]

2. In order to establish an allowable emissions limitation for emissions of nitrogen oxides (NO_X) during periods of start up and shut down of the combustion turbine, and to clearly specify the averaging time for compliance with the NO_X limits, Specific Conditions A.5. & A.6. are changed:

FROM:

A.5. Nitrogen Oxides. NO_X emissions shall not exceed 15 ppmvd @ 15% O₂ (52.7 lbs/hr and 230.7 TPY) when firing natural gas.

[AC53-211670 and BACT Determination dated February 21, 1994]

A.6. Nitrogen Oxides. NO_x emissions shall not exceed 42 ppmvd @ 15% O₂ (164.0 lbs/hr and 59.0 TPY) when firing new No. 2 fuel oil. [AC53-211670 and BACT Determination dated February 21, 1994]

TO:

- Nitrogen Oxides.
- 1. NO_X emissions shall not exceed 15 ppmvd @ 15% O₂ (52.7 lbs/hr and 230.7 TPY) when firing natural gas, based on a 4- hour rolling average as measured by the NO_x CEMS.
- 2. NO_X emissions shall not exceed 42 ppmvd @ 15% O₂ (164.0 lbs/hr and 59.0 TPY) when firing new No. 2 fuel oil, based on a 4- hour rolling average as measured by the NOx

[AC53-211670 and BACT Determination dated February 21, 1994; and, 1050217-004-AC]

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

NO_x Emissions During Start Up and Shut Down. The maximum allowable nitrogen oxide emissions resulting from a startup or shutdown of the CT shall not exceed an average of 52.7 lbs/hr when firing on natural gas nor 164 lbs/hr when firing on fuel oil, based on a 4hour period commencing with the beginning of a start up or ending at the conclusion of a shut down of the unit. The 4-hour rolling average shall be based on all available data excluding calibration data and periods of emissions due to malfunction during the start up or shut down period.

[Rule 62-210.700(5), F.A.C.; and, 1050217-004-AC]

In addition, since the emissions are now specifically limited during periods of start up and shut down operations for the CT, the excess emissions provisions in Specific Condition C.3. are changed:

FROM:

C.3. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

TO:

- C.3. Excess emissions resulting from a malfunction of the Combustion Turbine, or from startup, shutdown, or malfunction of the Secondary Boiler, shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1) & (5), F.A.C.]
- 3. To reflect the combustion turbine's ability to operate at a higher combustion temperature following the replacement of the combustor liners, Specific Conditions A.1. & A.2. are changed:

FROM:

A.1. Permitted Capacity. The operation rate shall not exceed 869 MMBtu/hr (LHV) at ISO conditions.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

A.2. Methods of Operation - Fuels.

The permittee shall fire natural gas or new No. 2 fuel oil. The primary fuel shall be natural gas with new No. 2 fuel oil as backup fuel. The fuel consumption rates (based on operation at 20° F) for the turbine shall not exceed those listed below:

11.50	Natural Gas	New No	5. 2 Fuel Oil
M ft3/hr	MM ft3/yr	M lbs/hr	MM lbs/yr
1013.4	8877.4	55.6	40.0

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility Statement of Basis

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

New No. 2 fuel oil can be used permanently as backup fuel for no more than 720 hours per year.

[Rule 62-213.410, F.A.C.; and, AC53-211670]

TO:

A.1. Permitted Capacity. The operation rate shall not exceed 912 MMBtw/hr (LHV) at ISO conditions.

[Rules 62-4.160(2) & 62-210.200(PTE), F.A.C.; and 1050217-004-AC]

A.2. Methods of Operation - Fuels.

The permittee shall fire natural gas or new No. 2 fuel oil. The primary fuel shall be natural gas with new No. 2 fuel oil as backup fuel. The annual fuel consumption rates (based on operation at 20° F) for the turbine shall not exceed those listed below:

如此是是不是是Natural Gas和以外是由所述的	系统的通常,New No.32 Fuel Oil 法的现在分词
MM ft3/yr	MM lbs/yr
8877.4	40.0

New No. 2 fuel oil can be used permanently as backup fuel for no more than 720 hours per

[Rule 62-213.410, F.A.C.; and, Permits AC53-211670 & 1050217-004-AC]

4. To provide assurance that the increase in the allowable heat input did not trigger PSD/New Source Review, the following record-keeping and reporting requirements are added as new Specific Conditions A.32. & A.33. The existing Specific Condition A.32. is renumbered to A.34.:

Monitoring and Reporting Requirements.

- 1. The permittee shall monitor the emissions of NO_X; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years from the issuance date of this permit. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
- 2. The permittee shall report to the Department within 60 days after the end of each year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - The name, address and telephone number of the owner or operator of the major stationary source;
 - b. The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1.,
 - c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and,
 - d. Any other information that the owner or operator wishes to include in the report.
- 3. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1. and 2., F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

[Rule 62-212.300(1)(e), F.A.C.]

Northern Star Generation Services Company LLC FINAL Permit No.: 1050217-005-AV Mulberry Cogeneration Facility Facility ID No.: 1050217 Statement of Basis

A.33. Computation of Emissions.

1. Because the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute NO_X emissions.

2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained through the use of a calibrated flowmeter that records data on a continuous basis.

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

- 5. To update the permit with the latest version of the Title V General Conditions, all references to "APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02" have been replaced by "APPENDIX TV-5, TITLE V CONDITIONS version dated 03/28/05".
- 6. To correct the improper identification of the auxiliary boiler as an Acid Rain Unit, all references to it (EU 002) in the Acid Rain Part have been removed. In addition, all occurrences throughout the permit where the auxiliary boiler was listed as being subject to Acid Rain, Phase II have also been removed.
- 7. At the applicant's request, the requirement to perform an annual visible emissions test for the secondary boiler has been removed by the addition of a new Specific Condition **B.9**. The existing Specific Condition **B.9**. has been renumbered to **B.10**. As a result of this request, Specific Condition **B.9**. is changed:

FROM:

B.9. This emissions unit is also subject to the conditions contained in Subsection C. Common Conditions.

TO:

B.9. <u>Visible Emissions Testing - Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit unless it operates more than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

- **B.10.** This emissions unit is also subject to the conditions contained in Subsection C. Common Conditions.
- 8. At applicant request, the annual test method for compliance with the NO_X emissions limit specified in Specific Condition C.13. (old Specific Condition C.12.) has been expanded to include Method 7E as an acceptable alternative.
- 9. The Applicant has chosen to use the Acid Rain NO_X CEMS as a continuous compliance determination method in order to be exempted from the Compliance Assurance Monitoring requirements of 40 CFR 64. As a result of this request, the existing Specific Conditions A.23. A.34. have been renumbered as A.24. A.35., and a new Specific Condition A.23. is inserted:
 - A.23. Use of NO_X CEMS For Continuous Compliance. Pursuant to 40 CFR 64.2(b)(1)(vi), the applicant has elected to use the existing certified Acid Rain NO_X continuous emissions

monitors for continuous compliance in order to be exempted from the Compliance Assurance Monitoring (CAM) requirements contained in 40 CFR 64. The permittee shall keep calibrated, maintain, and operate continuous emissions monitors (CEMS) to measure and record emissions of nitrogen oxides (NO_X) and oxygen (O_2) in a manner sufficient to demonstrate compliance with the standards of this permit.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- (a) Performance Specifications. Each monitor shall be installed in a location that will provide emissions measurements representative of actual stack emissions. Each CEMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements. Each NO_x monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_x monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60.
- (b) Data Collection. Each CEMS shall be designed and operated to sample, analyze, and record emissions data evenly spaced over a 1-hour period during all periods of operation. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of the 1-hour block during which the unit combusted fuel. If the NO_X CEMS measures concentration on a wet basis, the permittee shall use DEP approved methods for correction of measured emissions to a dry basis (0% moisture). The O₂ (or CO₂) CEMS shall express the 1-hour emission rate values in terms of "percent oxygen by volume". The NO_X CEMS shall express the 1-hour emission averages in terms of "ppmvd corrected to 15% oxygen" for compliance with the BACT standard and, when requested by the Department, ISO corrected at 15% oxygen for the NSPS standard.
- (c) Compliance Averages. Compliance with the 4-hour rolling average NO_X emissions standards shall be based on data collected by the CEMS. For purposes of determining compliance with the emission standards of this permit, missing data shall not be substituted. If monitoring data is authorized for exclusion (due to malfunction, or tuning), the 4-hour average shall be the average of the remaining valid 1-hour emission averages collected during actual operation. A 1-hour emissions average that includes any amount of oil firing shall only be included in the compliance average for oil firing. The CEMS used shall comply with 40 CFR 60.334(B)(2) (CFR dated 2004) which requires a minimum of I data point for each quadrant of a full unit operating hour or at least 2 data points (one in each of the two quadrants) when required quality assurance or maintenance activities are performed on the system.
- (d) Data Exclusion. Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall record emissions data at all times including episodes of startup, shutdown, malfunction and combustor tuning. Emissions data recorded during periods of malfunctions or combustor tuning may only be excluded from the compliance averages in accordance with the requirements previously specified in this permit. To the extent practicable, the permittee shall minimize the duration of data excluded for malfunctions and combustor tuning, unless specifically authorized in writing by the department's district office for longer periods. Data recorded during malfunctions or combustor tuning shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during startup, shutdown,

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

malfunction and combustor tuning. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. Excluded emissions data shall be summarized in the required quarterly report.

(e) Monitor Availability. Monitor availability shall not be less than 95% in any calendar quarter. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

[Rules 62-204.800, 62-210.700, 62-213.440, 62-4.070(3), 62-4.130, 62-4.160(8), F.A.C.; 40 CFR 60.7; and Applicant Request 1.

10. The applicant has also elected to utilize the provisions of 40 CFR 60, Subpart GG that allow the use of the Part 75 required NO_x CEMS to be used in lieu of water-to-fuel monitoring for the tracking and reporting of excess emissions. To ensure that all of the applicable requirements from Subpart GG are contained in the permit, Appendix GG, Standards of Performance for Stationary Gas Turbines has been added as a referenced attachment. As a result, Specific Condition A.25. (old A.24.) has been changed:

FROM:

A.25. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator. [40 CFR 60.334(a)]

TO:

A.25. Alternate Monitoring Plan for Measuring NSPS Excess Emissions.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_x emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_X and O₂ monitors. (See attached Appendix GG, Standards of Performance for Stationary Gas Turbines for specific details.)
 - 1. At applicant request, the Acid Rain NO_X CEM data shall be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(b), Subpart GG (CFR dated 2004). The calibration

Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility
Statement of Basis

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) (CFR dated 2004) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS.

2. When requested by the Department, the CEMS emission rates for NO_X on these units shall be corrected to ISO conditions to demonstrate compliance with the NO_X standards established in 40 CFR 60.332. With regard to NSPS Subpart GG, the NO_X CEMS data shall also be used to report excess emissions in accordance with 40 CFR 60.334(j)(1)(iii) and 40 CFR 60.7(c).

[40 CFR 60.334(a)&(b); and Applicant Request]

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility Facility ID No.: 1050217 Polk County

Title V Air Operation Permit Revision

FINAL Permit Project No.: 1050217-005-AV

1st Revision of Title V Air Operation Permit No.: 1050217-002-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section

Telephone: 850/488-0114 Fax: 850/921-9533

Compliance Authority:

Southwest District Office 13051 N. Telecom Parkway Temple Terrace, FL 33637-0926

Telephone: 813/744-6100 Fax: 813/744-6084

Title V Air Operation Permit Revision

FINAL Permit No.: 1050217-005-AV 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.	
C. Relevant Documents.	
II. Facility-wide Conditions	3
III. Emissions Unit(s) and Conditions	
A. Combustion Turbine with HRSG	
B. Secondary Boiler	16
C. Common Conditions	18
IV. Acid Rain Part	
A. Acid Rain, Phase II	24
Referenced Attachments	26
Phase II Acid Rain Application/NO _X Compliance Plan	
Appendix A-1, Abbreviations, Definitions, Citations, and Identification N Appendix GG, Standards of Performance for Stationary Gas Turbines	umbers
Appendix H-1, Permit History	
Appendix I-1, List of Insignificant Emissions Units and/or Activities	
Appendix SS-1, Stack Sampling Facilities	•
Appendix TV-5, Title V Conditions	
Appendix U-1, List of Unregulated Emissions Units and/or Activities	
Table 1-1, Summary of Air Pollutant Standards and Terms	
Table 2-1, Compliance Requirements	
Table 297.310-1, Calibration Schedule	
Figure 1 - Summary Report-Gaseous and Opacity Excess Emission and	
Monitoring System Performance	



Department of Environmental Protection

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

Colleen M. Castille Secretary

Permittee:

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility 3600 County Road 555 Bartow, Florida 33831-0824

F1NAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

SIC No(s).: 49, 4911

Project: Title V Air Operation Permit Revision

The purpose of this permit is to revise and replace Title V Air Operation Permit, No. 1050217-002-AV, in order to incorporate the conditions of construction permit No. 1050217-004-AC, which was issued concurrently with the DRAFT of this Title V Air Operation Permit. This existing facility is located at 3600 County Road 555, Bartow, Polk County.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. 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.

Referenced attachments made a part of this permit:

Phase II Acid Rain Permit Application/NO_X Compliance Plan dated 7/2/02

Appendix GG, Standards Of Performance For Stationary Gas Turbines

Appendix I-1, List Of Insignificant Emissions Units And/Or Activities

Appendix SS-1, Stack Sampling Facilities Version Dated 10/07/96

Appendix TV-5, Title V Conditions Version Dated 03/28/05

Appendix U-1, List Of Unregulated Emissions Units And/Or Activities

Table 297.310-1, Calibration Schedule Version Dated 10/07/96

Figure 1 - Summary Report-Gaseous And Opacity Excess Emission And Monitoring System

Performance (40 CFR 60, July, 1996)

Effective Date: January 1, 2003

Revision Effective Date: July 18, 2006

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Joseph Kahn, P.E., Acting Director Division of Air Resource Management

JK/TLV/jk/jh

"More Protection, Less Process"

Printed on recycled paper.

Section I. Facility Information.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Subsection A. Facility Description.

This facility has a 126 MW combined cycle cogeneration unit which consists of 1 General Electric PG7111EA combustion turbine (CT), 1 Heat Recovery Steam Generator (HRSG) and 1 Secondary Boiler. The facility is fired with natural gas and new No. 2 fuel oil, with natural gas being the primary fuel and new No. 2 fuel oil as backup fuel.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received July 5, 2002, 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).

E.U. ID

No. Brief Description
-001 Combustion Turbine (CT) with HRSG
-002 Secondary Boiler

Unregulated Emissions Units and/or Activities

-003 No. 2 Fuel Oil Tank (720,000 gal)

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.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1: Summary of Air Pollutant Standards and Terms

Table 2-1: Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

Statement of Basis

These documents are on file with the permitting authority:

Renewed Title V Air Operation Permit effective January 1, 2003.

Title V Air Operation Permit Revision Application received Electronically on September 19, 2005.

Request for additional information dated November 18, 2005

Additional information response received January 17, 2006

Section II. Facility-wide Conditions.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
- b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 1.12(r)(6) of the CAA.
- c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

> Department of Community Affairs Division of Emergency Management 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100

Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center Post Office Box 1515 Lanham-Seabrook, MD 20703-1515 Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center

EPA Office of Solid Waste and Emergency Response

USEPA (5305 W) 401 M Street, SW Washington, D.C. 20460 Telephone: 1/800/424-8802

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Send the required annual registration fee using approved forms made payable to:

Cashier

Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

- 5. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
- 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time.

 [Rule 62-296.320(1)(a), F.A.C.]
- 8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: Cooling Tower Drift Losses Maintain proper water chemistry (pH & TDS) and equipment in accordance with the manufacturer's specifications; Abrasive Blast Activities When practical, use of partial or total enclosures and use of grit materials verses sand. Limit annual activities; Surface Coating Activities When practical, use of partial or total enclosures and limiting outdoor activities to times of favorable weather conditions to avoid off-site impacts; Dry Chemical Handling and Storage Clean-up spills immediately, good housekeeping practices; Lawn & Ground Maintenance Application of water to non-vegetative areas, as needed, landscaping and grass in other areas as necessary; Parking Areas Application of water as necessary; and, Paved and Unpaved Roads As needed, application of water, the removal of particulate matter from paved roads, limited site access to vehicles and vehicle speed limitations.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the Title V Air Operation Permit Renewal application received July 5, 2002]

{Permitting note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition No. 57. of APPENDIX TV-5, TITLE V CONDITIONS)}

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- 9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-5, TITLE V CONDITIONS.)}

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office.

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: (813) 632-7600; Fax: 813/744-6458

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960

Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit and Conditions.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Subsection A. This section addresses the following emissions units.

E.U. ID

No. Brief Description

-001 Combustion Turbine (CT) with HRSG

The combustion turbine (CT) is a GE PG7111EA model with a nameplate rating of 82 MW at ISO. The CT is allowed to burn natural gas or new No. 2 fuel oil. Natural gas is the primary fuel and new No. 2 fuel oil can be used permanently as back-up fuel. NO_X emissions are controlled by dry low- NO_X combustors and water-injection. The HRSG services a 44 MW steam generator and furnishes steam to other facilities. The CT and HRSG began commercial operation on August 10, 1994. This emissions unit is not subject the CAM requirements of 40 CFR 64 because the applicant has chosen to use the Acid Rain NO_X CEMS as a continuous compliance determination method.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; NSPS 40 CFR 60 Subpart A; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated February 21, 1994.}

In addition to the following specific conditions that apply to the emissions unit listed above, this emissions unit is also subject to the requirements of 40 CFR 60, Subpart GG, which are attached to this permit as Appendix GG - Standards of Performance for Stationary Gas Turbines:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The operation rate shall not exceed 912 MMBtw/hr (LHV) at ISO conditions. [Rules,62-4.160(2) & 62-210.200(PTE), F.A.C.; and 1050217-004-AC]

A.2. Methods of Operation - Fuels.

The permittee shall fire natural gas or new No. 2 fuel oil. The primary fuel shall be natural gas with new No. 2 fuel oil as backup fuel. The annual fuel consumption rates (based on operation at 20° F) for the turbine shall not exceed those listed below:

Natural Gas	New No. 2 Fuel Oil
MM ft3/yr	MM lbs/yr
8,877.4	40.0

New No. 2 fuel oil can be used permanently as backup fuel for no more than 720 hours per year. [Rule 62-213.410, F.A.C.; and, Permits AC53-211670 & 1050217-004-AC]

A.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

{Permitting note: Unless otherwise specified, the averaging time for conditions A.5. – A.10. are based on the specified averaging time of the applicable test method.}

A.4. All emission limits in Specific Conditions A.5. through A.10. are based on operation at 59°F and 60% relative humidity (ISO conditions).
[AC53-211670]

A.5. Nitrogen Oxides.

- 1. NO_X emissions shall not exceed 15 ppmvd @ 15% O₂ (52.7 lbs/hr and 230.7 TPY) when firing natural gas, based on a 4- hour rolling average as measured by the NO_X CEMS.
- 2. NO_X emissions shall not exceed 42 ppmvd @ 15% O_2 (164.0 lbs/hr and 59.0 TPY) when firing new No. 2 fuel oil, based on a 4- hour rolling average as measured by the NO_X CEMS. [AC53-211670 and BACT Determination dated February 21, 1994; and, 1050217-004-AC]
- A.6. NO_X Emissions During Start Up and Shut Down. The maximum allowable nitrogen oxide emissions resulting from a startup or shutdown of the CT shall not exceed an average of 52.7 lbs/hr when firing on natural gas nor 164.0 lbs/hr when firing on fuel oil, based on a 4-hour period commencing with the beginning of a start up or ending at the conclusion of a shut down of the unit. The 4-hour rolling average shall be based on all available data excluding calibration data and periods of emissions due to malfunction during the start up or shut down period. (Note: For excess emissions regarding malfunctions, see Specific Condition C.3.)

[Rule 62-210.700(5), F.A.C.; and, 1050217-004-AC]

A.7. Sulfur Dioxide. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.10 percent, by weight.

[AC53-211670 and BACT Determination dated February 21, 1994]

A.8. Reserved.

A.9. Carbon Monoxide. CO emissions shall not exceed 25 ppmvd @ 15% O₂ (53.0 lbs/hr and 232.0 TPY) when firing natural gas.

[AC53-211670 and BACT Determination dated February 21, 1994]

A.10. Carbon Monoxide. CO emissions shall not exceed 75.3 lbs/hr and 27.1 TPY when firing new No. 2 fuel oil.

[AC53-211670 and BACT Determination dated February 21, 1994]

Test Methods and Procedures

A.11. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not

constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

[40 CFR 60.8(c)]

- A.12. Compliance with standards in 40 CFR 60, other than opacity, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- A.13. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- A.14. <u>Circumvention</u>. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

 [40 CFR 60.12]
- A.15. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired. (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.)
 [40 CFR 60.335(a)]
- A.16. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f). (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.)
 [40 CFR 60.335(b)]
- A.17. The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 1072-96, D 3031-81(86), D 4084-94, D 3246-92, or the latest edition of the above ASTM methods shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.)
 [40 CFR 60.335(d)]

Page 8 of 26

A.18. The owner or operator shall determine compliance with the sulfur content standard in Specific Condition A.7. by using ASTM D 2880-96, or the latest edition. (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.)
[40 CFR 60.335(d)]

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

A.19. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.) [40 CFR 60.335(e)]

A.20. Reserved

Monitoring of Operations

- A.21. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
 - (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

(See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.) [40 CFR 60.334(b)(1) and (2)]

A.22. The permittee shall monitor sulfur content and nitrogen content of natural gas fired in the turbine as follows:

Custom Fuel Monitoring Schedule for Natural Gas

- 1. Monitoring of fuel nitrogen content shall not be required when firing natural gas.
- 2. Sulfur Monitoring:
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D 3246-92, and ASTM D4084-94, or the latest edition of the above ASTM methods as referenced in 40 CFR 60.335(d).
 - b. This custom fuel monitoring schedule became effective on August 8, 1994. Sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided

by the applicant which demonstrates consistent compliance with the requirements herein, the applicant may begin monitoring as per the requirements of 2(c).

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.
- d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be reexamined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change for reexamination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being reexamined.

(See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.) [40 CFR 60.334(b)(2); and, AC 53-211670]

Continuous Monitoring Requirements

- A.23. Use of NO_X CEMS For Continuous Compliance. Pursuant to 40 CFR 64.2(b)(1)(vi), the applicant has elected to use the existing certified Acid Rain NO_X continuous emissions monitors for continuous compliance in order to be exempted from the Compliance Assurance Monitoring (CAM) requirements contained in 40 CFR 64. The permittee shall keep calibrated, maintain, and operate continuous emissions monitors (CEMS) to measure and record emissions of nitrogen oxides (NO_X) and oxygen (O_2) in a manner sufficient to demonstrate compliance with the standards of this permit.
- (a) Performance Specifications. Each monitor shall be installed in a location that will provide emissions measurements representative of actual stack emissions. Each CEMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements. Each NO_X monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60.
- (b) Data Collection. Each CEMS shall be designed and operated to sample, analyze, and record emissions data evenly spaced over a 1-hour period during all periods of operation. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of the 1-hour block during which the unit combusted fuel. If the NO_X CEMS measures concentration on a wet basis, the permittee shall use DEP approved methods for correction of measured emissions to a dry basis (0% moisture). The O₂ (or CO₂) CEMS shall express the 1-hour emission rate values in terms of "percent oxygen by volume". The NO_X CEMS shall express the 1-hour emission averages in terms of "ppmvd corrected to 15% oxygen" for compliance with the BACT standard and, when requested by the Department, ISO corrected at 15% oxygen for the NSPS standard.
- (c) Compliance Averages. Compliance with the 4-hour rolling average NO_X emissions standards shall

be based on data collected by the CEMS. For purposes of determining compliance with the emission standards of this permit, missing data shall not be substituted. If monitoring data is authorized for exclusion (due to malfunction, or tuning), the 4-hour average shall be the average of the remaining valid 1-hour emission averages collected during actual operation. A 1-hour emissions average that includes any amount of oil firing shall only be included in the compliance average for oil firing. The CEMS used shall comply with 40 CFR 60.334(B)(2) (CFR dated 2004) which requires a minimum of 1 data point for each quadrant of a full unit operating hour or at least 2 data points (one in each of the two quadrants) when required quality assurance or maintenance activities are performed on the system.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- (d) Data Exclusion. Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall record emissions data at all times including episodes of startup, shutdown, malfunction and combustor tuning. Emissions data recorded during periods of malfunctions or combustor tuning may only be excluded from the compliance averages in accordance with the requirements previously specified in this permit. To the extent practicable, the permittee shall minimize the duration of data excluded for malfunctions and combustor tuning, unless specifically authorized in writing by the department's district office for longer periods. Data recorded during malfunctions or combustor tuning shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during startup, shutdown, malfunction and combustor tuning. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. Excluded emissions data shall be summarized in the required quarterly report.
- (e) Monitor Availability. Monitor availability shall not be less than 95% in any calendar quarter. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

[Rules 62-204.800, 62-210.700, 62-213.440, 62-4.070(3), 62-4.130, 62-4.160(8), F.A.C.; 40 CFR 60.7; and Applicant Request].

- A.24. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
 - (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4)]

A.25. Alternate Monitoring Plan for Measuring NSPS Excess Emissions.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_X emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_X emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_X and O₂ monitors. (See attached Appendix GG, Standards of Performance for Stationary Gas Turbines for specific details.)
 - 1. At applicant request, the Acid Rain NO_x CEM data shall be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(b), Subpart GG (CFR dated 2004). The calibration of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) (CFR dated 2004) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS.
 - 2. When requested by the Department, the CEMS emission rates for NO_X on these units shall be corrected to ISO conditions to demonstrate compliance with the NO_X standards established in 40 CFR 60.332. With regard to NSPS Subpart GG, the NO_X CEMS data shall also be used to report excess emissions in accordance with 40 CFR 60.334(j)(1)(iii) and 40 CFR 60.7(c).

[40 CFR 60.334(a)&(b); and Applicant Request]

Recordkeeping and Reporting Requirements

A.26. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results.

[AC 53-211670]

A.27. Records of sample analysis and fuel supply pertinent to the "Custom Fuel Monitoring Schedule for Natural Gas" in Specific Condition A.22. shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[AC 53-211670]

A.28. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

a. Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas

urbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a). (See also APPENDIX GG, Standards of Performance for Stationary Gas Turbines, attached.)

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

A.29. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

- A.30. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
 - (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
 - (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2)]

- A.31. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or

operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

A.32. The permittee shall maintain a file of all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f) and Rule 62-213.440(1)(b)2.b., F.A.C.]

A.33. Monitoring and Reporting Requirements.

- 1. The permittee shall monitor the emissions of NO_X; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years from the issuance date of this permit. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
- 2. The permittee shall report to the Department within 60 days after the end of each year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - a. The name, address and telephone number of the owner or operator of the major stationary source;
 - b. The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
 - c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and,
 - d. Any other information that the owner or operator wishes to include in the report.
- 3. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1. and 2., F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

[Rule 62-212.300(1)(e), F.A.C.]

A.34. Computation of Emissions.

- 1. Because the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute NO_X emissions.
- 2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - a. A calibrated flowmeter that records data on a continuous basis, if available; or

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

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

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

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

A.35. This emissions unit is also subject to the conditions contained in Subsection C. Common Conditions.

Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility

Subsection B. This section addresses the following emissions unit(s).

E.U. ID

No. Brief Description
-002 Secondary Boiler

The secondary boiler is for auxiliary steam. It is fired by natural gas. A portion of the exhaust gas from the combustion turbine is vented through the secondary boiler. NO_X emissions are controlled with drylow NO_X combustion technology. This emissions unit began commercial operation on August 10, 1994.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

{Permitting notes: The emissions unit is regulated under: 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated February 21, 1994. Subpart Dc does not specify any emissions standards for units that combust only natural gas. Therefore, only the NSPS, Subpart Dc requirements for notification and record keeping apply.}

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The operation rate shall not exceed 99 MMBtu/hr (LHV) at ISO conditions. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

B.2. Methods of Operation - Fuels.

The only fuel allowed to be burned is natural gas. The fuel consumption rates (based on operation at 20° F) for the secondary boiler shall not exceed those listed below:

Natural Gas As Tolking			
M ft3/hr	MM ft3/vr		

104.2

<u>MM ft3/γτ</u> 450.2

B.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging time for conditions B.4. – B.8. are based on the specified averaging time of the applicable test method.}

^{*}Based on maximum firing rate for 4,320 hours per year. [Rule 62-213.410, F.A.C.; and, AC 53-211670]

Northern Star Generation Services Company LLC FINAL Permit No.: 1050217-005-AV Mulberry Cogeneration Facility

B.4. Nitrogen Oxides. NOx emissions shall not exceed 18.3 lbs/hr and 80.0 TPY when firing natural

Facility ID No.: 1050217

[AC53-211670 and BACT Determination dated February 21, 1994]

B.5. Nitrogen Oxides. NO_X emissions shall not exceed 23.4 lbs/hr and 8.4 TPY when firing new No. 2 fuel oil in the combustion turbine.

[AC53-211670 and BACT Determination dated February 21, 1994]

B.6. Sulfur Dioxide. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.10 percent, by weight.

[AC53-211670 and BACT Determination dated February 21, 1994]

B.7. Carbon Monoxide. CO emissions shall not exceed 12.6 lbs/hr and 55.2 TPY when firing natural

[AC53-211670 and BACT Determination dated February 21, 1994]

B.8. Carbon Monoxide. CO emissions shall not exceed 13.4 lbs/hr and 4.8 TPY when firing new No. 2 fuel oil in the combustion turbine.

[AC53-211670 and BACT Determination dated February 21, 1994]

- B.9. Visible Emissions Testing Annual. By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit unless it operates more than 400 hours per year. [Rule 62-297.310(7)(a)4., F.A.C.]
- B.10. This emissions unit is also subject to the conditions contained in Subsection C. Common Conditions.

Page 17 of 26

Subsection C. Common Conditions.

E.U. ID

No. Brief Description

-001 Combustion Turbine with HRSG

-002 Secondary Boiler

The following specific conditions apply to the emissions units listed above:

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging time for conditions C.1. - C.2 are based on the specified averaging time of the applicable test method.}

- C.1. <u>Visible Emissions</u>. Visible emissions shall not exceed 10 percent opacity when firing natural gas. [AC53-211670]
- C.2. <u>Visible Emissions</u>. Visible emissions shall not exceed 20 percent opacity when firing new No. 2 fuel oil in the combustion turbine.

 [AC53-211670]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.3. Excess emissions resulting from a malfunction of the Combustion Turbine, or from startup, shutdown, or malfunction of the Secondary Boiler, shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1) & (5), F.A.C.]

- C.4. 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.

 [Rule 62-210.700(4), F.A.C.]
- C.5. Excess emissions resulting from a combustor tuning session shall be permitted provided the tuning session is performed in accordance with the manufacturer's specifications and in no case shall exceed 72 hours in any calendar year. A "tuning session" would occur after a combustor change-out, a repair to a combustor, or as required to maintain proper operation. Prior to performing any tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least 1 day that details the activity and proposed tuning schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.

[Rule 62-210.700(1) & (5), F.A.C.; and, 1050217-004-AC]

Test Methods and Procedures

C.6. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

[Rule 62-297.310(1), F.A.C.]

C.7. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

C.8. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

C.9. Applicable Test Procedures.

(a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons
- per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

C.10. Determination of Process Variables.

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

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

- C.11. The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- C.12. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- 4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

C.13. Annual compliance with the NO_X, CO, SO₂ and visible emission standards shall be determined by the following reference methods as described in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C.

NO_x: EPA Method 20 or Method 7E

CO: EPA Method 10

SO₂: Fuel supplier's sulfur analysis

VE: EPA Method 9

The owner or operator is allowed to make compliance demonstrations for NO_X emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_X monitor. The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified 40 CFR 60.335(c).

[AC 53-211670 & 1050217-003-AC]

Continuous Monitoring Requirements

C.14. The power output from the generators shall be metered and continuously recorded. The data shall

be logged daily and maintained so that it can be provided to DEP upon request. [AC 53-211670]

Recordkeeping and Reporting Requirements

C.15. The owner of operator shall notify the Southwest District Office of the Department, in writing, at least 15 days prior to the date on which each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9., F.A.C.]

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

C.16. In case of excess emissions resulting from malfunctions, Polk Power Partners, L.P. shall notify the Department's Southwest District Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

C.17. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Reasonable Assurances

C.18. Any other operating parameters established during compliance testing and/or inspections, that will ensure the proper operation of this facility, are considered part of this operating permit. Said operating parameters include, but are not limited to: Fuel flow rate and heat input rate.

[Rule 62-4.070(3), F.A.C.]

Section IV. This section is the Acid Rain Part.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Operated by: Polk Power Partners, L.P.

ORIS code: 54426

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions unit(s) listed below are regulated under Acid Rain, Phase II.

E.U. ID

No. Brief

Brief Description

-001 Combustion Turbine with HRSG

A.1. The Phase II permit application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. DEP Form No. 62-210.900(1)(a), dated July 2, 2002 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
-001	01	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

^{*}The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

- A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
- 1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-

Northern Star Generation Services Company LLC

Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Track Revisions of Acid Rain Parts.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Comments, notes, and justifications: none

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

Referenced Attachments

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Phase II Acid Rain Application/NO_X Compliance Plan

Appendix A-1, Abbreviations, Definitions, Citations, and Identification
Numbers

Appendix GG, Standards of Performance for Stationary Gas Turbines

Appendix H-1, Permit History

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix SS-1, Stack Sampling Facilities

Appendix TV-5, Title V Conditions

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Compliance Requirements

Table 297.310-1, Calibration Schedule

Figure 1 - Summary Report-Gaseous and Opacity Excess Emission and
Monitoring System Performance

Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV
Facility ID No.: 1050217

Phase II Acid Rain Permit Application/NO_X Compliance Plan

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

Revised

STEP 1 Identify the source by plant name, State, and ORIS code

Plant Name Mulberry Cogeneration Facility	State FL	ORIS Code 54426

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column *a.* For new units, enter the requested information in columns "c" and "d."

đ а þ c Unit ID# Unit will **New Units New Units** hold allowances in accordance with 40 CFR Commence Monitor 72.9(c)(1) Operation Date Certification Deadline

1.	Yes	Existing Unit	Existing Unit Already Certified
	Yes		
1	Yes		
	Yes		
·	Yes		
	Yes		
	Yes		
	Yes		

DEP Form No. 62-210.900(1)(a) - Form

Effective: C6/16/03

Mulberry Cogeneration Facility

Plant Name (from Step 1)

STEP 3 Read the standard requirements

Acid Rain Part Requirements

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules \$2-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
 - (ii) Have an Acid Rain Part.

Manitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sultur Dioxide Requirements

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73 34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows: (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be constitued to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right,

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall compty with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Recording Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 52-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply:
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

DEP Form No. 62-210.900(1)(a) - Form Effective: 06/16/03

STEP 3. Cont'd.

Mulberry Cogeneration Facility

Plant Name (from Step 1)

Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72 7 or 72.8, including any requirement for the payment of any penalty ewed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 13 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a prevision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase It repowering extension plans) and 40 CFR 75.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 75, 77, and 73 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or.
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

Read the certification statement, sign, and date

STEP 4

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of mose individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name David A. Kellermeyer		
Signature David A. Kellumy	Date	Oct. 26, 2005

DEP Form No. 62-210.900(1)(a) - Form

Effective: CE/16/03

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Appendix A-1, Abbreviations, Definitions, Citations, and Identification Numbers (Version Dated 2/5/97)

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit

BACT: Best Available Control Technology

CFR: Code of Federal Regulations

DEP: State of Florida, Department of Environmental Protection

DARM: Division of Air Resource Management EPA: United States Environmental Protection Agency

F.A.C.: Florida Administrative Code

F.S.: Florida Statute

ISO: International Standards Organization

LAT: Latitude LONG: Longitude

MMBtu: million British thermal units

MW: Megawatt

ORIS: Office of Regulatory Information Systems

SOA: Specific Operating Agreement UTM: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 reference to Title 40

CFR reference to Code of Federal Regulations

60 reference to Part 60

60.334 reference to Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213, F.A.C.]

Where: 62 reference to Title 62

62-213 reference to Chapter 62-213

62-213.205 reference to Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97) (continued)

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01

AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Appendix GG. Standards of Performance for Stationary Gas Turbines (Version Dated 7/08/04)

Appendix GG-Standards of Performance for Stationary Gas Turbines

§ 60.330 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of § 60.332.

§ 60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.
- (b) Simple cycle gas turbine means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.
- (c) Regenerative cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.
- (d) Combined cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.
- (e) Emergency gas turbine means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.
- (f) Ice fog means an atmospheric suspension of highly reflective ice crystals.
- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (h) Efficiency means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.
- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.

- (k) Fire-fighting turbine means any stationary gas turbine that is used solely to pump water for extinguishing fires.
- (l) Turbines employed in oil/gas production or oil/gas transportation means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
- (m) A Metropolitan Statistical Area or MSA as defined by the Department of Commerce.
- (n) Offshore platform gas turbines means any stationary gas turbine located on a platform in an ocean.
- (o) Garrison facility means any permanent military installation.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combuster inlet pressure, combuster inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) Electric utility stationary gas turbine means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.
- (r) Emergency fuel is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
- (s) Unit operating hour means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
- (t) Excess emissions means a specified averaging period over which either:
 - (1) The NO_X emissions are higher than the applicable emission limit in Sec. 60.332;
- (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in Sec. 60.333; or
- (3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.
- (u) Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

- (v) Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.
- (w) Lean premix stationary combustion turbine means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (x) Diffusion flame stationary combustion turbine means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (y) Unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

§ 60.332 Standard for nitrogen oxides.

- (a) On and after the date on which the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.
- (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_X emission concentration (percent by volume at 15 percent oxygen and on a dry basis), Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and $F = NO_X$ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_X emission concentration (percent by volume at 15 percent oxygen and on a dry basis), Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and F = NOX emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

- (3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO_X allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.
- (4) If the owner or operator elects to apply a NO_X emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under Sec. 60.8 as follows:

Fuel-bound nitrogen (% by we	ight) F (NO _X % by volum	<u>e)</u>
N≤0.015 0.015 <n≤0.1< th=""><th></th><th>·</th></n≤0.1<>		·
0.1 <n≤0.25< td=""><td></td><td>•</td></n≤0.25<>		•
N>0.25	0.005	
		·

Where:

N = the nitrogen content of the fuel (percent by weight).or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by Sec. 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

- (b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.
- (c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

- (d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in § 60.332(b) shall comply with paragraph (a)(2) of this section.
- (e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.
- (f) Stationary gas turbines using water or steam injection for control of NO_X emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
- (g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.
- (h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.
- (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a caseby-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
- (j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.
- (k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.
- (1) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

§ 60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by § 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

§ 60.334 Monitoring of operations.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_X emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_X emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_X and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NO_X concentrations to 15 percent O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_X and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:
 - (i) On a ppm basis (for NO_x) and a percent O2 basis for oxygen; or
 - (ii) On a ppm at 15 percent O2 basis; or
- (iii) On a ppm basis (for NO_X) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NO_X data to 15 percent O2).
- (2) As specified in Sec. 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in Sec. 60.13(h).
- (i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_X and diluent, the data acquisition and handling system must calculate and record the hourly NO_X emissions in the units of the applicable NO_X emission standard under Sec. 60.332(a), i.e., percent NO_X by volume, dry basis, corrected to 15 percent O2 and International Organization for Standardization (ISO) standard conditions (if required as given in Sec. 60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19.0 percent O2 may be used in the emission calculations.

- (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.
- (iii) If the owner or operator has installed a NO_X CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in Sec. 60.7(c).
- (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_X emissions, the owner or operator may, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA or local permitting authority approval of a petition for an alternative procedure of continuously monitoring compliance with the applicable NO_X emission limit under Sec. 60.332, that approved procedure may continue to be used, even if it deviates from paragraph (a) of this section.
- (d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_X emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_X CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.
- (e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO_X emissions may elect to use a NO_X CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. An acceptable alternative to installing a CEMS is described in paragraph (f) of this section.
- (f) The owner or operator of a new turbine who elects not to install a CEMS under paragraph (e) of this section, may instead perform continuous parameter monitoring as follows:
- (1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_X formation characteristics and shall monitor these parameters continuously.
- (2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in the lean premixed (low- NO_X) combustion mode.
- (3) For any turbine that uses SCR to reduce NO_X emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.
- (4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_X emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in Sec. 75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in Sec. 75.19(c)(1)(iv)(H) of this chapter.

- (g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under Sec. 60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in Sec. 75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in Sec. 75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.
- (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:
- (1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see Sec. 60.17), which measure the major sulfur compounds may be used; and
- (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in Sec. 60.332). The nitrogen content of the fuel shall be determined using methods described in Sec. 60.335(b)(9) or an approved alternative.
- (3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in Sec. 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
- (4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
- (i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:

- (1) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
- (2) Gaseous fuel. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- (3) Custom schedules. Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Sec. 60.333.
- (i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:
- (A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.
- (B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.
- (C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:
- (1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.
- (2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.
- (3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.
- (D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur

content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.

(ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

(A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (i.e., the maximum total sulfur content of natural gas as defined in Sec. 60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.

(B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.

(C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.

(D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.

- (j) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Sec. 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - (1) Nitrogen oxides.
 - (i) For turbines using water or steam to fuel ratio monitoring:
- (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.332, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.
- (B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
- (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).
- (ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.
- (A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in Sec. 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and

ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(iii) For turbines using NO_x and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_X concentration exceeds the applicable emission limit in Sec. 60.332(a)(1) or (2). For the purposes of this subpart, a `'4-hour rolling average NO_X concentration" is the arithmetic average of the average NO_X concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under Sec. 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_X concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_X concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).

(iv) For turbines required under paragraph (f) of this section to monitor combustion parameters or parameters that document proper operation of the NO_X emission controls:

(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

- (2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:
- (i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a

required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

- (3) Ice fog. Each period during which an exemption provided in § 60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
- (4) Emergency fuel. Each period during which an exemption provided in § 60.332(k) is in effect shall be included in the report required in § 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
- (5) All reports required under Sec. 60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter.

Sec. 60.335 Test methods and procedures.

- (a) The owner or operator shall conduct the performance tests required in Sec. 60.8, using either
 - (1) EPA Method 20,
 - (2) ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or
- (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_X and diluent concentration.
- (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- (5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:
 - (i) You may perform a stratification test for NO_X and diluent pursuant to
 - (A) [Reserved]
- (B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.
- (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O2, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_X concentration during the stratification test; or
- (B) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O2, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.
- (6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.

- (b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Sec. 60.332 and shall meet the performance test requirements of Sec. 60.8 as follows:
- (1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{Xo}) corrected to 15 percent O2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$NO_X = (NO_{Xo})(P_o/P_o)^{0.5} e^{19(H_o-0.00633)} (288[deg]K/Ta)^{1.53}$$

Where:

 NO_X = emission concentration of NO_X at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis,

 NO_{Xo} = mean observed NO_X concentration, ppm by volume, dry basis, at 15 percent O2,

 P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,

P_a = observed combustor inlet absolute pressure at test, mm Hg,

H_o = observed humidity of ambient air, g H2O/g air,

e = transcendental constant, 2.718, and

 $T_a = ambient temperature, [deg]K$.

- (2) The 3-run performance test required by Sec. 60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in Sec. 60.331).
- (3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_X emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_X emission limit in Sec. 60.332 for the combustion turbine must still be met.
- (4) If water or steam injection is used to control NO_N with no additional post-combustion NO_N control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with Sec. 60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable Sec. 60.332 NO_N emission limit.
- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in Sec. 60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in Sec. 60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.

- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
- (7) If the owner or operator elects to install and certify a NO_X CEMS under Sec. 60.334(e), then the initial performance test required under Sec. 60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
- (ii) Use the test data both to demonstrate compliance with the applicable NO_X emission limit under Sec. 60.332 and to provide the required reference method data for the RATA of the CEMS described under Sec. 60.334(b).
 - (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator is required under Sec. 60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO_X emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in Sec. 60.334(g).
- (9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
- (i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
- (10) If the owner or operator is required under Sec. 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.
- (11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in Sec. 60.8 to ISO standard day conditions.

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Appendix H-1, Permit History

Appendix H-1: Permit History

orthern Star Generation Services Company, LLC. alberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type 1
All	Facility	AC53-211670/ PSD-FL-187	11/24/1992	12/31/1995	Construction (new)
All	Facility	AC53-211670/ PSD-FL-187	8/3/1994	12/31/1997	Construction (mod.)
All	Facility	1050217-001-AV	01/01/1998	12/31/2002	Initial
-001	Combustion Turbine (CT) with HRSG	1050217-003-AC/ PSD-FL-187A	10/28/2002	10/28/2007	Construction (mod.)
All	Facility	1050217-002-AV	01/01/2003	12/31/2007	Renewal
All	Facility	1050217-004-AC	05/05/2006	3/15/2007	Construction (mod.)
All	Facility	1050217-005-AV	07/18/06	12/31/2007	Revision

¹ Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

Northern Star Generation Services Company LLC

Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix I-1: List of Insignificant Emissions Units and/or Activities.

FINAL Permit No.: 1050217-005-AV

Facility ID No.: 1050217

Northern Star Generation Services Company, LLC. Mulberry Cogeneration Facility

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

- 1. Comfort heating < 1 MMBtu/hr
- 2. Internal combustion engines mobile sources
- 3. Non-industrial vacuum cleaning
- 4. Refrigeration equipment
- 5. Vacuum pumps for labs
- 6. Steam cleaning equipment
- 7. Sanders < 5 sq. ft.
- 8. Lab equipment used for chemical or physical analyses
- 9. Brazing, soldering or welding equipment
- 10. Emergency generators < 32,000 gal/yr
- 11. General purpose engines < 32,000 gal/yr
- 12. Fire and safety equipment
- 13. Surface coating > 5% VOC; 6 gal/month
- 14. Surface coating < 5% VOC
- 15. Freshwater cooling towers. The cooling towers do not use chromium-based treatment chemicals.

Northern Star Generation Services Company LLC
Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: -1050217

Appendix SS-1; Stack Sampling Facilities (version dated 10/7/96) Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis,

shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter

upstream from any fan, bend, constriction or other flow disturbance.

- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
- 3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
- 4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) (continued)

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.
 (f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

 (g) Sampling Equipment Support.
- 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
- a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

- c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
- 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test. [Rule 62-297.310(6), F.A.C.]

Northern Star Generation Services Company LLC Mulberry Cogeneration Facility

FINAL Permit No.: 1050217-005-AV Facility ID No.: 1050217

Appendix TV-5, Title V Conditions (version dated 3/28/05)

APPENDIX TV-5, TITLE V CONDITIONS (version dated 03/28/05)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

[Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.]

Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedures to Obtain Permits and Other Authorizations: Applications.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except, when the application is for renewal of an air pollution operation permit at a non-Title V source as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
 - (b) When an application is received without the required fee, the Department shall acknowledge receipt of the application and shall immediately notify the applicant that the required fee was not received and advise the applicant of the correct fee. The Department shall take no further action until the correct fee is received. If a fee was received by the Department which is less than the amount required, the Department shall return the fee along with the written notification.
 - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876. F.S., shall begin.
 - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
 - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application for the same time duration except for modification under Chapter 62-45, F.A.C. [Rule 62-4:050, F.A.C.]

- 3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]
- 4. Modification of Permit Conditions.
- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following: (also, see Condition No. 38.).
 - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.
[Rule 62-4.090, F.A.C.]

6. Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the his agent:
 - (a) Submitted false or inaccurate information in his application or operational reports.
 - (b) Has violated law, Department orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Department rules.
 - (d) Has refused lawful inspection under Section 403.091, F.S.
- (4) No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

 [Rule 62-4.100, F.A.C.]

7. Not federally enforceable. <u>Financial Responsibility</u>. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

8. Transfer of Permits.

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. [Rule 62-4.120, F.A.C.]
- 9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. (also, see Condition No. 10.).

[Rule 62-4.130, F.A.C.]

- 10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". [also, see Conditions Nos. 9. and 12.(8).]
 [40 CFR 70.6(a)(3)(iii)(B)]
- 11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

 [Rule 62-4.150, F.A.C.]
- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in Subsections 403.087(7) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and 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 F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (also, see Condition No. 10.)
 - (a) A description of and cause of noncompliance; and,
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least tive (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;

- 5. the analytical techniques or methods used;
- 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
 - (a) A completed application on forms furnished by the Department.
 - (b) An engineering report covering:
 - 1. plant description and operations,
 - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
 - 3. proposed waste control facilities,
 - 4. the treatment objectives,
 - 5. the design criteria on which the control facilities are based, and,
 - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S., and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

 [Rule 62-4.210, F.A.C.]
- 14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources the applicant shall submit the appropriate fee and certification that construction was completed, noting any deviations from the conditions in the construction permit and test results where appropriate.

 [Rule 62-4.220, F.A.C.]

Chapters 23-106 and 62-110, F.A.C.

- 15. <u>Public Notice, Public Participation, and Proposed Agency Action</u>. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C. [Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]
- 16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C. [Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.]

Chapter 62-204, F.A.C.

17. <u>Asbestos.</u> This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204-800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
- (1) Air Construction Permits.
 - (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
 - (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
 - 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
 - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;
 b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
 - c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(10)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(10)(d)2.. Rule 62-212.400, or Rule 62-212.500, F.A.C., as appropriate.
 - 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.

 3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in Chapter 62-210, F.A.C., or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-213, F.A.C., and Chapter 62-4, F.A.C.

- (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
 - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
 - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
 - Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.
 - d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
 - 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. Not federally enforceable. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.
 - (a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
 - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

- 20. Emissions Unit Reclassification.
- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed

permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Transfer of Air Permits.

- (a) An air permit is transferable only after submission of an Application for Transfer of Air Permit (DEP Form 62-210.900(7)) and Department approval in accordance with Rule 62-4.120, F.A.C. For Title V permit transfers only, a complete application for transfer of air permit shall include the requirements of 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C. Within 30 days after approval of the transfer of permit, the Department shall update the permit by an administrative permit correction pursuant to Rule 62-210.360, F.A.C.
- (b) For an air general permit, the provision of Rules 62-210.300(7)(a) and 62-4.120, F.A.C., do not apply. Thirty (30) days before using an air general permit, the new owner must submit an air general permit notification to the Department in accordance with Rule 62-210.300(4), F.A.C., or Rule 62-213.300(2)(b), F.A.C. [Rule 62-210.300(7), F.A.C.]

22. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
 - (a) A notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
 - 1. An air construction permit;
 - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
 - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
 - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-110.106, F.A.C. A public notice under Rule 62-210.350(1)(a)1., F.A.C., for an air construction permit may be combined with any required public notice under Rule 62-210.350(1)(a)2. or 3., F.A.C., for air operation permits. If such notices are combined, the public notice must comply with the requirements for both notices.
 - (c) Except as otherwise provided at Rules 62-210.350(2) and (5), F.A.C., each notice of intent to issue an air construction permit shall provide a 14-day period for submittal of public comments.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment Area Preconstruction Review.
 - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved:
 - 2. A 30-day period for submittal of public comments: and,
 - 3. A notice, by advertisement in a newspaper of general circulation in the country affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1, above; and, notifying the public of the opportunity for submitting comments and requesting a public hearing.
 - (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
 - (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U.S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance

over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.

- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C.; is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:
 - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
 - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
 - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and
 - 2. A 30-day period for submittal of public comments.
 - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a), F.A.C.
 - (c) The notice shall identify:
 - 1. The facility;
 - 2. The name and address of the office at which processing of the permit occurs;
 - 3. The activity or activities involved in the permit action;
 - 4. The emissions change involved in any permit revision;
 - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
 - 6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;
 - 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and
 - 8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rules 62-210.350(1) thru (3), F.A.C.]

- 23. Administrative Permit Corrections.
- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (a) Typographical errors noted in the permit;
 - (b) Name, address or phone number change from that in the permit;
 - (c) A change requiring more frequent monitoring or reporting by the permittee;
 - (d) A change in ownership or operational control of a facility, subject to the following provisions:
 - 1. The Department determines that no other change in the permit is necessary;
 - 2. The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
 - 3. The new permittee has notified the Department of the effective date of sale or legal transfer.
 - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (f) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
 - (g) Any other similar minor administrative change at the source.
- (2) Upon receipt of any such notification, the Department-shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- (4) For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

[Rule 62-210.360, F.A.C.]

24. Reports.

- (3) Annual Operating Report for Air Pollutant Emitting Facility.
 - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
 - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

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

- 25. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
- 26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Forms 62-210.900(1),(3),(4) and (5), F.A.C., including instructions, are available from the Department as hard-copy documents or executable files on computer diskettes. Copies of forms (hard-copy or diskette) may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Notwithstanding the requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate, if an air permit application is submitted using the Department's electronic application form, only one copy of the diskette and signature pages is required to be submitted.
- (1) Application for Air Permit Title V Source, Form and Instructions (Effective 02/11/1999).
 - (a) Acid Rain Part (Phase II), Form and Instructions (Effective 04/16/2001).
 - 1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995).
 - 2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).
 - 3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001).
 - 4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).
 - 5. Phase Il NOx Averaging Plan, Form (Effective 01/06/1998).
 - (b) Reserved.
- (5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).
- (7) Application for Transfer of Air Permit Title V and Non-Title V Source, (Effective 04/16/2001).

[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

27. Responsible Official.

- (1) Each Title V source must identify a responsible official on each application for Title V permit, permit revision, and permit renewal. For sources with only one responsible official, this is how the Title V source designates the responsible official.
- (2) Each Title V source may designate more than one responsible official, provided a primary responsible official is designated as responsible for the certifications of all other designated responsible officials. Any action taken by the primary responsible official shall take precedence over any action taken by any other designated responsible official.
- (3) Any facility initially designating more than one responsible official or changing the list of responsible officials must submit a Responsible Official Notification Form (DEP Form No. 62-213.900(8)) designating all responsible officials for a Title V source, stating which responsible official is the primary responsible official, and providing an effective date for any changes to the list of responsible officials. Each individual listed on the Responsible Official Notification Form must meet the definition of responsible official given at Rule 62-210.200, F.A.C.
- (4) A Title V source with only one responsible official shall submit DEP Form No. 62-213.900(8) for a change in responsible official.
- (5) No person shall take any action as a responsible official at a Title V source unless designated a responsible official as required by this rule, except that the existing responsible official of any Title V source which has a change in responsible official during the term of the permit and before the effective date of this rule may continue to act as a responsible official until the first submittal of DEP Form No. 62-213.900(8) or the next application for Title V permit, permit revision or permit renewal, whichever comes first. [Rules 62-213.202(1) thru (5), F.A.C.]
- 28. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.
- (1)(g) If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, Florida Statutes. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
- (1)(i) Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
- (1)(j) A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.

[Rules 62-213.205, (1)(g), (1)(i) & (1)(j), F.A.C.]

- 29. Reserved.
- 30. Reserved.
- 31. Air Operation Permit Fees No permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

 [Rule 62-213.205(4), F.A.C.]
- 32. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C., except those Title V sources permittable pursuant to Rule 62-213 300, F.A.C., Title V Air General Permits.
- (1) No Title V source may operate except in compliance with Chapter 62-213, F.A.C.

- (2) Except as provided in Rule 62-213.410, F.A.C., no source with a permit issued under the provisions of Chapter 62-213, F.A.C., shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the following:
 - (a) Constitutes a modification;
 - (b) Violates any applicable requirement;
 - (c) Exceeds the allowable emissions of any air pollutant from any unit within the source;
 - (d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;
 - (e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapters 62-212 or 62-296, F.A.C.;
 - (f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;
 - (g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.;
 - (h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(e), (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;
 - (i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1), (2), or (3), (b)(1) or (b)(3), hereby incorporated by reference;
 - (j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source;

[Rules 62-213.400(1) & (2), F.A.C.]

- 33. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- (1) Permitted sources may change among those alternative methods of operation;
- (2) A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (3) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]
- 34. Immediate Implementation Pending Revision Process.
- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to 42 USC 7412(a) or to 40 CFR 52.01, 60.2, or 61.15, adopted and incorporated by reference at Rule 62-204.800, F.A.C., may implement such change prior to final issuance of a permit revision, provided the change:
 - (a) Does not violate any applicable requirement;
 - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
 - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.:
 - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.
- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or. If the Title V source has submitted a construction permit application

conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action on the operation permit revision application until all the requirements of Rules 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.

- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit. If any terms and conditions of the new or revised construction permit have not been complied with prior to the issuance of the draft operation permit revision, the operation permit shall include a compliance plan in accordance with the provisions of Rule 62-213.440(2), F.A.C.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, F.A.C., and Rules 62-4.050(1) through (3), F.A.C.
 - (a) Timely Application.
 - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
 - (b) Complete Application.
 - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change(s) from the currently effective Title V permit and any other requirements that become applicable at the time of application. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
 - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4. F.A.C.
 - 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.
 - 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested

and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. (also, see Condition No. 50.) [Rule 62-213.420(2), F.A.C.]
- 37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C.. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
 [Rule 62-213.420(3), F.A.C.]
- 38. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.
- b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40 CFR 70.7(t)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:
 - o 40 CFR 70.7(f): Reopening for Cause. (also, see Condition No. 4.)
 - (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
 - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
 - (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

- 39. Insignificant Emissions Units or Pollutant-Emitting Activities.
- (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
- (b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:
 - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s);
 - 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 40. <u>Permit Duration.</u> Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years, provided that the initial Acid Rain Part may be issued for a term less than five years where necessary to coordinate the term of such part with the term of a Title V permit to be issued to the source. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five years. [Rule 62-213.440(1)(a), F.A.C.]
- 41. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

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

[Rule 62-213.440(1)(b)2.b., F.A.C.]

- 43. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

 [Rule 62-213.440(1)(b)3.a., F.A.C.]
- 44. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. [Rule 62-213.440(1)(b)3.b., F.A.C.]
- 45. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- 46. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- 47. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

 [Rule 62-213.440(1)(d)3., F.A.C.]

- 48. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 49. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- 50. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. (also, see Condition No. 36.).
 [Rule 62-213.440(1)(d)6., F.A.C.]
- 51. Statement of Compliance. (a)2. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C. Such statements shall be submitted (postmarked) to the Department and EPA:
 - a. Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
 - b. Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- 3. The statement of compliance status shall include all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C.
- (b) The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

- 52. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

 [Rule 62-213.460, F.A.C.]
- 53. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)
- (7) Statement of Compliance Form. (Effective 06/02/2002)
- (8) Responsible Official Notification Form. (Effective 06/02/2002)

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

Chapter 62-256, F.A.C.

54. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source. [Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

- 55. <u>Refrigerant Requirements</u>. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (lifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.35 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166:
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

Chapter 62-296, F.A.C.

- 56. Industrial, Commercial, and Municipal Open Burning Prohibited. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
 - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
 - (b) An emergency exists which requires immediate action to protect human health and safety; or
 - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

57. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

- 3. 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.
 - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - e. Landscaping or planting of vegetation.
 - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - g. Contining abrasive blasting where possible.
 - h. Enclosure or covering of conveyor systems.

APPENDIX TV-5, TITLE V CONDITIONS (version dated 03/28/05) (continued)

4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

[electronic file name: tv-5.doc]

Appendix U-1, List of Unregulated Emissions Units and/or Activities

FINAL Permit No.: 1050217-005-AV

Northern Star Generation Services Company LLC

Attachment MC-EU1-IV3
Alternative Methods of Operation

Alternative Methods of Operation - Emission Unit 001

The alternative methods of operation include the following:

- Natural Gas Firing in the Combustion Turbine with emissions directed through Emission Point EU 001.
- Natural Gas Firing in the Combustion Turbine with a portion of the emissions directed through Secondary Boiler (firing Natural Gas) and exhausted through Emission Point EU 002.
- Distillate Oil Firing in the Combustion Turbine with emissions directed through Emission Point EU001.
- Distillate Oil Firing in the Combustion Turbine with a portion of the emissions directed through Secondary Boiler (firing Natural Gas) and exhausted through Emission Point EU 002.

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.

Attachment MC-EU1-IV4
Acid Rain Part Application

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is:

New

X Revised

STEP 1 Identify the source by plant name, State, and ORIS code

Plant Name: Mulberry Cogeneration State: Florida ORIS Code: 54426

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

Unit ID#

b

С

d

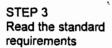
Unit will hold allowances in accordance with 40 CFR 72.9(c)(1) **New Units**

New Units

Commence Operation Date Monitor Certification Deadline

001	Yes	Existing Unit	Existing Unit already certified
	Yes		•
	Yes		
	Yes		·
	Yes		
	Yes		

DEP Form No. 62-210.900(1)(a) - Form Effective: 06/16/03



Plant Name (from Step 1) Mulberry Cogeneration

Acid Rain Part Requirements

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timety manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
- The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department;
 - (ii) Have an Acid Rain Part.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows: (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program;

DEP Form No. 62-210.900(1)(a) - Form Effective: 06/16/03



Plant Name (from Step 1) Mulberry Cogeneration

Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_X averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	
Signature	Date

STEP 4

Read the certification statement, sign, and date

DEP Form No. 62-210.900(1)(a) - Form Effective: 06/16/03

Acid Rain Program Instructions for Acid Rain Part Application (40 CFR 72.30 - 72.31 and Rule 62-214.320, F.A.C.)

The Acid Rain Program requires the designated representative to submit an Acid Rain part application for each source with an Acid Rain unit. A complete Certificate of Representation must be received by EPA <u>before</u> the part application is submitted to the title V permitting authority. A complete Acid Rain part application, once submitted, is binding on the owners and operators of the Acid Rain source and is enforceable in the absence of an Acid Rain part until the title V permitting authority either issues an Acid Rain part to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the title V permitting authority.

- STEP 1 Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 287-1730 (for ORIS codes), or (202) 287-1927 (for facility codes).
- STEP 2 For column "a," identify each Acid Rain unit at the Acid Rain source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements.

For columns "c" and "d," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 72.2 and 75.4, respectively.

Submission Deadlines

For new units, an initial Acid Rain part application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid rain part renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

DEP Form No. 62-210.900(1)(a) - Instructions Effective: 96/16/03

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.

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION

Section [2] of [2]

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.)					
regulated emissions unit.	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				
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	•	issions only.			
2. Description of Emissions Unit Addressed in this Se Secondary Boiler	ction:				
3. Emissions Unit Identification Number: 002					
4. Emissions Unit Status Code: A 5. Commence Construction Date: Date: 10-AUG-94	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? x Yes No			
9. Package Unit: Manufacturer: Model Number:					
10. Generator Nameplate Rating:					
11. Emissions Unit Comment: This unit is not regulated under Acid Rain Phase II. This unit is regulated under NSPS Subpart Dc. This secondary boiler is for auxiliary steam and it is fired by natural gas. A portion of the exhaust gas from the combustion turbine is vented through the secondary boiler. NO_x emissions are controlled with dry low NO_x combustion technology.					

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [2] of [2]

Emissions Unit Control Equipment

Emissions Out Control Equipment	
1. Control Equipment/Method(s) Description:	
Natural Gas Firing - Emissions control strategy includes the use of Dry-Low NO_x Burner fo NO_x emissions coupled with good combustion practices for CO, and PM/PM_{10} emissions, and Pipeline Quality Natural Gas for SO_2 emissions. The control strategy ensures compliance with the BACT emission limitations.	

2. Control Device or Method Code(s): 24

DEP Form No. 62-210.900(1) - Form

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:		
3.	3. Maximum Heat Input Rate: 99 million Btu/hr		
4.	4. Maximum Incineration Rate: pounds/hr		
	tons/day		
5.	Requested Maximum Operating Schedule:		
	24 hours/day 7 days/week		
	52 weeks/year	8,760 hours/year	
6.	Operating Capacity/Schedule Comment:		

Maximum heat input based on 0.1042 MM ft³/hr and 950 BTU/ ft³, based on low heating value (LHV) at 20°F when firing natural gas.

DEP Form No. 62-210.900(1) - Form

C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units)

Emission Point Description and Type

Identification of Point on Plot Plan or Flow Diagram:		 Emission Point Type Code: 1 - A single emission point serving a single emission unit. 		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:				
4. ID Numbers or Description	ns of Emission Ur	nits with this Emission	n Point in Common:	
5. Discharge Type Code:V	6. Stack Height 125 feet		7. Exit Diameter: 3 feet	
8. Exit Temperature: 220 °F	9. Actual Volumetric Flow Rate: 28,201 acfm		10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates Zone: 17 East (km): 413.6		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) 27/50/56 Longitude (DD/MM/SS) 81/53/11		
North (km) 15. Emission Point Comment:	_	Longitude (DD/I	VIIVI/55) 81/53/11	
Annual emission calculations are based on base load condition at 59°F for natural gas firing.			for natural gas firing.	

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [2]

[2] of

Natural Gas

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type):

2. Source Classification Code 10100601	e (SCC):	3. SCC Units: Million Cubic Feet Natural Gas Burned		
4. Maximum Hourly Rate: 0.1042	5. Maximum . 450.2	Annual Rate:	6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 950 (LHV)	
when natural gas. Annual Rate Limit is: 450.2 Ml 99MMBtu/hr / 950 Btu/ft ³ = 0.1	M ft³/yr. Based o 1042 MM ft³/hr x	n maximum firi 4,320 hr/yr = 45	low heating value (LHV) at 20°F ng rate for 4,320 hours per year.	
Segment Description and Ra	te: Segment	of		
1. Segment Description (Proc				
2. Source Classification Code	e (SCC):	3. SCC Units	:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:		6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:	
10. Segment Comment:				

DEP Form No. 62-210.900(1) - Form

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment _ of _

1.	1. Segment Description (Process/Fuel Type):				
	·				
		(0.00)	0.0001111		.
2.	Source Classification Code	e (SCC):	3. SCC Units:		
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:
10.	Segment Comment:				
Se	gment Description and Ra		of		
1.	1. Segment Description (Process/Fuel Type):				
_	0 0 0	(2.66)	0.00011:		
2.	Source Classification Code	e (SCC):	3. SCC Units:		
4.	Maximum Hourly Rate:	5. Maximum Annual Rate: 6. Estimated Annual Acti Factor:		Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum % Ash: 9. Million Btu per SCC Unit			
10.	Segment Comment:	L			

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [2] of [2]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

	tted by Ellissions Cili	•	
1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
СО			EL
NO _x	Modified Furnace/Burner Design		EL
SO_2			EL
	·		
			1

DEP Form No. 62-210.900(1) - Form

POLLUTANT DETAIL INFORMATION Page [1] of [3]

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.

CO - Carbon Monoxide	2. Total Perc	ent Efficie	ency of Control:		
3. Potential Emissions: 13.4 lb/hour	tons/year		netically Limited? Yes x No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):				
6. Emission Factor: 13.4 lb/hour) L CTT		7. Emissions Method Code:		
Reference: AC 53-211670 permit Limit and I			_		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:				
tons/year	From: To:				
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:				
tons/year	5 years 10 years				
10. Calculation of Emissions:	•				
			•		
11. Potential, Fugitive, and Actual Emissions C	omment:				
, and the second					

DEP Form No. 62-210.900(1) - Form

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 1 of 2

i.	Basis for Allowable Emissions Code: Rule - BACT	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 13.4 lb/hour	4.	Equivalent Allowable Emissions: 13.4 lb/hour 4.8 tons/year
5.	Method of Compliance: EPA Method 10		
WI Fel	Allowable Emissions Comment (Description nile firing No. 2 Fuel Oil. Basis for allowable: Abruary 21, 1994. nual CO = 13.4 lbs/hr x 720 hr/yr / 2,000 lb/ton	C 5	3-211670 and BACT Determination dated

Allowable Emissions Allowable Emissions 2 of 2

Allowable Emissions Allowable Emissions 2	1014
1. Basis for Allowable Emissions Code: Rule - BACT	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 12.6 lb/hour	4. Equivalent Allowable Emissions: 12.6 lb/hour 55.2 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Descripti While firing Natural Gas. Basis for allowable: February 21, 1994. Annual CO = 12.6 lbs/hr x 8,760 hr/yr / 2,000 lb	AC 53-211670 and BACT Determination dated

DEP Form No. 62-210.900(1) - Form

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.

2. Total Percent Efficiency of Control: 1. Pollutant Emitted: NOx - Nitrogen Oxides 4. Synthetically Limited? 3. Potential Emissions: X Yes No 23.4 lb/hour tons/year 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year 6. Emission Factor: 23.4 lb/hour 7. Emissions Method Code: Reference: AC 53-211670 permit Limit and BACT 8.b. Baseline 24-month Period: 8.a. Baseline Actual Emissions (if required): tons/year 9.a. Projected Actual Emissions (if required): 9.b. Projected Monitoring Period: tons/year 5 years 10 years 10. Calculation of Emissions: 11. Potential, Fugitive, and Actual Emissions Comment:

DEP Form No. 62-210.900(1) - Form

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 1 of 2

Basis for Allowable Emissions Code: Rule - BACT	2. Future Effective Date of Allowable Emissions:	
3. Allowable Emissions and Units: 18.3 lb/hour	4. Equivalent Allowable Emissions: 18.3 lb/hour 80 tons/year	
5. Method of Compliance: EPA Method 20 or 7E		
6. Allowable Emissions Comment (Description of Operating Method): While firing Natural Gas. Basis for allowable: AC 53-211670 and BACT Determination dated February 21, 1994. Annual NO _x = 18.3 lbs/hr x 8,760 hr/yr / 2,000 lb/ton = 80 TPY		

Allowable Emissions Allowable Emissions 2 of 2

Allowable Emissions 2 o	<u> </u>		
Basis for Allowable Emissions Code: Rule - BACT	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 23.4 lb/hour	4. Equivalent Allowable Emissions: 23.4 lb/hour 8.4 tons/year		
5. Method of Compliance: EPA Method 20 or 7E			
6. Allowable Emissions Comment (Description of Operating Method): While firing No. 2 Fuel Oil in the combustion turbine. Basis for allowable: AC 53-211670 and BACT Determination dated February 21, 1994. Annual NO _x = 23.4 lbs/hr x 720 hr/yr / 2,000 lb/ton = 8.4 TPY			

45

DEP Form No. 62-210.900(1) - Form

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: SO ₂ – Sulfur Dioxide	2. Total Pero	ent Efficie	ncy of Control:
3. Potential Emissions: 4.67 lb/hour 20.	4 tons/year		etically Limited?
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		-
6. Emission Factor:	•		7. Emissions Method Code:
Reference:			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:
tons/year	From:	T	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	d Monitorii	ng Period:
tons/year	5 years	☐ 10 ye	ars
10. Calculation of Emissions:	omment:		
11. Potential, Fugitive, and Actual Emissions C	omment:		

DEP Form No. 62-210.900(1) - Form

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 Emissio	ns Allowable	Emissions	1 of 1

Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.10 percent in fuel	4. Equivalent Allowable Emissions:
5. Method of Compliance: Fuel analysis for sulfur content.	
6. Allowable Emissions Comment (Descripting While firing No. 2 fuel oil. Basis for allowable: AC 53-211670 and BACT	Determination dated February 21, 1994.
Allowable Emissions Allowable Emissions	
Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
5. Method of Compliance:	
6. Allowable Emissions Comment (Description)	on of Operating Method):
Allowable Emissions Allowable Emissions	_ of
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description)	on of Operating Method):

DEP Form No. 62-210.900(1) - Form

EMISSIONS UNIT INFORMATION Section [2] of [2]

G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE 10 – Visible Emission – 10% Opacity	x Rule
3. Allowable Opacity:	
	xceptional Conditions: 100 %
Maximum Period of Excess Opacity Allow	ed: 2hrs in any 24 hour period min/hour
4. Method of Compliance:	
EPA Method 9	
	<u>.</u>
5. Visible Emissions Comment:	
While firing Natural Gas. (Excess Emission Ru	le)
·	
Visible Emissions Limitation: Visible Emiss	ions I imitation 2 of 2
<u> </u>	
1. Visible Emissions Subtype: VE 20 - Visible Emission - 20% Opacity	2. Basis for Allowable Opacity: X Rule
	X Ruic Utilei
3. Allowable Opacity:	100 %
Normal Conditions: 20% Exceptional Co Maximum Period of Excess Opacity Allow	
	ed. 2015 in any 24 nour period init/110di
4. Method of Compliance: EPA Method 9	
EFA Method 9	
5. Visible Emissions Comment:	
While firing Fuel Oil. (Excess Emission Rule)	

H. CONTINUOUS MONITOR INFORMATION

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

<u> </u>	Continuous Monitor _ot _				
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement:	Rule Other			
4.	Monitor Information Manufacturer:				
	Model Number:	Serial Number:			
5.	Installation Date:	6. Performance Specification Test Date:			
7.	Continuous Monitor Comment:				
Co	ntinuous Monitoring System: Continuous	Monitor _of _			
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement:	Rule Other			
4.	Monitor Information Manufacturer:				
	Model Number:	Serial Number:			
5.	Installation Date:	6. Performance Specification Test Date:			
7.	Continuous Monitor Comment:				

EMISSIONS UNIT INFORMATION

Section [2]

of [2]

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) X Attached, Document ID: MC-EU2-II Previously Submitted, Date
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) X Attached, Document ID: MC-EU1-I2 Previously Submitted, Date
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) Attached, Document ID: N/A Previously Submitted, Date
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) x Attached, Document ID: MC-EU2-I2 Previously Submitted, Date Not Applicable (construction application)
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) Attached, Document ID: Previously Submitted, Date X Not Applicable
6.	Compliance Demonstration Reports/Records Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: Test Date(s)/Pollutant(s) Tested:
	To be Submitted, Date (if known): Test Date(s)/Pollutant(s) Tested:
	X 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: x Not Applicable

DEP Form No. 62-210.900(1) - Instructions

EMISSIONS UNIT INFORMATION [2]

Section [2]

of

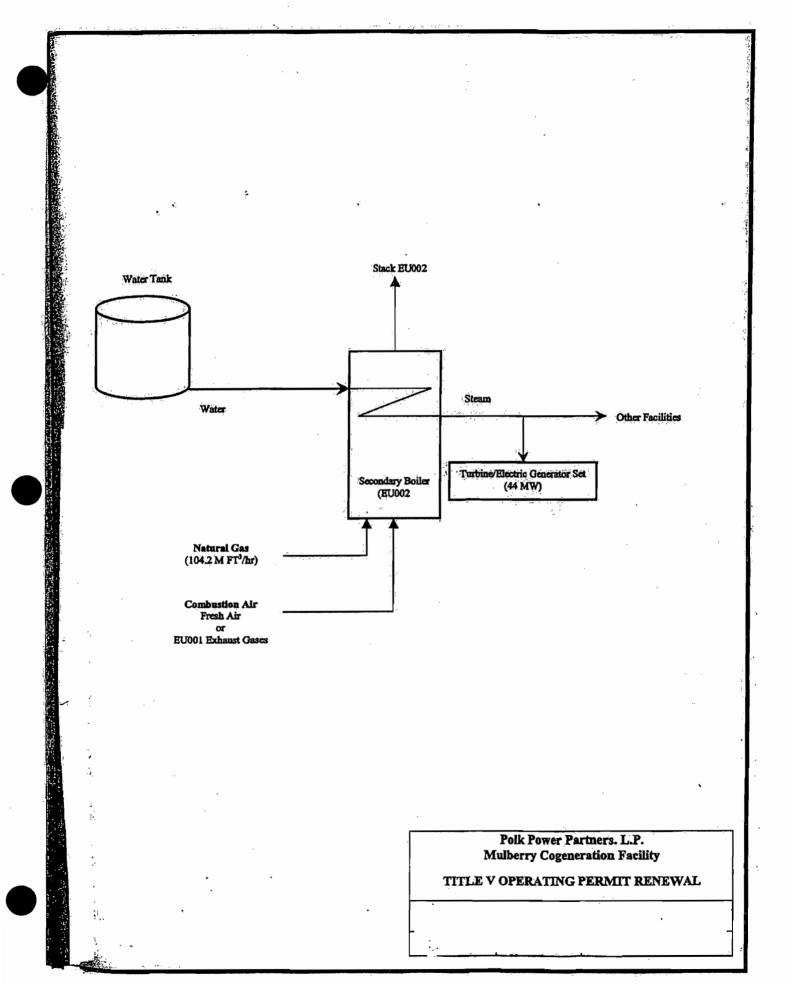
Additional Requirements for Air Construction Permit Applications -N/A

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)) Attached, Document ID: 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.)
	Attached, Document ID: Not Applicable
3.	Description of Stack Sampling Facilities (Required for proposed new stack sampling
"	facilities only)
	Attached, Document ID: Not Applicable
Ac	dditional Requirements for Title V Air Operation Permit Applications
1.	Identification of Applicable Requirements
	X Attached, Document ID: MC-EU1-IV1
2.	Compliance Assurance Monitoring
	Attached, Document ID: x Not Applicable
3.	Alternative Methods of Operation
	x Attached, Document ID: MC-EU2-IV3 Not Applicable
4.	Alternative Modes of Operation (Emissions Trading)
	Attached, Document ID: x Not Applicable
5.	Acid Rain Part Application
	Certificate of Representation (EPA Form No. 7610-1)
	Copy Attached, Document ID:
	Acid Rain Part (Form No. 62-210.900(1)(a))
	Attached, Document ID: Previously Submitted, Date:
	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
	Attached, Document ID: Previously Submitted, Date:
	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
	Attached, Document ID: Previously Submitted, Date: Patiend Unit Exemption (Form No. 62.210.000(1)(s)3.)
	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: Previously Submitted, Date:
	Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
	Attached, Document ID: Previously Submitted, Date:
	Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
	Attached, Document ID: Previously Submitted, Date:
	x Not Applicable

DEP Form No. 62-210.900(1) - Instructions Effective: 2/2/06 51

Additional Requirements Comme	<u>nt</u>		
			_
		•	

DEP Form No. 62-210.900(1) - Instructions Effective: 2/2/06 52 Attachment MC-EU2-I1 Process Flow Diagram



Attachment MC-EU2-I2
Procedures for Startup and Shutdown

Procedures for Startup/Shutdown - Emission Unit 002

Start-up for the Secondary Boiler begins by introducing natural gas into one of the burners within the unit and ignited. Start-up is complete and steady-state operation begins when the combustion process has stabilized.

Best Operating Practices to reduce or eliminate excess emissions include the following:

- Proper Excess Air Adjustments
- Shutdown of the Unit, if necessary
- Pressure Rate Changes

Knowledge of the Best Operating Practices to reduce or eliminate excess emissions is part of the training provided to the boiler operators.

Reference: 1996 Title V Permit Application

Attachment MC-EU2-IV3
Alternative Methods of Operation

Alternative Methods of Operation - Emission Unit 002

The alternative methods of operation include the following:

- Natural Gas Firing in the Secondary Boiler.
- Natural Gas Firing in the Secondary Boiler with a portion of the exhaust gases from the Combustion Turbine firing natural gas directed through the Secondary Boiler.
- Natural Gas Firing in the Secondary Boiler with a portion of the exhaust gases from the Combustion Turbine firing distillate oil directed through the Secondary Boiler.

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.