

Department of  
Environmental Protection  
Division of Air Resource Management

**SUBMITTED APPLICATION REPORT**  
**APPLICATION FOR AIR PERMIT - LONG FORM**

--- Form Effective 02/02/06 ---

Application Number: 1599- 1

Application Name: CRIST 4 & 5 ESP

Date Submitted: 08 June 2007

**I. APPLICATION INFORMATION**

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

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

**Air Operation Permit** - Use this form to apply for:

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

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

**To ensure accuracy, please see form instructions.**

**Identification of Facility**

1. Facility Owner/Company Name: GULF POWER COMPANY	
2. Site Name: CRIST ELECTRIC GENERATING PLANT	
3. Facility Identification Number: 0330045	
4. Facility Location...	
Street Address or Other Locator:	on Pate Road, off 10 mile Rd, located on Governors Bayou
	10 Mile Road
City: PENSACOLA	County: ESCAMBIA                      Zip Code: 32520-0340
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility <input type="checkbox"/> Yes <input type="checkbox"/> No

**Application Contact**

1.	Application Contact Name: GLENN WATERS	Application Contact Job Title: Special Projects and Environmental Assets Coordinator
2.	Application Contact Mailing Address... Organization/Firm: GULF POWER COMPANY Street Address: ONE ENERGY PLACE City: PENSACOLA	State: FL Zip Code: 32520-0328
3.	Application Contact Telephone Numbers... Telephone: (850) 444-6527 ext.	Fax: (850) 444-6217
4.	Application Contact Email Address: <a href="mailto:gdwaters@southernco.com">gdwaters@southernco.com</a>	

**Purpose of Application****This application for air permit is submitted to obtain: (Check one)****Air Construction Permit**

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

**Air Operation Permit**

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

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

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

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

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

**Application Comment**

The purpose of this air construction application is the upgrade the existing electrostatic precipitators on Crist Unit 4 and 5. See project description under Unit 4 and 5 'Other Emissions Unit Information' Section. No increase in emissions or change in capacity or operations of the units are expected from the project.

**Scope of Application**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>
5	Boiler #5 (Phase I & II Acid Rain Unit)	AC1F
4	Boiler #4 (Phase I & II Acid Rain Unit)	AC1F

*Note: The fee calculation information associated with this application may be accessed from the Main Menu of ESPAP.*

**Owner/Authorized Representative Statement****Complete if applying for an air construction permit or an initial FESOP.**

1.	Owner/Authorized Representative Name: PENNY MANUEL	Owner/Authorized Representative Job Title: Vice President and SPO
2.	Owner/Authorized Representative Mailing Address... Organization/Firm: GULF POWER COMPANY Street Address: ONE ENERGY PLACE City: PENSACOLA                      State: FL                      Zip Code: 32520-0001	
3.	Owner/Authorized Representative Telephone Numbers... Telephone: (850) 444-6383      ext.                      Fax: (850) 444-6744	
4.	Owner/Authorized Representative Email Address: pmmanuel@southernco.com	
5.	<p>Owner/Authorized Representative Statement:</p> <p>By entering my PIN below, I certify that I am the owner/authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</p>	

**Professional Engineer Certification**

1.	Professional Engineer Name: TOM DAVIS Registration Number: 36777	Professional Engineer Job Title: Principal Engineer
2.	Professional Engineer Mailing Address... Organization/Firm: ECT, INC. Street Address: 11211 NW 98TH STREET City: GAINESVILLE      State: FL      Zip Code: 32606-5004	
3.	Professional Engineer Telephone Numbers... Telephone: (352) 248-3351      ext.      Fax: (352) 332-6722	
4.	Professional Engineer Email Address: TDAVIS@ECTINC.COM	
5.	Professional Engineer Statement:  I hereby certify, except as particularly noted herein*, that:  (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and  (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.  (3) If the purpose of this application is to obtain a Title V air operation permit (check here <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.  (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.  (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.	

\* Explain any exception to the certification statement.

Professional Engineer Exception Statement:

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates... Zone 16                      East (km) 478.27 North (km) 3381.36		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 30° 33' 58" N Longitude (DD/MM/SS) 87° 13' 44" W	
3. Governmental Facility Code: (0) NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT	4. Facility Status Code: Active	5. Facility Major Group SIC Code: (49) ELECTRIC, GAS AND SANITARY SERVICES	6. Facility SIC(s): Primary: 4911
7. Facility Comment:			

#### Facility Contact

1. Facility Contact Name: GLENN D. WATERS	Facility Contact Job Title: Speical Projects & Environmental Assets Coordinator
2. Facility Contact Mailing Address... Organization/Firm: GULF POWER COMPANY Street Address: ONE ENERGY PLACE  <div style="display: flex; justify-content: space-between;"> <span>City: PENSACOLA</span> <span>State: FL</span> <span>Zip Code: 32520-0328</span> </div>	
3. Facility Contact Telephone Numbers... Telephone: (850) 444-6537 ext. Fax: (850) 444-6217	
4. Facility Contact Email Address:	



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

1.	<input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2.	<input type="checkbox"/> Synthetic Non-Title V Source	
3.	<input checked="" type="checkbox"/> Title V Source	
4.	<input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5.	<input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6.	<input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7.	<input type="checkbox"/> Synthetic Minor Source of HAPs	
8.	<input 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:	

**List of Pollutants Emitted by Facility**

1. Pollutants Emitted	2. Pollutant Classification	Emissions Cap [Y or N]?
NOX	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
HAPS	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
H107	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
H106	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
VOC	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
CO	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
PM	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
SO2	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
PM10	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
NH3	(C) CLASS IS UNKNOWN	N
TH	(C) CLASS IS UNKNOWN	N
H150	(C) CLASS IS UNKNOWN	N
H095	(C) CLASS IS UNKNOWN	N
H151	(C) CLASS IS UNKNOWN	N
H161	(C) CLASS IS UNKNOWN	N
H014	(C) CLASS IS UNKNOWN	N
DIOX	(C) CLASS IS UNKNOWN	N
H162	(C) CLASS IS UNKNOWN	N
H169	(C) CLASS IS UNKNOWN	N
H017	(C) CLASS IS UNKNOWN	N
H047	(C) CLASS IS UNKNOWN	N
H133	(C) CLASS IS UNKNOWN	N
H114	(C) CLASS IS UNKNOWN	N
H113	(C) CLASS IS UNKNOWN	N
H046	(C) CLASS IS UNKNOWN	N
H027	(C) CLASS IS UNKNOWN	N
H021	(C) CLASS IS UNKNOWN	N
H015	(C) CLASS IS UNKNOWN	N
SAM	(C) CLASS IS UNKNOWN	N
PB	(C) CLASS IS UNKNOWN	N

**B. Emissions Caps**

**Facility-Wide or Multi-Unit Emissions Caps**

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NOX	No	No EUs included in the cap			OTHER
<p>7. Facility-Wide or Multi-Unit Emissions Cap Comment:                      NOX: Once constuction is complete, Permit No. 0330045-005-AC establishes a NOx cap of 0.2 lb/MMBtu (30-day rolling average) for Units 4, 5, 6, and 7</p>					

**C. FACILITY ADDITIONAL INFORMATION****Additional Requirements for All Applications, Except as Otherwise Stated**

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

**Additional Requirements for Air Construction Permit Applications**

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

**Additional Requirements for FESOP Applications**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): (Not applicable if no exempt units at facility) | <input type="checkbox"/> Applicable | <input type="checkbox"/> Attachment |
|---|-------------------------------------|-------------------------------------|

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

- |  |  |                                     |
|--|--|-------------------------------------|
| 1. List of Insignificant Activities: (Required for initial/renewal applications, but not for revision applications)  | <input type="checkbox"/> Applicable  | <input type="checkbox"/> Attachment |
| 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"/> Applicable  | <input type="checkbox"/> Attachment |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications):<br>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. | <input type="checkbox"/> Applicable  | <input type="checkbox"/> Attachment |
| 4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):  | <input type="checkbox"/> Applicable <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed | <input type="checkbox"/> Attachment |
| 5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only):   | <input type="checkbox"/> Applicable  | <input type="checkbox"/> Attachment |
| 6. Requested Changes to Current Title V Air Operation Permit:  | <input type="checkbox"/> Applicable  | <input type="checkbox"/> Attachment |

**Other Information Regarding this Facility:**

- |                                |                                   |                                     |
|--------------------------------|-----------------------------------|-------------------------------------|
| 4. Other Facility Information: | <input type="checkbox"/> Included | <input type="checkbox"/> Attachment |
|--------------------------------|-----------------------------------|-------------------------------------|

**Additional Requirements Comment**

**Facility Attachments**

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Rule Applicability Analysis	CristFacilityFDEPRuleList.	Updated facility FDEP rule applicability list.	Yes	06/05/2007
	CristFacilityEPARuleList.p	Updated facility EPA applicability list.	Yes	06/05/2007



**III. EMISSIONS UNIT INFORMATION**  
**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. (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:  
 Boiler #4 (Phase I & II Acid Rain Unit)

3. Emissions Unit Identification Number: 4

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 01-JUL-59	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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9. Package Unit COMBUSTION ENGINEERING Model Number:  
 Manufacturer:

10. Generator Nameplate Rating: 93 MW

11. Emissions Unit Comment:  
 Unit 4 is a Combustion Engineering tangentially fired, dry bottom electric utility boiler.



**Emissions Unit Control Equipment**

Code	Equipment	Description
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Hot side electrostatic precipitators manufactured by Buell Model Bal. 2x34n333-4-3p with GE Energy ESP-3 & RDE-1 upgrade and cold side precipitators Buell Model 1.1x48k33-1p.

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:	99999 MW	
3. Maximum Heat Input Rate:	1097 million Btu/hr	
4. Maximum Incineration Rate:		pounds/hr tons/day
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8760 hours/year
6. Operating Capacity/Schedule Comment:	1096.7 mmBtu/hr. Compliance by fuel records.	



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

1. Segment Description (Process/Fuel Type): Pulverized bituminous coal.		
2. Source Classification Code (SCC): 10100212	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 40.52	5. Maximum Annual Rate: 354955.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 3.5	8. Maximum % Ash: 9.3	9. Million Btu per SCC Unit: 24
10. Segment Comment: Primarily a coal fired unit. This unit is also capable of full load using natural gas. No. 2 fuel oil is used as a secondary fuel.		
Is this a valid segment? Yes		

**Segment Description and Rate: Segment 2 of 5**

1. Segment Description (Process/Fuel Type): #2 fuel oil		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 7.184	5. Maximum Annual Rate: 62931.84	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: #2 fuel oil as a back up fuel.		
Is this a valid segment? Yes		

**Segment Description and Rate:** Segment 3 of 5

1. Segment Description (Process/Fuel Type): Natural gas.		
2. Source Classification Code (SCC): 10100604	3. SCC Units: Million Cubic Feet Natural Gas Burned	
4. Maximum Hourly Rate: .96	5. Maximum Annual Rate: 8409.6	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .01	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment: Natural gas.		
Is this a valid segment? Yes		

**Segment Description and Rate:** Segment 4 of 5

1. Segment Description (Process/Fuel Type): "Biomass" (wood, switchgrass, sawdust, and sander dust)		
2. Source Classification Code (SCC): 10100903	3. SCC Units: Tons Wood 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: Permit allows up to 97.7 MMBtu/hr of "biomass" (wood, switchgrass, sawdust, and sander dust) with TPH and TPY limits for each "biomass" fuel		
Is this a valid segment? Yes		

**Segment Description and Rate:** Segment 5 of 5

1. Segment Description (Process/Fuel Type): On-specification used oil.		
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, PCB50 ppm.		
Is this a valid segment? Yes		

**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	Valid?
CO			NS	Yes
DIOX			NS	Yes
H014			NS	Yes
H015			EL	Yes
H017			NS	Yes
H021			NS	Yes
H027			EL	Yes
H046			EL	Yes
H047			NS	Yes
H095			NS	Yes
H106			NS	Yes
H107			NS	Yes
H113			NS	Yes
H114			NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162			NS	Yes
H169			NS	Yes
HAPS				Yes
NH3				Yes
NOX			EL	Yes
PB			EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SAM			NS	Yes
SO2			EL	Yes
VOC			NS	Yes

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: CO - Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 38.4 lb/hour                      168.19 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 40 LB/MMCF BURNED Reference: AP-42	7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.
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: [40 lb/mmcf] [.96 mmcf/hr] [8760 hr/yr] [1/2000] =168.19 tons/yr	
11. Pollutant Potential, Fugitive, and Actual Emissions Comment: Potential emissions highest with unit operates on natural gas.	



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H015 - Arsenic Compounds (inorganic including arsine)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour .02 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: .000592 LB/TON Reference: RAD		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil.			

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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H017 - Benzene (including benzene from gasoline)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour .02 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: .000091 LB/TON Reference: EPRISR	7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:	



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H046 - Chromium Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .02 lb/hour .08 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: .00045 LB/TON Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 10 ppm as specification of used oil.			

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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H113 - Manganese Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .02 lb/hour .1 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: .000542 LB/TON Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H114 - Mercury Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .01 lb/hour .02 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: .00014 LB/TON Reference: GDW		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H150 - Polychlorinated biphenyls (Aroclors)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		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:	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 50 ppm as specification of used oil.			

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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H161 - Radionuclides (including radon)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		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:	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H162 - Selenium Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .1 lb/hour .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: .002541 LB/TON Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H169 - Toluene		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .01 lb/hour .04 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: .001396 LB/1000 GAL Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: NH3 - Ammonia		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		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:  OTHER (SPECIFY IN COMMENT)  Reference:		7. Emissions Method Code:	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: ppmvd @ 3% O2			

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

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

*No Pollutant Allowable Emissions information submitted.*

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: NOX - Nitrogen Oxides	2. Total Percent Efficiency of Control:
3. Potential Emissions: 570.28 lb/hour                      2497.84 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .52 LB/MMBTU Reference: PERMIT LIMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
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: [0.52 lb/mmBtu] [1096.7 mmBtu/hr] [8760 hr/yr] [1/2000]= 2497.84 tons/yr	
11. Pollutant Potential, Fugitive, and Actual Emissions Comment: Part of Plantwide Limit- NOx emissions from units 4-7 will not exceed 0.2 lb/MMBtu of heat input on a rolling 30day average	

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

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

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .52 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 570.28 lb/hour      2497.84 tons/year
5. Method of Compliance: CEM annual average of Title V Phase II NOx Averaging Plan.	
6. Allowable Emissions Comment (Description of Operating Method): Crist Unit 4 is part of the Gulf/Mississippi Power NOx Averaging Plan for compliance with Phase II NOx limits. See 40 CFR Part 76 for details. No hrly annual equivalent allowable emissions necessary.	



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

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

*No Pollutant Allowable Emissions information submitted.*

### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: PM - Particulate Matter - Total		2. Total Percent Efficiency of Control: 99	
3. Potential Emissions: 109.7 lb/hour                                  600 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: .125 LB/MMBTU Reference: Permit Limit		7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.	
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: lb/hr = 1096.7 mmBtu/hr*0.1 lb/mmBtu = 109.7 lb/hr. TPY =1096.7 mmBtu/hr*0.125 lb/mmBtu * 8760 hrs/yr/*1 ton/2000 lb = 600. TPY			
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Emission factor based on 0.1 lb/MMBtu, 21 hours (steady- state); 0.3 lb/MMBtu, 3 hours (soot-blowing).			



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

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

### Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .1 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 109.67 lb/hour          600 tons/year
5. Method of Compliance: Test required when liquid a/o solid fuel fired >400 hrs/yr	
6. Allowable Emissions Comment (Description of Operating Method): During normal operations.	

### Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .3 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 329.01 lb/hour          600 tons/year
5. Method of Compliance: Test required when liquid a/o solid fuel fired >400 hrs/yr	
6. Allowable Emissions Comment (Description of Operating Method): During soot-blowing and load change for 3-hrs per 24-hr period .	

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: PM10 - Particulate Matter - PM10		2. Total Percent Efficiency of Control: 99	
3. Potential Emissions: 18.8399 lb/hour                      82.5189 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: .465 LB/TON Reference: AP-42		7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.	
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: [.465 lb/ton of coal] [40.516 ton/hr] [8760 hr/yr] [1/2000]=82.5189 tons/yr			
11. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

**Allowable Emissions** Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 2632.08 lb/hour      11528.51 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing coal.	

**Allowable Emissions** Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.75 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 3015.9 lb/hour      13210 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While burning liquid fuel.	





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

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

*No Pollutant Allowable Emissions information submitted.*

**G. VISIBLE EMISSIONS INFORMATION**

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

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE40 - VISIBLE EMISSIONS - 40% NORMAL OPACITY	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 40%                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: During normal operations. Compliance shown through transmissometer (opacity meter).	

**Visible Emissions Limitation:** Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE60 - VISIBLE EMISSIONS - 60% NORMAL OPACITY	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 60%                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: During the 3-hrs in any 24 hr period allowed for boiler cleaning (soot blowing) and load change. Compliance shown through transmissometer (opacity meter).	

**H. CONTINUOUS MONITOR INFORMATION****Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 1 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teco Model Number: 43H Serial Number: 43H-44285-271	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Unit has elected to install and operate CEM for SO2 in lieu of monitoring emissions using fuel sampling and analysis under rule 62-296.405(1)(f)1.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 2 of 5

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Lear Siegler Model Number: SS-4542 Serial Number: 940601	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Unit required to monitor opacity under 62-96.405(1)(f)1.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 3 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teco Model Number: 42D Serial Number: 42D-44859-272	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses Siemens and Teco analyzers to calculate unit NOx emission rate.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 4 of 5

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Siemens Model Number: ULTRAMAT 5E Serial Number: E3-729	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses the Siemens CO2 analyzer to measure the diluent component of the SO2 and NOX emission rate.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 5 of 5

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: United Science Model Number: ULTRAFLOW 100 Serial Number: 9401588	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions.	
Status: Active	

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

1.	Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
2.	Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
3.	Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
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"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
6.	Compliance Demonstration Reports/Records	<input type="checkbox"/> Applicable	<input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
	<input type="checkbox"/> To Be Submitted, Date (if known):			
	Previously Submitted Test Date(s)/Pollutants Tested:			
	To be Submitted Test Date(s)/Pollutants Tested:			
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.			
7.	Other Information Required by Rule or Statute	<input type="checkbox"/> Applicable		<input type="checkbox"/> Attachment

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

1. Identification of Applicable Requirements	<input checked="" type="checkbox"/> Applicable	<input checked="" type="checkbox"/> Attachment
2. Compliance Assurance Monitoring Plan	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
3. Alternative Methods of Operation	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
4. Alternative Modes of Operation (Emissions Trading)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
5. Acid Rain Part Application		
Certificate of Representation (EPA Form No. 7610-1)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Acid Rain Part (Form No. 62-210.900(1)(a))	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment

**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))<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span>   |
| 2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span> |
| 3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span>                |

**Other Information Regarding this Emissions Unit**

- |  |
|--|
| 1. Other Emissions Unit Information<br><input checked="" type="checkbox"/> Applicable <span style="float: right;"><input checked="" type="checkbox"/> Attachment</span><br>Note: Provide any other information related to the emissions unit addressed in this Emissions Unit Information Section that is not elsewhere provided in the application, not otherwise required and that you, the applicant, believe may be helpful. |
|--|

**Additional Requirements Comment**

Unit 4 ESP Upgrade Project Summary and Information.
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**Emission Unit Attachments**

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Cr 4_5 ESP Pictures.ppt	ESP Upgrade Pictures.	Yes	06/05/2007
	Crist 4 _ 5 ESP Project.pdf	Crist Unit 4 Hot ESP Upgrade Project Description.	Yes	06/06/2007
	Crist 4-5 Precip Changes.pdf	Crist 4 Change List.	Yes	06/06/2007
Identification of Applicable Requirements	Crist4FDEPRuleList.pdf	Updated Unit 4 FDEP rule applicability list.	Yes	06/05/2007
	Crist4EPARuleList.pdf	Updated Unit 4 EPA rule applicability list.	Yes	06/05/2007

**III. EMISSIONS UNIT INFORMATION**  
**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. (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:  
 Boiler #5 (Phase I & II Acid Rain Unit)

3. Emissions Unit Identification Number: 5

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 01-JUN-61	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
-------------------------------------	--------------------------------	---------------------------------------	---	--

9. Package Unit COMBUSTION ENGINEERING Model Number:  
 Manufacturer:

10. Generator Nameplate Rating: 93 MW

11. Emissions Unit Comment:  
 Unit 5 is a Combustion Engineering tangentially fired, dry bottom electric utility boiler.

**Emissions\_Unit Control Equipment**

Code	Equipment	Description
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Hot side electrostatic precipitators manufactured by Buell Model Bal. 2x34n333-4-3p with GE Energy ESP-3 & RDE-1 upgrade and cold side precipitators Buell Model 1.1x48k33-1p.

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	99999 MW
3. Maximum Heat Input Rate:	1097 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:	1096.7 mmBtu/hr. Compliance by fuel records.

**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: SINGLE COMMON STACK SHARED BY UNITS 1,2,3,4,AND 5		2. Emission Point Type Code: 2 - An emission point serving 2 or more EU's capable of simultaneous operation	
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: • 4 - Boiler #4 (Phase I & II Acid Rain Unit)			
5. Discharge Type Code: (V) A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL/NEARLY VERTICAL DIRECTION	6. Stack Height: 450 feet	7. Exit Diameter: 18 feet	
8. Exit Temperature: 290° F	9. Actual Volumetric Flow Rate: 802500 acfm	10. Water Vapor: 9 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 16      East (km): 478.6 North (km): 3381.3		14. Emission Point Latitude/Longitude... Latitude: 30° 33' 56" N Longitude: 87° 13' 31" W	
15. Emission Point Comment: Common stack for unts 1-5.			

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

1. Segment Description (Process/Fuel Type): Pulverized bituminous coal.		
2. Source Classification Code (SCC): 10100212	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 40.52	5. Maximum Annual Rate: 354955.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 3.5	8. Maximum % Ash: 9.3	9. Million Btu per SCC Unit: 24
10. Segment Comment: Primarily a coal fired unit. This unit is also capable of full load using natural gas. No. 2 fuel oil is used as a secondary fuel.		
Is this a valid segment? Yes		

**Segment Description and Rate:** Segment 2 of 5

1. Segment Description (Process/Fuel Type): #2 fuel oil.		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 7.184	5. Maximum Annual Rate: 62931.84	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: #2 fuel oil as a back up fuel.		
Is this a valid segment? Yes		

**Segment Description and Rate: Segment 3 of 5**

1. Segment Description (Process/Fuel Type): Natural gas		
2. Source Classification Code (SCC): 10100604	3. SCC Units: Million Cubic Feet Natural Gas Burned	
4. Maximum Hourly Rate: .96	5. Maximum Annual Rate: 8409.6	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .01	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment: Natural gas		
Is this a valid segment? Yes		

**Segment Description and Rate: Segment 4 of 5**

1. Segment Description (Process/Fuel Type): "Biomass" (wood, switchgrass, sawdust, and sander dust)		
2. Source Classification Code (SCC): 10100903	3. SCC Units: Tons Wood 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: Permit allows up to 40.2 MMBtu/hr of "biomass" ( 4.7 tph woodchips, 2.9 tph switchgrass, 3.7 tph sawdust, and 3.7 tph sander dust)		
Is this a valid segment? Yes		

**Segment Description and Rate:** Segment 5 of 5

1. Segment Description (Process/Fuel Type): On-specification used oil.		
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, PCB50 ppm.		
Is this a valid segment? Yes		



**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	Valid?
CO			NS	Yes
DIOX			NS	Yes
H014			NS	Yes
H015			EL	Yes
H017			NS	Yes
H021			NS	Yes
H027			EL	Yes
H046			EL	Yes
H047			NS	Yes
H095			NS	Yes
H106			NS	Yes
H107			NS	Yes
H113			NS	Yes
H114			NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162			NS	Yes
H169			NS	Yes
HAPS				Yes
NOX			EL	Yes
PB			EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0- 99.9%)		EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0- 99.9%)		NS	Yes
SAM			NS	Yes
SO2			EL	Yes
VOC			NS	Yes



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H014 - Antimony Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .04 lb/hour .16 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: .004935 LB/1000 GAL Reference: AP-42		7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*

### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H015 - Arsenic Compounds (inorganic including arsine)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour <span style="float: right;">.02 tons/year</span>	4. Synthetically Limited? <input type="checkbox"/> Yes <span style="margin-left: 100px;"><input type="checkbox"/> No</span>
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000592 LB/TON Reference: RAD	7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: <span style="margin-left: 100px;">To:</span>
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <span style="margin-left: 100px;"><input type="checkbox"/> 10 years</span>
10. Calculation of Emissions:	
11. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil.	



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H021 - Beryllium Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour .02 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: .000103 LB/TON Reference:		7. Emissions Method Code: (2) CALCULATED BY USE OF MATERIAL BALANCE AND KNOWLEDGE OF THE PROCESS.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H027 - Cadmium Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour .01 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: .000079 LB/TON Reference: RAD		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 2 ppm as specification of used oil.			

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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H095 - Formaldehyde		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .02 lb/hour .09 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: .00282 LB/1000 GAL Reference: EPRISR		7. Emissions Method Code: (2) CALCULATED BY USE OF MATERIAL BALANCE AND KNOWLEDGE OF THE PROCESS.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*

### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H106 - Hydrogen chloride (Hydrochloric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 70.5 lb/hour                      308.79 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: 1.74 LB/TON  Reference:	7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.
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: 1.74 lb/ton coal*40.516 ton/hr * 8760 hr/yr*1 ton/2000 lbs = 308.78 TPY	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment:	

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

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

*No Pollutant Allowable Emissions information submitted.*

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6.83 lb/hour                      29.9 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: .16849 LB/TON Reference: GDW	7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.
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: 0.16848 lb/ton of coal* 40.516 ton/hr* 8760 hr/yr* 1ton /2000 lb = 29.9 TPY	
11. Pollutant Potential, Fugitive, and Actual Emissions Comment:	



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H113 - Manganese Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .02 lb/hour .1 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: .000542 LB/TON Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H150 - Polychlorinated biphenyls (Aroclors)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		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:	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Limited to 50 ppm as specification of used oil.			



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: H162 - Selenium Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: .1 lb/hour .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: .002541 LB/TON Reference:		7. Emissions Method Code: (5) CALCULATED USING EMISSION FACTOR OTHER THAN AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

*No Pollutant Allowable Emissions information submitted.*

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

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

1. Pollutant Emitted: HAPS - Total Hazardous Air Pollutants		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		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:	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			

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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .6 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 658.02 lb/hour      2882.13 tons/year
5. Method of Compliance: CEM annual average of Title V Phase II NOx Averaging Plan.	
6. Allowable Emissions Comment (Description of Operating Method): Crist Unit 5 is part of the Gulf/Mississippi Power NOx Averaging Plan for compliance with Phase II NOx limits. See 40 CFR Part 76 for details. No hrly annual equivalent allowable emissions necessary.	



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

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

*No Pollutant Allowable Emissions information submitted.*





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

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

**Allowable Emissions** Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .3 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 329.01 lb/hour                  600 tons/year
5. Method of Compliance: Test required when liquid a/o solid fuel fired >400 hrs/yr	
6. Allowable Emissions Comment (Description of Operating Method): During soot-blowing and load change for 3-hrs per 24-hr period .	

**Allowable Emissions** Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .1 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 109.67 lb/hour                  600 tons/year
5. Method of Compliance: Test required when liquid a/o solid fuel fired >400 hrs/yr	
6. Allowable Emissions Comment (Description of Operating Method): During normal operations.	



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

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

*No Pollutant Allowable Emissions information submitted.*



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

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

*No Pollutant Allowable Emissions information submitted.*

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

(Optional for unregulated emissions units.)

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: SO2 - Sulfur Dioxide		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2632.8 lb/hour 11532 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 2.4 LB/MMBTU Reference: Permit Limit		7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment: Potential emissions are based on coal firing.			

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

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

**Allowable Emissions**    Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 6470.5 lb/hour            28341 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing coal.	

**Allowable Emissions**    Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.75 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 3015.93 lb/hour            13209.75 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While burning liquid fuel.	

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

**(Optional for unregulated emissions units.)**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

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

1. Pollutant Emitted: VOC - Volatile Organic Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2.43 lb/hour                      10.65 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: .06 LB/TON Reference: AP-42		7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.	
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. Pollutant Potential, Fugitive, and Actual Emissions Comment:			



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

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

*No Pollutant Allowable Emissions information submitted.*

**G. VISIBLE EMISSIONS INFORMATION**

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

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE40 - VISIBLE EMISSIONS - 40% NORMAL OPACITY	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 40%                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: During normal condition. Compliance shown through transmissometer (opacity meter).	

**Visible Emissions Limitation:** Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE60 - VISIBLE EMISSIONS - 60% NORMAL OPACITY	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 60%                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: During the 3-hrs in any 24 hr period allowed for boiler cleaning (soot blowing) and load change. Compliance shown through transmissometer (opacity meter).	

**H. CONTINUOUS MONITOR INFORMATION****Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 1 of 5

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Lear Siegler Model Number: SS-4542 Serial Number: 940602	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Unit required to monitor opacity under 62-96.405(1)(f)1.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 2 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teco Model Number: 43H Serial Number: 43H-44334-271	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Unit has elected to install and operate CEM for SO2 in lieu of monitoring emissions using fuel sampling and analysis under rule 62-296.405(1)(f)1.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 3 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teco Model Number: 42D Serial Number: 42D-42539-267	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses Siemens and Teco analyzers to calculate unit NOx emission rate.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 4 of 5

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Siemens Model Number: ULTRAMAT 5E Serial Number: E3-730	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses the Siemens CO2 analyzer to measure the diluent component of the SO2 and NOX emission rate.	
Status: Active	

**Continuous Monitoring System:** Continuous Monitor 5 of 5

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: United Science Model Number: ULTRAFLOW 100 Serial Number: 9401591	
5. Installation Date: 01-JUL-94	6. Performance Specification Test Date: 24-JUL-94
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions.	
Status: Active	

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

<p>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)</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p>
<p>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)</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p>
<p>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)</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p>
<p>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)</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p>
<p>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)</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p>
<p>6. Compliance Demonstration Reports/Records</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Previously Submitted, Date: _____      <input type="checkbox"/> Attachment</p> <p style="padding-left: 40px;"><input type="checkbox"/> To Be Submitted, Date (if known): _____</p> <p>Previously Submitted Test Date(s)/Pollutants Tested:</p> <p>To be Submitted Test Date(s)/Pollutants Tested:</p> <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>
<p>7. Other Information Required by Rule or Statute</p> <p><input type="checkbox"/> Applicable      <input type="checkbox"/> Attachment</p>

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

1. Identification of Applicable Requirements	<input checked="" type="checkbox"/> Applicable	<input checked="" type="checkbox"/> Attachment
2. Compliance Assurance Monitoring Plan	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
3. Alternative Methods of Operation	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
4. Alternative Modes of Operation (Emissions Trading)	<input type="checkbox"/> Applicable	<input type="checkbox"/> Attachment
5. Acid Rain Part Application		
Certificate of Representation (EPA Form No. 7610-1)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Acid Rain Part (Form No. 62-210.900(1)(a))	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)	<input type="checkbox"/> Applicable <input type="checkbox"/> Previously Submitted, Date:	<input type="checkbox"/> Attachment

**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))<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span>   |
| 2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span> |
| 3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)<br><input type="checkbox"/> Applicable <span style="float: right;"><input type="checkbox"/> Attachment</span>                |

**Other Information Regarding this Emissions Unit**

- |  |
|--|
| 1. Other Emissions Unit Information<br><input checked="" type="checkbox"/> Applicable <span style="float: right;"><input checked="" type="checkbox"/> Attachment</span><br>Note: Provide any other information related to the emissions unit addressed in this Emissions Unit Information Section that is not elsewhere provided in the application, not otherwise required and that you, the applicant, believe may be helpful. |
|--|

**Additional Requirements Comment**

Crist 5 ESP Upgrade Project Summary and Information.
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**Emission Unit Attachments**

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Cr 4_5 ESP Pictures.ppt	ESP Upgrade Pictures.	Yes	06/05/2007
	Crist 4 _ 5 ESP Project.pdf	Crist Unit 5 Hot ESP Upgrade Project Description.	Yes	06/06/2007
	Crist 4-5 Precip Changes.pdf	Unit 5 Change List.	Yes	06/06/2007
Identification of Applicable Requirements	Crist5FDEPRuleList.pdf	Unit 5 FDEP rule applicability list.	Yes	06/05/2007
	Crist5EPARuleList.pdf	Unit 5 EPA rule applicability list.	Yes	06/05/2007



APPLICATION: CRIST 4 & 5 ESP (#1599-1)  
FACILITY: GULF POWER COMPANY (#0330045)

<b>Facility Attachments</b>				
Supplemental Item	Electronic File Name	Attachment Description	Electronic Document?	Date Uploaded
RULE APPLICABILITY ANALYSIS	CristFacilityEPARuleList.pdf	Updated facility EPA applicability list.	Yes	6/5/2007
->>	CristFacilityFDEPRuleList.pdf	Updated facility FDEP rule applicability list.	Yes	6/5/2007
<b>Emissions Unit Attachments</b>				
Emissions Unit: 004 - Boiler #4 (Phase I & II Acid Rain Unit)				
Supplemental Item	Electronic File Name	Attachment Description	Electronic Document?	Date Uploaded
DETAILED DESCRIPTION OF CONTROL EQUIPMENT	Crist 4-5 GE Proposal.pdf	Description of new ESP design for Unit 4.	Yes	6/5/2007
IDENTIFICATION OF APPLICABLE REQUIREMENTS	Crist4EPARuleList.pdf	Updated Unit 4 EPA rule applicability list.	Yes	6/5/2007
->>	Crist4FDEPRuleList.pdf	Updated Unit 4 FDEP rule applicability list.	Yes	6/5/2007
OTHER EMISSIONS UNIT INFORMATION	Cr 4_5 ESP Pictures.ppt	ESP Upgrade Pictures.	Yes	6/5/2007
->>	Crist 4 _ 5 ESP.Project.pdf	Crist Unit 4 Hot ESP Upgrade Project Description.	Yes	6/6/2007
->>	Crist 4-5 Precip Changes.pdf	Crist 4 Change List.	Yes	6/6/2007
Emissions Unit: 005 - Boiler #5 (Phase I & II Acid Rain Unit)				
Supplemental Item	Electronic File Name	Attachment Description	Electronic Document?	Date Uploaded
DETAILED DESCRIPTION OF CONTROL EQUIPMENT	Crist 4-5 GE Proposal.pdf	Description of new ESP design for Unit 5.	Yes	6/5/2007
IDENTIFICATION OF APPLICABLE REQUIREMENTS	Crist5EPARuleList.pdf	Unit 5 EPA rule applicability list.	Yes	6/5/2007
->>	Crist5FDEPRuleList.pdf	Unit 5 FDEP rule applicability list.	Yes	6/5/2007
OTHER EMISSIONS UNIT INFORMATION	Cr 4_5 ESP Pictures.ppt	ESP Upgrade Pictures.	Yes	6/5/2007
->>	Crist 4 _ 5 ESP Project.pdf	Crist Unit 5 Hot ESP Upgrade Project Description.	Yes	6/6/2007
->>	Crist 4-5 Precip Changes.pdf	Unit 5 Change List.	Yes	6/6/2007
Report Completed as of: 7/17/2007 3:03:29 PM				