

AIR PERMIT APPLICATION
ORLANDO UTILITIES COMMISSION
STANTON ENERGY CENTER
For the Installation of Natural Gas
Igniters on Units 1 and 2

B&V PROJECT NO. 160357

PREPARED FOR



Orlando Utilities Commission

OCTOBER 2011





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OCT 13 2011

DIVISION OF AIR
RESOURCE MANAGEMENT

October 12, 2011

Mr. Martin Costello
Florida Department of Environmental Protection
Division of Air Resource Management
Office of Air Permitting and Compliance
2600 Blair Stone Road, MailStation 5505
Tallahassee, FL 32399-2400

project No 0950137 -039-AC

Dear Mr. Costello,

Enclosed please find the finalized application for a construction permit for the Stanton Energy Center.

Per our phone conversations, the subject application project entails the replacement of oil igniters for natural gas igniters on Units 1 and 2 (EU 001 and 002).

If you would like to discuss any issues regarding this application, please contact me at my office, 407-434-3072 or Brian O'Neill, Air Permitting Section Lead, Energy, Black and Veatch Corporation 913-458-8199.

The Orlando Utilities Commission looks forward to working with you on this permitting effort.

Best Regards,

David R. Báez

Project Engineer, Environmental Affairs
Orlando Utilities Commission

ORLANDO UTILITIES COMMISSION

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1.0 Introduction and Project Description

Orlando Utilities Commission (OUC) is proposing to replace the existing fuel oil igniter systems on Stanton Energy Center (SEC) Units 1 & 2 with natural gas igniter systems. The natural gas will be supplied from the existing Florida Gas Transmission (FGT) transmission line on the SEC site located north of SEC Units 1 & 2. The igniters will be used primarily as initial light-off for the 60 low NO_x coal burners (30 per unit).

A new natural gas metering station will be installed at the Facility for metering and regulation of the natural gas to be used for the new igniter systems. The new metering station will be located next to the existing FGT transmission line. At the metering station the gas supply will be reduced in pressure to approximately 250 psi. The natural gas will then be routed underground in a single pipeline to the south wall outside Unit 2 where the line will split into a supply piping line supporting Unit 1 and supply piping line supporting Unit 2. At this point the natural gas pressure will be reduced further to approximately 125 psi before entering the Units. The natural gas will be routed to the front and back walls of each boiler at the burner fronts (three on the front wall and two on the back wall of the boilers). Near the burner fronts the natural gas pressure will be further reduced to approximately 30 psi which is the pressure needed at the igniters.

At the burner fronts, the existing fuel oil igniter piping and atomizing steam lines will be removed from the units and replaced in essentially the same locations with the new natural gas lines. Modifications will be made to the igniter guns to accommodate the natural gas firing. The entire burner management system will be modified and upgraded to accommodate natural gas firing as well as compliance with NFPA 2011 Code requirements for Burner Management Systems.

The remainder of this document provides the permit applicability analysis, supporting calculations, and the appropriate Florida Department of Environment (FDEP) application forms.

2.0 NSR/PSD Applicability

On December 31, 2002, the United States Environmental Protection Agency (USEPA) substantially reformed the Prevention of Significant Deterioration (PSD) program, including the manner in which a project's emissions increase is determined. Florida amended its rules, effective February 2006, to address the USEPA PSD reforms.

2.1 EMISSIONS ANALYSIS

In terms of PSD applicability, a project at an existing major source will not be subject to PSD review if it does not result in a significant emissions increase. In general, a project's emissions increase is determined as the difference between its baseline actual emissions (BAE) and its future projected actual emissions (PAE). One is also allowed to consider excludable emissions (EE) when making this comparison.

The starting point for this type of analysis at the Stanton Energy Center is the determination of the BAE for Units 1 and 2 combined. For this analysis, the BAE emissions were determined using historical emissions data and the methodology set forth in the current PSD regulations. The historical emissions data were derived from continuous emissions monitoring system (CEMS) data for SO₂, NO_x, CO, and CO₂ emissions (for all or part of the baseline period) and from annual operating reports (AORs) and stack tests for all other pollutants. The BAE period is chosen on a pollutant-by-pollutant basis as the 24-month period within the five year look-back period that has the highest emissions of that pollutant based on historical emissions data. The BAE period can be different for each pollutant but must be the same for both units for each individual pollutant. The five year look back period for this air permit application ran from September 2006 through August 2011. Table 2-1 illustrates the BAE for this project.

Once the BAE is established, the next step is to determine the EE based on the projected operation of each unit without the project. Essentially, the rules allow one to exclude from the emissions increase calculation those emission increases that would have occurred without the project. As will be discussed shortly, the EE can be considered an adjusted BAE and is subtracted from the PAE to determine the project emission increases. This project conservatively assumes that no adjustments to the baseline are made as the units would continue to operate as they've done historically if the new natural gas burners were never installed. Therefore, the EE are equal to the BAE which were shown in Table 2-1.

Once the BAE (and EE) are established, the next step is to determine the PAE values. In determining the PAE for each unit, one needs to differentiate between the projected increases due to *natural* demand growth versus the demand increases due to the *project*. However, since the project is not expected to increase demand growth upon the units, the increase in operation of the unit due to demand growth caused by the project is non-existent (zero). This analysis also conservatively assumes that the units will have a flat (zero) natural demand growth into the future essentially making their anticipated future annual heat input equal to the units' baseline heat input.

Table 2-1 Baseline Actual Emissions

POLLUTANT	BAE PERIOD	UNIT 1 BAE (TPY)	UNIT 2 BAE (TPY)	COMBINED BAE (TPY)
NO _x	Sep 2006 – Aug 2008	6,306.82	2,486.78	8,793.60
SO ₂	Sep 2006 – Aug 2008	4,723.59	2,052.73	6,776.32
CO	Jan 2009 – Dec 2010	1,012.09	856.96	1,869.04
VOC	Sep 2006 – Aug 2008	42.08	15.59	57.67
PM	Sep 2006 – Aug 2008	259.87	322.20	582.07
PM ₁₀	Sep 2006 – Aug 2008	248.93	313.96	562.89
PM _{2.5}	Jan 2009 – Dec 2010	187.11	253.32	440.43
H ₂ SO ₄	Apr 2007 – Mar 2009	178.76	189.27	368.03
CO ₂	May 2007 – Apr 2009	3,228,131	3,285,671	6,513,803

Note: Appendix A contains detailed emissions calculations.

The remaining step for determining the PAE then is to combine the projected annual heat input (equal to the baseline heat input) with the anticipated future emission factors. To accomplish this calculation, the analysis assumed that no more than 15 percent of the projected annual heat input from the units would come from the combustion of natural gas in the proposed igniter systems. This annual heat input value was then combined with emissions factors representing the combustion of natural gas in the proposed igniter systems to derive ton per year emissions from the proposed igniter system. The balance of the projected annual heat input from the units was then combined with annualized emission factors based on their historical operations.¹ Together, the projected emissions from the combustion of the historical fuels along with the projected emissions from the combustion of natural gas make up the project's PAE. Table 2-2 provides the project's PAE.

Once the BAE (EE) and PAE values are determined, the next step is to perform the calculations to determine the projected emissions increase (PEI) to compare with the PSD Significant Emission Rates (SERs). Table 2-3 combines the data from the previous tables and makes the appropriate comparisons. As illustrated in the table, the installation of natural gas igniter systems will not cause a significant emissions increase and therefore will not trigger/require major source PSD permitting.

2.2 RECORD KEEPING REQUIREMENTS

Prior to beginning actual construction on a proposed project, a facility must record the following information:

- A description of the project;
- Identification of each affected emission unit;
- A description of the applicability test used; including,
 - The BAE;
 - The PAE;
 - The amount of EE;
 - The reason for excluding that amount; and,
 - Any netting calculations, if applicable.

With this application submittal, OUC is fulfilling this above information requirement.

After resuming normal operation following completion of the project, the PSD regulations also require the facility to monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by any of the affected emission units. In addition,

¹ This analysis was conservative in that it did not account for any reduction in the projected/future emission factors (which are meant to represent all operations other than the natural gas igniters) for the removal of oil firing capabilities. That is, projected/future emission factors for the non-natural gas igniter portion of the boilers' operations were set equal to the historical emission factors which included the oil firing capabilities that will no longer be available to the units.

Table 2-2 Projected Actual Emissions

POLLUTANT	PAE (TPY)
NO _x	8,118.13
SO ₂	5,766.76
CO	1,962.78
VOC	74.31
PM	529.70
PM ₁₀	513.39
PM _{2.5}	408.21
H ₂ SO ₄	313.08
CO ₂	6,096,916

Note: Appendix A contains detailed emissions calculations.

Table 2-3 Projected Emissions to Baseline Emissions Comparison

POLLUTANT	BAE (EE) (TPY)	PAE (TPY)	PROJECT EMISSIONS INCREASE (TPY)	PSD SER (TPY)	PSD MAJOR MODIFICATIO N (YES/NO)
NO _x	8,793.60	8,118.13	-675.47	40	No
SO ₂	6,776.32	5,766.76	-1,009.55	40	No
CO	1,869.04	1,962.78	93.73	100	No
VOC	57.67	74.31	16.63	40	No
PM	582.07	529.70	-52.37	25	No
PM ₁₀	562.89	513.39	-49.50	15	No
PM _{2.5}	440.43	408.21	-32.22	10	No
H ₂ SO ₄	368.03	313.08	-54.95	7	No
CO ₂	6,513,803	6,096,916	-416,887	75,000	No

Notes:

Assumes a maximum natural gas contribution to annual heat input of 15 percent.

Appendix A contains detailed emissions calculations.

annual emissions, in tons per year, are required to be calculated at the end of each year following the date that normal operation resumes after completion of the project. These monitoring and emission calculation requirements shall continue for each year of the projection period.

2.3 REPORTING REQUIREMENTS

It is important to note that per the FDEP and USEPA NSR reform rules, the PAE values in Table 2-3 should not be construed to be future annual permit limits. Rather, OUC's obligation going forward is to simply track and report emissions from Units 1 and 2 60 days after the end of each year for the five years following completion of the project to demonstrate that the units did not experience a significant emissions increase over the baseline emissions which would indicate a potential for retroactive PSD permitting. That is, if the post-project actual emissions exceed the BAE by a significant amount *and* differ from (and presumably exceed) the PAE, then the project may be subject to PSD review, unless a legitimate reason is identified in the emissions report, such as the actual electrical demand growth exceeded the projected growth rate and the reported emissions increase is the result of that circumstance alone.

Further, as discussed above and because the installation of the natural gas igniter systems is voluntary and the amount of use is yet to be determined, Units 1 and 2 are not obligated to demonstrate the emissions reductions shown above and the values should not be construed to be future annual permit limits (per the FDEP and USEPA NSR reform rules). The purpose of the analysis presented in this document was simply to demonstrate that emission increases for will be below the SERs and thus not be considered a major modification for PSD.

Appendix A

Detailed Emissions Calculations

Significant Emissions Increase Calculation - Natural Gas Igniter Project

Market Demand Growth that is independent of project - Percent increase over the 10 years following the date the Unit resumes regular operation.	0.0%	None assumed for power generation
Market Demand Growth that is directly the result of the project - Percent increase over the 10 years following the date the Unit resumes regular operation.	0.0%	
Annual Project Related Capacity Increase (%)	0.0%	
Short-term Project Related Capacity Increase (%)	0.0%	
Pre-Project (Baseline Period) Maximum Permitted Heat Input (Mbtu/hr)	9,800	
Post-Project Maximum Heat Input (Mbtu/hr)	9,800	This V Air Operating Permit Heat Input for Both Units (4,800 MMBtu/hr each)

	NOx			SO2			CO			VOC			PM			PM10			PM2.5			H2SO4			CO2		
	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy	Blended Fuel Mbtu/yr	Natural Gas Mbtu/yr	Emissions tpy
BAE - Average rate in tpy of actual emissions over any consecutive 24-month period within the 5-years immediately preceding a dual construction of the project.	6.25E+07		8,793.60	6.25E+07		6,776.32	6.06E+07		1,869.04	6.25E+07		57.67	6.25E+07		562.07	6.25E+07		562.89	6.06E+07		440.43	6.34E+07		368.03	6.35E+07		6,513.803
PAE - The Ht and initial projected emissions in a one 12-month period of the 10 years following the date the Unit resumes regular operation.	5.31E+07	9.38E+06	8,118.13	5.31E+07	9.38E+06	5,766.76	5.15E+07	9.09E+06	1,962.78	5.31E+07	9.38E+06	74.31	5.31E+07	9.38E+06	529.70	5.31E+07	9.38E+06	513.39	5.15E+07	9.09E+06	408.21	5.38E+07	9.51E+06	313.08	5.40E+07	9.52E+06	6,096.916
Post-Project Period Capacity Factor 74.34%	74.34%			74.34%			72.02%			74.34%			74.34%			74.34%			72.02%			75.43%			75.43%		
EE - The available Ht and emissions that would have been emitted anyway without the modification.	6.25E+07		8,793.60	6.25E+07		6,776.32	6.06E+07		1,869.04	6.25E+07		57.67	6.25E+07		562.07	6.25E+07		562.89	6.06E+07		440.43	6.34E+07		368.03	6.35E+07		6,513.803
Projected Emission Increase = PAE minus the EE			-675.47			-1,009.55			93.73			16.63			-52.37			-49.50			-32.22			-54.95			-416.887
Significant Emission Level (tpy) Exceed SEL			40			40			100			40			25			15			10			7			75,000
			NO			NO			NO			NO			NO			NO			NO			NO			NO

	Baseline Period Average Emissions (lb/Mbtu)	Post-Project Blended Fuel Emission ¹ (lb/Mbtu)	Post-Project Gas Emission ² (lb/Mbtu)	Post-Project Percent Boiler Ht that is Gas
NOx	0.2813	0.2813	0.1373	15.00%
SO2	0.2168	0.2168	0.0015	8.180 Coal (Mbtu/h)
CO	0.0817	0.0817	0.0824	1.440 Gas (Mbtu/h)
VOC	0.0018	0.0018	0.0054	9.800 Total
PM	0.0186	0.0186	0.0075	
PM10	0.0180	0.0180	0.0075	
PM2.5	0.0145	0.0145	0.0075	
H2SO4	0.0116	0.0116	0.0001	
CO2	205.20	205.20	117.65	

¹ Conservatively assumed no change to post-project emission factor since largely driven by coal usage.
² From EPA AP-42 Tables 1.4-1 and 1.4-2, Emission Factors for Natural Gas Boilers (exception is H2SO4 which is calculated as 3% of SO2 x ratio of molecular weights (98/80))

Appendix B Application Forms



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- 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, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Orlando Utilities Commission

2. Site Name: Stanton Energy Center

3. Facility Identification Number: 0950137

4. Facility Location...

Street Address or Other Locator: 5100 South Alafaya Trail

City: Orlando

County: Orange

Zip Code: 32831

5. Relocatable Facility?

Yes No

6. Existing Title V Permitted Facility?

Yes No

Application Contact

1. Application Contact Name: David R. Báez, Project Engineer, Environmental Affairs

2. Application Contact Mailing Address...

Organization/Firm: Orlando Utilities Commission

Street Address: P.O. Box 3193

City: Orlando

State: FL

Zip Code: 32802

3. Application Contact Telephone Numbers...

Telephone: (407) 434-3072 ext. Fax: (407) 244-8794

4. Application Contact E-mail Address: dbaez@ouc.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application:

3. PSD Number (if applicable):

2. Project Number(s): 0950137-039-AC

4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being 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

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
1	Fossil Fuel Steam Generation Unit No. 1	ACM1	
2	Fossil Fuel Steam Generation Unit No. 2	ACM1	

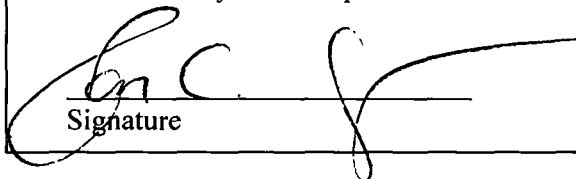
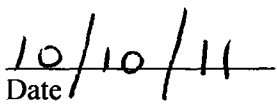
Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : Jan C. Aspuru, VP, Power Resources
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Owner/Authorized Representative Telephone Numbers... Telephone: (407) 434 - 3135 ext. Fax: (407) 275 - 4120
4. Owner/Authorized Representative E-mail Address: <u>jaspuru@ouc.com</u>
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature  Date

APPLICATION INFORMATION

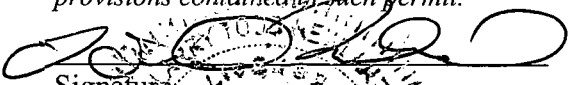
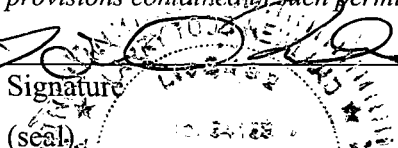
Application Responsible Official Certification

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

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

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Larry Todd Newland Registration Number: 64188
2. Professional Engineer Mailing Address... Organization/Firm: Black & Veatch Street Address: 9000 Regency Parkway, Suite 300 City: Cary State: NC Zip Code: 27518
3. Professional Engineer Telephone Numbers... Telephone: (919) 462-7415 ext. Fax: (919) 468-9212
4. Professional Engineer E-mail Address: newlandlt@bv.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(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 <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> Signature:  (seal)  Date: 10.6.11

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates...		2. Facility Latitude/Longitude...	
Zone 17	East (km) 483.5	Latitude (DD/MM/SS) 28° 29' 1" N	Longitude (DD/MM/SS) 81° 10' 7" W
	North (km) 3150.6		
3. Governmental Facility Code:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
4	A	49	4911
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: David R. Báez, Project Engineer, Environmental Affairs
2. Facility Contact Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Facility Contact Telephone Numbers: Telephone: (407) 434 - 3072 ext. Fax: (407) 244 - 8794
4. Facility Contact E-mail Address: dbaez@ouc.com

Facility Primary Responsible Official

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

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

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

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
SO2	A	N
CO	A	N
NOX	A	N
PM	A	N
VOC	A	N
PM10	A	N
PB	A	N

FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

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

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. A</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. B</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. C</u> <input type="checkbox"/> Previously Submitted, Date: _____

Additional Requirements for Air Construction Permit Applications

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

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

- | |
|---|
| 1. List of Exempt Emissions Units:
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

Additional Requirements for Title V Air Operation Permit Applications

- | |
|--|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> 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)
<input type="checkbox"/> Attached, Document ID: _____
<input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements) |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
<input type="checkbox"/> Attached, Document ID: _____
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)
<input type="checkbox"/> Attached, Document ID: _____
<input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed
<input type="checkbox"/> Not Applicable |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 6. Requested Changes to Current Title V Air Operation Permit:
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID: _____ Previously Submitted, Date: 5/21/2009

Not Applicable (not an Acid Rain source)

Phase II NO_x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

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

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: _____ Previously Submitted, Date: 5/21/2009

Not Applicable (not a CAIR source)

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [1] of [2]

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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

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

EMISSIONS UNIT INFORMATION

Section [1] of [2]

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.)
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)			
<input checked="" type="checkbox"/> 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).			
<input type="checkbox"/> 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.			
<input type="checkbox"/> 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: Fossil Fuel Steam Generating Unit #1			
3. Emissions Unit Identification Number: 1			
4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 01-JULY-85	7. Emissions Unit Major Group SIC Code: 49
8. Federal Program Applicability: (Check all that apply)			
<input checked="" type="checkbox"/> Acid Rain Unit			
<input checked="" type="checkbox"/> CAIR Unit			
9. Package Unit: Manufacturer:		Model Number:	
10. Generator Nameplate Rating: MW			
11. Emissions Unit Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Emissions Unit Control Equipment/Method: Control 1 of 2

- | |
|--|
| 1. Control Equipment/Method Description:
Gas Scrubber for SO2 control |
| 2. Control Device or Method Code: 013 |

Emissions Unit Control Equipment/Method: Control 2 of 2

- | |
|--|
| 1. Control Equipment/Method Description:
Electrostatic Precipitator - High Efficiency |
| 2. Control Device or Method Code: 010 |

Emissions Unit Control Equipment/Method: Control 3 of 3

- | |
|---|
| 1. Control Equipment/Method Description:
Low NOx Burners with Overfire Air |
| 2. Control Device or Method Code: 204/205 |

Emissions Unit Control Equipment/Method: Control ___ of ___

- | |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

EMISSIONS UNIT INFORMATION

Section [1] of [2]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 4,800 MMBtu/hr
2. Maximum Production Rate: 465 MW
3. Maximum Heat Input Rate: 4,800 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 8760 hours/year
6. Operating Capacity/Schedule Comment:

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 Plot Plan or Flow Diagram:		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: 550 Feet	7. Exit Diameter: 19 feet	
8. Exit Temperature: 127 °F	9. Actual Volumetric Flow Rate: 1,420,000 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): 483.05 North (km): 3150.06		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) 28° 28' 43" N Longitude (DD/MM/SS) 81° 10' 30" W	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100202		3. SCC Units: Tons Bituminous Coal Burned
4. Maximum Hourly Rate: 159	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 3.5	8. Maximum % Ash: 10	9. Million Btu per SCC Unit: 26
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100401		3. SCC Units: 1000 Gallons Residual Oil (No. 6) Burned
4. Maximum Hourly Rate: 27.6	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 150
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)**Segment Description and Rate:** Segment 3 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100701		3. SCC Units: Million Cubic Feet Process Gas Burned
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 Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10101302		3. SCC Units: 1000 Gallons Waste Oil Burned
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: On-site generated lubricating oil and used fuel oil which meets the requirements of 40 CFR 266.40.		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

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

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100601		3. SCC Units: Million Cubic Feet Gas Burned
4. Maximum Hourly Rate: TBD	5. Maximum Annual Rate: TBD	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: TBD	8. Maximum % Ash: TBD	9. Million Btu per SCC Unit: TBD
10. Segment Comment:		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (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:		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	013		EL
CO			NS
NOX	205/204		EL
PM	010		EL
VOC			NS
PM10	010		EL
PB	010		NS

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 771.5 lb/hour 3379.2 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.18 lb/mmBtu burned Reference: Vendor guarantee		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 tpy) x (0.18 lb/mmBtu) = 771.5 lb/hr (4286 tpy) x (0.18 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 3379.2 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.18 lb/mmBtu	4. Equivalent Allowable Emissions: 771.5 lb/hour 3379.2 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission value is based on vendor guarantee from Low NOx Burner/Overfire Air system installation.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOX - Nitrogen Oxides		2. Total Percent Efficiency of Control: 60	
3. Potential Emissions: 2572 lb/hour 8635 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.6 lb/mmBtu (30 day rolling average) 0.46 lb/mmBtu (annual average)		7. Emissions Method Code: 0	
Reference: Existing permit limit			
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 mmBtu/hr) x (0.6 lb/mmBtu) = 2572 lb/hr (4286 mmBtu/hr) x (0.46 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 8635 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.6 lb/mmBtu (30 day rolling average)	4. Equivalent Allowable Emissions: 2572 lb/hour 11264 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.46 lb/mmBtu (annual average)	4. Equivalent Allowable Emissions: lb/hour 8635 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PB - Lead - Total (elemental lead and lead compounds)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.07 lb/hour 0.29 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 4.2E-04 lb/ton Reference: USEPA AP-42		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(159 \text{ tpy}) \times (4.2\text{E-}04 \text{ lb/ton}) = 0.07 \text{ lb/hr}$ $(159 \text{ tpy}) \times (4.2\text{E-}04 \text{ lb/ton}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.29 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

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):	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM - Particulate Matter - Total		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 128.6 lb/hour 563 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.03 lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 mmBtu/hr) x (0.03 lb/mmBtu) = 128.6 lb/hr (4286 mmBtu/hr) x (0.03 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 563 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.03 lb/mmBtu heat input	4. Equivalent Allowable Emissions: 128.6 lb/hour 563 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM10 - Particulate Matter - PM10		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 128.6 lb/hour 563 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.03 lb/mmBtu Reference: Existing permit limit for PM		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Assume same as PM			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

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):	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO ₂ - Sulfur Dioxide		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 4886 lb/hour 21401 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 1.14 lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(4286 \text{ mmBtu/hr}) \times (1.14 \text{ lb/mmBtu}) = 4886 \text{ lb/hr}$ $(4286 \text{ mmBtu/hr}) \times (1.14 \text{ lb/mmBtu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 21401 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.14 lb/mmBtu heat input	4. Equivalent Allowable Emissions: 4886 lb/hour 21401 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC - Volatile Organic Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 15.9 lb/hour 69.67 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.1 Reference:		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

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):	

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):	

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):	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: COMS	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 8

1. Parameter Code: VE	2. Pollutant(s): Opacity
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: Light Hawk 560 Serial Number: 56000377/378	
5. Installation Date:	6. Performance Specification Test Date: 1/16/2004
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 8

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML9850 Serial Number: S/N 745	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor 3 of 8

1. Parameter Code: 02	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: SERVOMEX LTD. Model Number: 1400 Serial Number: 1420C/1013	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 4 of 8

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML9850 Serial Number: S/N 363	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor 5 of 8

1. Parameter Code: CO2	2. Pollutant(s): CO2
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: MONITOR LABS Model Number: TML9820 Serial Number: S/N 76	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Continuous Monitoring System: Continuous Monitor 6 of 8

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: EMRC-DP7 Model Number: CM60 Serial Number: S/N 460	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor 7 of 8

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML 9841 Serial Number: N0373	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 8 of 8

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Model Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. B</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. H</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. I</u> <input type="checkbox"/> 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) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. J</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable <p>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.</p>

7. Other Information Required by Rule or Statute:

Attached, Document ID: _____ Not Applicable

EMISSIONS UNIT INFORMATION

Section [1] of [2]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [2] of [2]

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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

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

EMISSIONS UNIT INFORMATION

Section [2] of [2]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Pulverized Coal Fired Unit No. 2 (460 MW gross)

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 29-MAR-96	7. Emissions Unit Major Group SIC Code: 49
-------------------------------------	--------------------------------	---------------------------------------	---

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Emissions Unit Control Equipment/Method: Control 1 of 1

- | |
|--|
| 1. Control Equipment/Method Description:
Electrostatic Precipitator – High Efficiency |
| 2. Control Device or Method Code: 016, , |

Emissions Unit Control Equipment/Method: Control 2 of 2

- | |
|---|
| 1. Control Equipment/Method Description:
SCR (Selective Catalytic Reduction) |
| 2. Control Device or Method Code: 139 |

Emissions Unit Control Equipment/Method: Control 3 of 3

- | |
|--|
| 1. Control Equipment/Method Description:
Gas Scrubber for SO2 control |
| 2. Control Device or Method Code: 013 |

Emissions Unit Control Equipment/Method: Control 4 of 4

- | |
|---|
| 1. Control Equipment/Method Description:
Low NOx Burner/Overfire Air |
| 2. Control Device or Method Code: 205/204 |

EMISSIONS UNIT INFORMATION

Section [2] of [2]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 4,800 MMBtu/hr
2. Maximum Production Rate: 465 MW
3. Maximum Heat Input Rate: 4,800 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 8760 hours/year
6. Operating Capacity/Schedule Comment:

EMISSIONS UNIT INFORMATION

Section [2] of [2]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: 550 Feet	7. Exit Diameter: 19 feet	
8. Exit Temperature: 124 °F	9. Actual Volumetric Flow Rate: 1,310,120 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): 484 North (km): 3150.5		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) 28° 28' 57" N Longitude (DD/MM/SS) 81° 9' 54" W	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [2] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100202		3. SCC Units: Tons Bituminous Coal Burned
4. Maximum Hourly Rate: 159	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 3.5	8. Maximum % Ash: 10	9. Million Btu per SCC Unit: 26
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100401		3. SCC Units: 1000 Gallons Residual Oil (No. 6) Burned
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2	8. Maximum % Ash:	9. Million Btu per SCC Unit: 154
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)**Segment Description and Rate:** Segment 3 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100701		3. SCC Units: Million Cubic Feet Process Gas Burned
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 Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10101302		3. SCC Units: 1000 Gallons Waste Oil Burned
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: Used oil specification: Arsenic 5 PPM, Cadmium 2 PPM, Chromium 10 PPM, Lead 100 PPM, Total Halogens 1000 PPM, PCB 50 ppm.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)**Segment Description and Rate:** Segment 5 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100601		3. SCC Units: Million Cubic Feet Gas Burned
4. Maximum Hourly Rate: TBD	5. Maximum Annual Rate: TBD	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: TBD	8. Maximum % Ash: TBD	9. Million Btu per SCC Unit: TBD
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (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:		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
NOX	139	205/204	EL
PB			EL
PM	010		EL
PM10	010		NS
SO2	001		EL
VOC			EL

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO - Carbon Monoxide		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 642.9 lb/hour 2815.9 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.15 lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(4286 \text{ mmBtu/hr}) \times (0.15 \text{ lb/mmBtu}) = 642.9 \text{ lb/hr}$ $(4286 \text{ mmBtu/hr}) \times (0.15 \text{ lb/mmBtu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 2815.9 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/mmBtu	4. Equivalent Allowable Emissions: 642.9 lb/hour 2815.9 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOX - Nitrogen Oxides		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 728.6 lb/hour 3191.4 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.17 lb/mmBtu (30 day rolling average) Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 mmBtu/hr) x (0.17 lb/mmBtu) = 728.6 lb/hr (4286 mmBtu/hr) x (0.17 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 3191.4 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.17 lb/mmBtu Heat Input	4. Equivalent Allowable Emissions: 728.6 lb/hour 3191.4 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PB - Lead - Total (elemental lead and lead compounds)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.64 lb/hour 2.8 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 1.5×10^{-4} lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(4286 \text{ mmBtu/hr}) \times (1.5 \times 10^{-4} \text{ lb/mmBtu}) = 0.64 \text{ lb/hr}$ $(4286 \text{ mmBtu/hr}) \times (1.5 \times 10^{-4} \text{ lb/mmBtu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 2.8 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 x 10 ⁻⁴ lb/mmBtu	4. Equivalent Allowable Emissions: 0.64 lb/hour 2.8 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
 (Optional for unregulated emissions units.)**

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM - Particulate Matter - Total		2. Total Percent Efficiency of Control: 99.4	
3. Potential Emissions: 85.7 lb/hour 375.5 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.02 lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(4286 \text{ mmBtu/hr}) \times (0.02 \text{ lb/mmBtu}) = 85.7 \text{ lb/hr}$ $(4286 \text{ mmBtu/hr}) \times (0.02 \text{ lb/mmBtu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 375.5 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.02 lb/mmBtu heat input	4. Equivalent Allowable Emissions: 85.7 lb/hour 375.5 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM10 - Particulate Matter - PM10		2. Total Percent Efficiency of Control: 99.4	
3. Potential Emissions: 85.72 lb/hour 375.45 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Assume PM10 emissions are the same as PM.			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

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):	

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):	

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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 3643 lb/hour 4693 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.85 lb/mmBtu (3 hour average) 0.25 lb/mmBtu (30 day rolling average)		7. Emissions Method Code: 0	
Reference: Existing permit limit			
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 mmBtu/hr) x (0.85 lb/mmBtu) = 3643 lb/hr (4286 mmBtu/hr) x (0.25 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 4693 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.85 lb/mmBtu (3 hour)	4. Equivalent Allowable Emissions: 3643 lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.67 lb/mmBtu (24 hour)	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/mmBtu (30 day rolling average)	4. Equivalent Allowable Emissions: lb/hour 4693 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC - Volatile Organic Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 64.29 lb/hour 281.59 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.015 lb/mmBtu Reference: Existing permit limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: (4286 mmBtu/hr) x (0.015 lb/mmBtu) = 64.29 lb/hr (4286 mmBtu/hr) x (0.015 lb/mmBtu) x (8760 hr/yr) x (ton/2000 lb) = 281.59 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.015 lb/mmBtu Heat Input	4. Equivalent Allowable Emissions: 64.29 lb/hour 281.59 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

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):	

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):	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: VE may not exceed 20% opacity under normal operation except for one 6-minute period per hour of not more than 27% opacity.	

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 8

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: MONITOR LABS Model Number: 9850 Serial Number: 593	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 8

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML41 Serial Number: S/N 131	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor 3__ of 8__

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: Light Hawk 560 Serial Number: 5600379 / 5600380	
5. Installation Date:	6. Performance Specification Test Date: 5/21/2003
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 4__ of 8__

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: MONITOR LABS Model Number: 9820 Serial Number: S/N 179	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5 of 8

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: EMRC Model Number: EMRC-DP1 Serial Number: S/N 461	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 6 of 8

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML 9850 Serial Number: S/N 615	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor 7_ of 8_

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: 9820 Serial Number: S/N 175	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 8_ of 8_

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML 30 Serial Number: S/N 151	
5. Installation Date:	6. Performance Specification Test Date: 10/21/2008
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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. B</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. H</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. I</u> <input type="checkbox"/> 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) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. J</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:

Attached, Document ID: _____ Not Applicable

EMISSIONS UNIT INFORMATION

Section [2] of [2]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

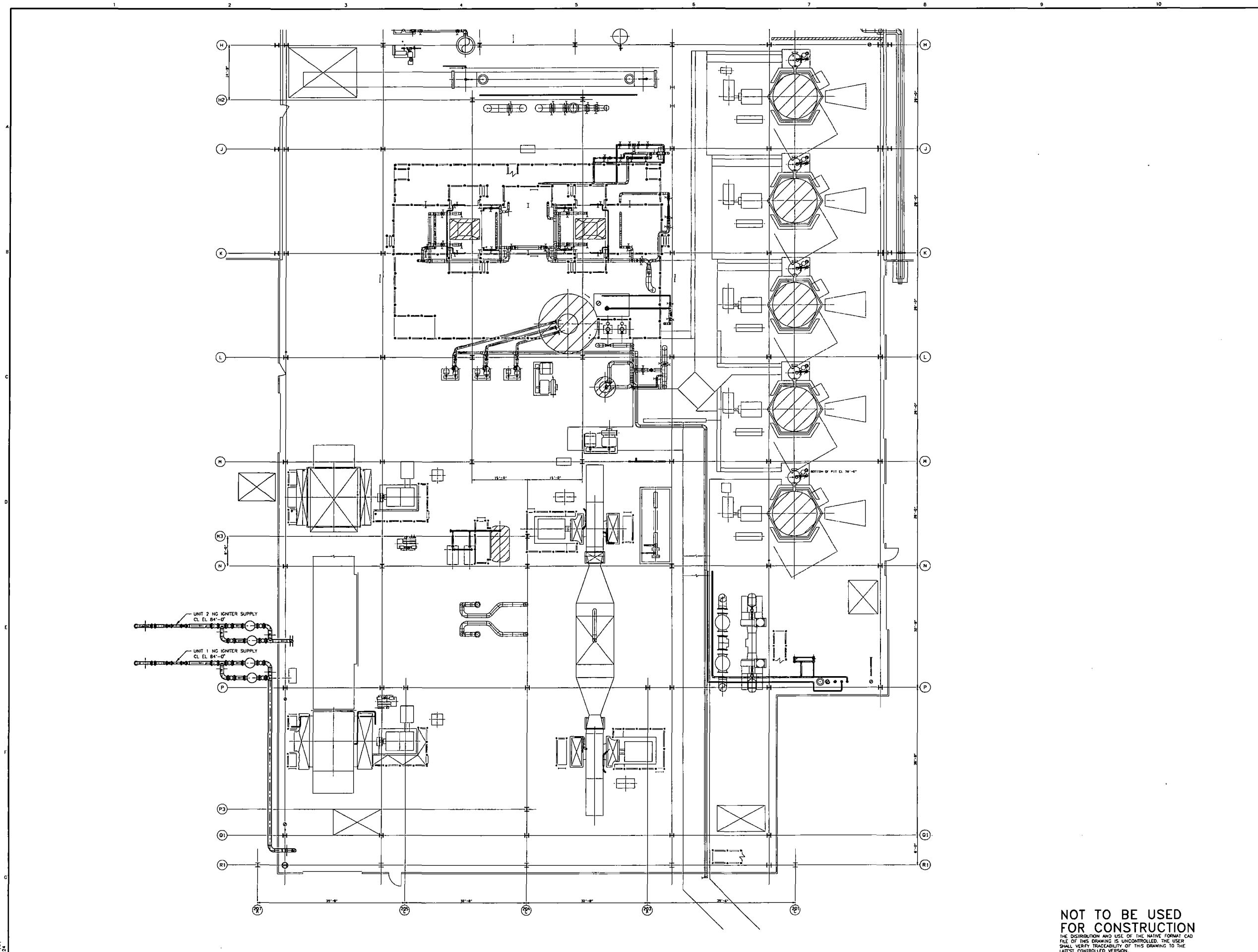
1. Identification of Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements Comment

--

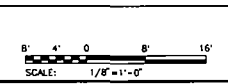
Attachment A

Facility Plot Plan



SAW1382
 07/26/11 14.49.27
 AAO 16.1" (LMS Tech)

NO.	DATE	DESCRIPTION	BY	CHKD.
A	06/20/11	PRELIMINARY PIPING DESIGN FOR PROPOSAL	BRISBEN	SPY
		REVISIONS AND RECORD OF ISSUE	BRISBEN	CHM/PDE/APP



I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA.
 SIGNED: _____ DATE: _____ REG. NO. _____



ORLANDO UTILITIES COMMISSION
 STANTON ENERGY CENTER - UNIT 2
 NG IGNITER PIPING PROPOSAL
 PLAN BELOW 122'-0"

PROJECT	DRAWING NUMBER	REV
905705-SM-2001		A
CODE	AREA	

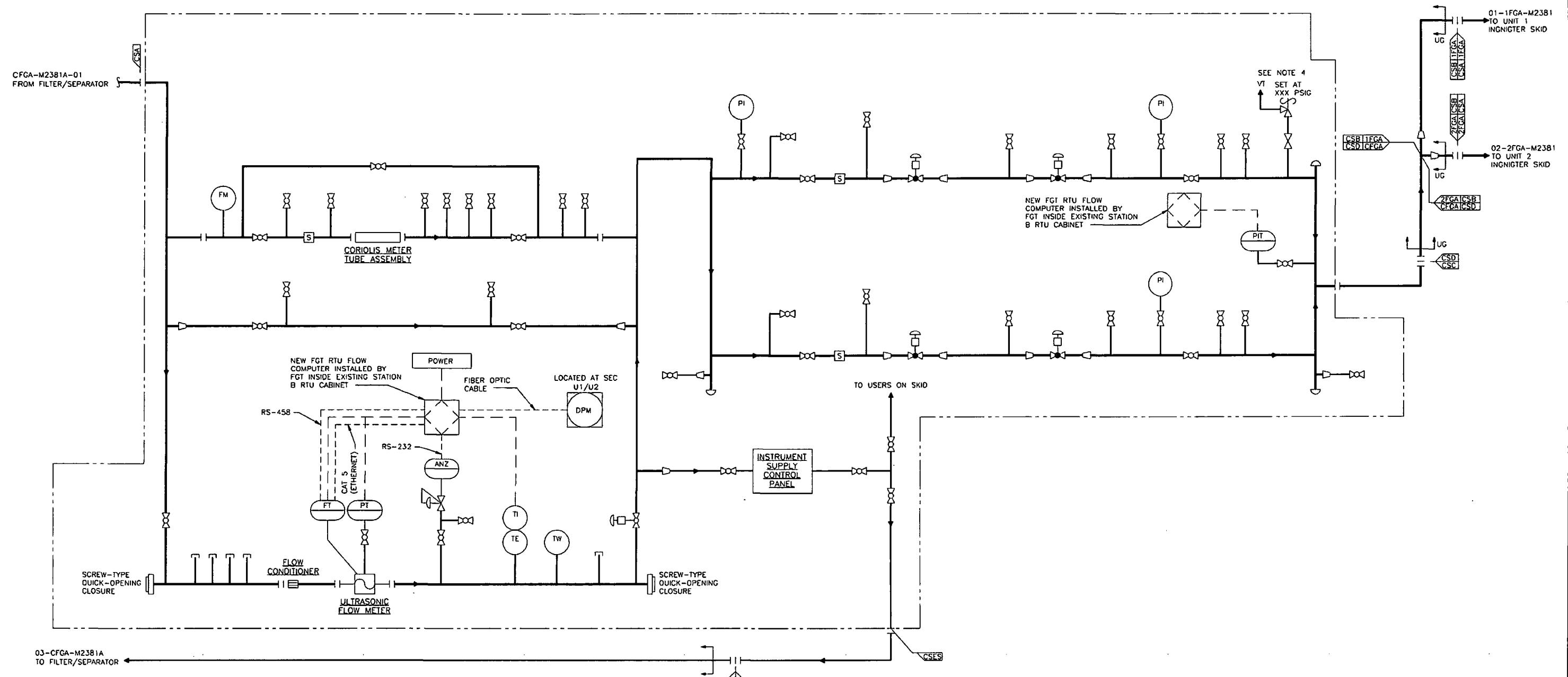
NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

Attachment B

Process Flow Diagram

- NOTES:**
1. SYSTEM CODE IS FGA, EXCEPT AS INDICATED.
 2. ALL SYSTEM COMPONENTS ARE SERIES CFGA-XXX-XXXX, UNLESS OTHERWISE NOTED.
 3. SEE DRAWING CUUU-M2001 FOR MISCELLANEOUS CONNECTION SIZES.
 4. VENT TO A SAFE LOCATION.

EXISTING GAS CHROMATOGRAPH AT STATION B GAS YARD



MCD11196 ACAD 18.0s (LWS Tech) D1 1=1 09/20/11 13:01:18

BLACK & VEATCH CORPORATION
 9000 REGENCY PARKWAY, SUITE 300
 CARY, NC 27518
FLORIDA ENGINEERING
 CERTIFICATE OF AUTHORIZATION
 #8132

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I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA
 SIGNED _____ DATE _____ REG. NO. _____

BLACK & VEATCH CORPORATION
 DESIGNER: RJB/DPT
 CHECKED: _____ DATE: _____

ORLANDO UTILITIES COMMISSION
 STANTON UNIT 1&2 GAS IGNITER PROJECT
 PIPING & INSTRUMENT DIAGRAM
 FUEL GAS SUPPLY

PROJECT	DRAWING NUMBER	REV
174727-SM-2005		0
CODE	AREA	

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
0	20/SEP/2011	ISSUED FOR PERMIT					

Attachment C

Precautions to Prevent Emissions of Unconfined Particulate Matter

Precautions to Prevent Emissions of Unconfined Particulate Matter

This project will not create new sources of unconfined particulate matter nor alter OUC's previous commitments to the prevention of unconfined particulate matter.

Attachment D

Description of Proposed Construction or Modification

Description of Proposed Construction or Modification

Orlando Utilities Commission (OUC) is proposing to replace the existing fuel oil igniter systems on Stanton Energy Center (SEC) Units 1 & 2 with natural gas igniter systems. The natural gas will be supplied from the existing Florida Gas Transmission (FGT) transmission line on the SEC site located north of SEC Units 1 & 2. The igniters will be used primarily as initial light-off for the 60 low NO_x coal burners (30 per unit). Additional information can be found in the Sections 1.0 and 2.0 of the application support document.

Attachment E

Rule Applicability Analysis

Rule Applicability Analysis

The following rule applicability analysis is limited to the rules associated with the proposed facility changes and does not encompass overall facility rule applicability. Overall facility applicable requirements were identified in the latest Title V permit application.

Rule Applicability Analysis for the Facility Changes

State: Rule 62-4.070 – *Standards for Issuing or Denying Permits.*

State: Rule 62-210.300 – *Permits Required.*

State: Rule 62-212.300 – *General Preconstruction Review Requirements.*

Attachment F

List of Exempt Emission Units

List of Exempt Emission Units

This application does not affect the existing list of exempt emission units at this facility.

Attachment G

Fugitive Emissions Identification

Fugitive Emissions Identification

This project does not contain any new fugitive emissions sources for the facility.

Attachment H

Fuel Analysis or Specification

Fuel Analysis or Specification

The primary fuel for Unit No. 1 and Unit No. 2 is coal. With this permit application, it is requested that the permit also allow for the firing of natural gas in the proposed new igniter systems. The natural gas will be pipeline quality with a sulfur content of 0.5 grains per dscf. Secondary fuels for these units are:

- Fuel oil – no longer available to the units upon installation of the natural gas igniters,
- Waste oil,
- Natural gas,
- Landfill gas

Attachment I

Detailed Description of Control Equipment

Detailed Description of Control Equipment

There is no new control equipment associated with this installation.

Attachment J

Operation and Maintenance Plan

Operation and Maintenance Plan

The facility equipment will be operated and maintained in accordance with manufacturer's recommendations, operations and maintenance experience, and technical guidance taking into account protection of equipment, safety of personnel and other factors as deemed necessary to maintain compliance with the permitted limits.