Department of
Environmental Protection
Division of Air Resource Management

SUBMITTED APPLICATION REPORT
APPLICATION FOR AIR PERMIT - LONG FORM

Received: * 10/30/06

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

Application Number: 1366- 1
Application Name: CRIST FGD-SCR PROJECT
Date Submitted: 30 October 2006

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? ☐ Yes ☑ No	6. Existing Title V Permitted Facility ☑ Yes ☐ 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: 32520-0329	
3.	Application Contact Telephone Numbers... Telephone: (850) 444-6527 ext. Fax: (850) 444-6217	
4.	Application Contact Email Address: gdwaters@southernco.com	

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 application is to request a construction permit for the installation of a wet Flue Gas Desulphurization (FGD) scrubber on the coal fired generating units (4-7) at Plant Crist to comply with requirements associated with new CAIR and CAMR rules.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type
5	Boiler #5	AC1B
7	Boiler #7	AC1B
9	Coal, Limestone, Ash and Gypsum Materials Handling	AC1B
4	Boiler #4	AC1B
6	Boiler # 6	AC1B

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.	Owner/Authorized Representative Statement: 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.

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 ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☑, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

* 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...		2. Facility Latitude/Longitude...	
Zone 16 East (km) 478.27 North (km) 3381.36		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 is a coal-fired generating plant conprised of 4 units ranging from 93 to 579 MW and supportive systems.			

Facility Contact

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

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

1.	☐ Small Business Stationary Source	☐ Unknown
2.	☐ Synthetic Non-Title V Source	
3.	☑ Title V Source	
4.	☑ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5.	☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6.	☑ Major Source of Hazardous Air Pollutants (HAPs)	
7.	☐ Synthetic Minor Source of HAPs	
8.	☐ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9.	☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10.	☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11.	☐ 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.	Y
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	Yes	All		10779	OTHER

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

NOX: FDEP-Gulf Ozone Agreement established a NOx cap of 0.2 lb/MMBtu (30-day rolling average) for Units 4, 5, 6, and 7. 10779 annual tons is an equivalent limit based on facility 12304.6 mmbtu/hr @ .20 lb/mmbtu * 8760 * 1/2000 lb/ton. Ton Cap is not a limit.

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) ☐ Applicable ☐ Previously Submitted, Date: ☑ 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) ☐ Applicable ☐ Previously Submitted, Date: ☑ 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) ☑ Applicable ☐ Previously Submitted, Date: ☑ Attachment

Additional Requirements for Air Construction Permit Applications

1.	Area Map Showing Facility Location: (Not applicable for existing permitted facility) ☐ Applicable ☐ Attachment
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): ☐ Applicable ☐ Attachment
3.	Rule Applicability Analysis: ☑ Applicable ☑ Attachment
4.	List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): (Not applicable if no exempt units at facility) ☐ Applicable ☐ Attachment
5.	Fugitive Emissions Identification: ☐ Applicable ☐ Attachment
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Applicable ☐ Attachment
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Applicable ☐ Attachment
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Applicable ☐ Attachment
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): ☐ Applicable ☐ Attachment
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Applicable ☐ 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)
   ☐ Applicable ☐ 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)
   ☐ Applicable ☐ 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):
   ☐ Applicable ☐ Attachment
3. Compliance Report and Plan: (Required for all initial/revision/renewal applications):
   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.
   ☐ Applicable ☐ Attachment
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Applicable ☐ Equipment/Activities On site but Not Required to be Individually Listed ☐ Attachment
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only):
   ☐ Applicable ☐ Attachment
6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Applicable ☐ Attachment

Other Information Regarding this Facility:

4. Other Facility Information:
   ☑ Included ☑ Attachment

Additional Requirements Comment

Please find attached a description of the Crist Wet FGD Scrubber, plot plan, process flow, netting analysis,CEM Monitoring Plan and support information for this project.

Facility Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Rule Applicability Analysis	FDEPTitleVCoreList.pdf	Facility FDEP Core List.	Yes	10/25/2006
	CristFacilityFDEPRuleList.	Facility FDEP Rule List.	Yes	10/25/2006
	CristFacilityEPARuleList.p	Facility EPA Rule List.	Yes	10/25/2006
Facility Plot Plan	Crist stack location-Layout1.pdf	Facility Proposed Chimney Location Plot.	Yes	10/24/2006
	Crist FGD Plot Plan.doc	Facility Plot Plan	Yes	10/27/2006
Process Flow Diagram (s)	Crist Ductwork Sketch for Vent Stack.pdf	Crist Process Flow for Vent Stack and Unit arrangement.	Yes	10/25/2006
	Process Flow Diagram.ppt	Facility Process Flow	Yes	10/20/2006
Precautions to Prevent Emissions of Unconfined Particulate Matter	CristPrecautions.DOC	Crist Facility Precautions.	Yes	10/30/2006
Other Facility Information	Crist FGD Layout2.TIF	Crist Facility FGD Layout Document 2.	Yes	10/24/2006
	Crist FGD Description.pdf	Crist FCG Project Description.	Yes	10/26/2006
	CristFGDEmissionReductic estimated by LSM.xls	Crist Chiyoda Scrubber Emission Factors by Larry Monroe.	Yes	10/24/2006
	CristSO2NettingAnalysis10	Crist SO2 Netting Analysis.	Yes	10/27/2006
	Crist CEM Monitoring Plan.pdf	Crist CEM Monitoring Plan.	Yes	10/26/2006
	CristPartiulcateNettingAnal	Crist Particulate Netting Analysis.	Yes	10/28/2006
	Crist FGD Summary Schedule.pdf	Crist FGD Schedule.	Yes	10/24/2006
	CristFGDPresentation.ppt	Crist FGD Presentation	Yes	10/20/2006
	Crist FGD Layout1.TIF	Crist Facility FCG Layout Document 1.	Yes	10/24/2006

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

3. Emissions Unit Identification Number: 4

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-JUL-59	49	☑ Yes ☐ No

9. Package Unit Manufacturer: COMBUSTION ENGINEERING Model Number:

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 and cold side precipitators Buell Model 1.1x48k33-1p.
1	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	Unit 4 flue gas emissions will be incorporated with Units 5,6 and 7 to a single Wet FGD scrubber system. Unit 4 will have a by-pass stack for startup, shutdown and malfunction.
205	LOW NOX BURNERS	
107	SELECTIVE NONCATALYTIC REDUCTION FOR NOX	SNCR added in 2006.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:		
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 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 BY-PASS STACK SHARED BY UNITS 4, 5, 6 & 7	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: • 5 - Boiler #5 • 6 - Boiler # 6 • 7 - Boiler #7		
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: 35 feet
8. Exit Temperature: 131° F	9. Actual Volumetric Flow Rate: 3282000 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): 478.25 North (km): 3381.61	14. Emission Point Latitude/Longitude... Latitude: 30° 34' .34" N Longitude: 87° 13' 36.5" W	
15. Emission Point Comment: Existing stack used for by-pass operations for units 4&5@450ft;18ftdia;290degrees;Location:Z16,E478.53,N3381.49; Unit 6& 7@450ft;18ftdia, 316degrees, 2975540 acfm. location:Z16,E478.435,N3381.482		

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: 45.71	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	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 and No. 2 fuel oil.		
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	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H027	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H046	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H047			NS	Yes
H095			NS	Yes
H106	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H107	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H113	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H114	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H169			NS	Yes
HAPS				Yes
NH3				Yes
NOX	LOW NOX BURNERS	NSCR (NON-SELECTIVE CATALYTIC REDUCTION)	EL	Yes
	WET SCRUBBER			

PB	HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	NS	Yes
SAM	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		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? ☐ Yes ☑ 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: ☐ 5 years ☐ 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.

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: DIOX - Dioxin/Furan	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: H014 - Antimony Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .04 lb/hour .16 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .004935 lb/kgal * 7.184 kgal/hr * 8760hr/yr * 1/2000 lb/ton = .16 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000092 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000092 lb/ton * 45.71 t/hr * 8760 hr/yr * 1/2000 lb/ton = .02 t/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil. Assume no reduction from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000091 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton = .02 t/y	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume no change from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000103 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)=.02	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from FGD.	

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? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000079 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000079 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)= .01 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 2 ppm as specification of used oil.Assume 20% reduction from FGD.	

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 .07 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00045 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .07	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 10 ppm as specification of used oil.Assume 20 % reduction from FGD.	

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: H047 - Cobalt Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .04 lb/hour .16 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .005217 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .005217 lb/1000gal * 7.184 kgal/hr = .04; Annual= .005217 * 62931.84/2000 = .16 ton	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00282 lb/kgal * 7.184 kgal/hr=.02 lb/hr; Annual = .00282 * 62931.84/2000=0.09 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: 79.53 lb/hour 28.03 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.74 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= 1.74 lb/ton coal*45.71 ton/hr = 79.53; Annual = (79.53 * 456 hr) + (8304 hrs *79.53 * (1-.97))* 1/2000 lb/ton = 28.03 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @97%control + 19 days by-pass = 28.03 ton/yr; Assume97% reduction of HCL from FGD based on EPRI report.	

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: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7.7 lb/hour 4 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .16848 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .16848 lb/ton coal*45.71 ton/hr = 7.70lb/hr; Annual = (7.70 * 456 hr) + (8304 hrs *7.70 * (1-.93))* 1/2000 lb/ton = 4.00 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @93%control + 19 days by-pass = ton/yr;	

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 .08 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000542 lb/ton *45.71 ton/hr *(1-.20)reduction * 8760/2000 = .08	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from the FGD.	

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: .006 lb/hour .02 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .00014 lb/ton coal*45.71 ton/hr = .006lb/hr; Annual = (.006lb/hr * 456 hr) + (8304 hrs *.006 lb/hr * (1-.45))* 1/2000 lb/ton = (30.1 lbs)or.02 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max hr potential emissions are based on by-pass mode. Annual = @45%control + 19 days by-pass= ton/yr;	

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: H133 - Nickel Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .17 lb/hour .75 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .02397 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .02397 lb/kgal * 7.184 kgal/hr * 8760 hr/yr * 1/2000 lb/ton = .75 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 50 ppm as specification of used oil. No change from FGD; highest rate for used oil segment.	

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: H151 - Polycyclic organic matter	2. Total Percent Efficiency of Control:
3. Potential Emissions: .02 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .003173 LB/1000 GAL 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .003173 lb/kgal * 7.184 kgal/hr= .02; Annual = .003173*62931.84 kgal/2000 = .10 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: .12 lb/hour .14 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .002541 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass mode)=.002541 lb/ton * 45.71 ton/hr =.12 lb/hr; Annual= (456 hrs *0.12)+ ((8304 hr * 0.12 lb/hr)*(1-.78)reduction)* 1/2000 lb/ton =.14 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @78%control + 19 days by-pass = ton/yr;Assume 78% reduction from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .001396 lb/kgal * 7.184 kgal/hr = .01 lb/hr; Annual = .001396 * 62931.84 kgal/yr/2000 = .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: NH3 - Ammonia	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: 5 ppmvd @ 3% O2; SNCR slip.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 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: See Plantwide Limit- NOx emissions from units 4-7 will not exceed 0.2 lb/MMBtu of heat input on a rolling 30day average. Acid rain limit.	

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 Southern System NOx Averaging Plan for compliance with Phase II NOx limits. See 40 CFR Part 76 for details. No hrly annual equivalent allowable emissions necessary.	

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: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: .01 lb/hour .04 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000259 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (by-pass)=.000259 lb/ton * 45.71 ton/hr = .01 lb/hr; Annual = .01 lb/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil.Assume 20% reduction from FGD.	

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: 329.01 lb/hour 202.01 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .3 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: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Max (By-pass)lb/hr = 1096.7 mmBtu/hr*0.30 lb/mmBtu = 329.01 lb/hr. TPY =(456 hrs * 1096.7 mmbtu * .125 lb/mmbtu) + ((8304 hrs * 1096.7 mmBtu/hr*0.125 lb/mmBtu * (1-.70)reduction *1 ton/2000 lb = 202.01 TPY

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Max Hr = Soot blow standard; Annual Avg. Emission factor avg. based on 0.1 lb/MMBtu for 21 hours (steady- state); 0.3 lb/MMBtu, 3 hours (soot-blowing). Assume 70% reduction from FGD.

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: 21.25 lb/hour 57.79 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass) =[.465 lb/ton of coal] [45.71 ton/hr]= 21.25lb/hr; Annual = (456 hr * 21.25 lb/hr)+[8304 hr/yr * 21.25 lb/hr * 1-.40)reduction]*[1/2000]=57.79 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 40% reduction from FGD.	

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: SAM - Sulfuric Acid Mist	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.88 lb/hour 13.27 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.14 LB/TON Reference: EPRI & LARRY MONROE	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr(By-Pass)=(3063*.008 *(2.4*1096.7)*1/2000)* .49*.63*.49 = 4.88 lb/hr; Annual =(456 hr * 4.88 lb/hr)+ ((8304 hr *4.88 * (1-.40)reduction * 1/2000 lb/ton = 13.27 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Larry Monroe Acid Mist Paper. Assume 40% reduction from FGD.Unit has hot & cold ESP+Air Heater.	

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 1146.8 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass)=2.4 lb/mmbtu * 1096 mmbtu/hr = 2632.8 lb/hr; Annual =(456 hr *2632.8)+ ((8304 hr *2632.8 * (1-.95))* 1/2000 = 1146.8 tons	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on coal firing during by-pass mode. Annual = @95%control + 19 days by-pass.	

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: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 2632.1 lb/hour 11528.5 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: 2.74 lb/hour 12.01 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .06 LB/TON Reference: FIRE	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .06 lb/ton * 45.71 ton/hr = 2.74; Annual = 2.74 lb/hr * 8760/2000 = 12.01	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD;	

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: ☑ Rule ☐ 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: ☑ Rule ☐ 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: ☐ Rule ☐ 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: ☐ Rule ☐ 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: ☐ Rule ☐ 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: ☐ Rule ☐ 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:	☐ Rule ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment
   ☐ 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
   ☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements ☑ Applicable	☑ Attachment
2. Compliance Assurance Monitoring Plan ☐ Applicable	☐ Attachment
3. Alternative Methods of Operation ☑ Applicable	☑ Attachment
4. Alternative Modes of Operation (Emissions Trading) ☐ Applicable	☐ Attachment
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Acid Rain Part (Form No. 62-210.900(1)(a)) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Applicable ☐ Previously Submitted, Date:	☐ 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))	
☐ Applicable	☐ Attachment
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.)	
☐ Applicable	☐ Attachment
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Applicable	☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information	
☑ Applicable	☑ Attachment
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

(1) fuel analyses have previously been submitted, (2) a detailed description of the FGD control equipment is included with the facility attachments, and (3) a description of stack sampling facilities for the new FGD stack will be provided when available.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Criststacksiteplan.pdf	New FGD Stack Site Plan.	Yes	10/24/2006
	Chimney Sketch rev1-Layout1.pdf	Crist Chimney Sketch Layout.	Yes	10/24/2006
Identification of Applicable Requirements	Crist4EPARuleList.pdf	Crist 4 EPA Rule List.	Yes	10/25/2006
	FDEPTitleVCoreList.pdf	Crist 4 FDEP Title V Core List.	Yes	10/25/2006
	Crist4FDEPRuleList.pdf	Crist 4 FDEP Rule List.	Yes	10/25/2006
Alternative Methods of Operation	Crist 4Methods.doc	Crist 4 methods of operation update	Yes	10/20/2006

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

3. Emissions Unit Identification Number: 5

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-JUN-61	49	☑ Yes ☐ No

9. Package Unit Manufacturer: COMBUSTION ENGINEERING Model Number:

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 and cold side precipitators Buell Model 1.1x48k33-1p.
1	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	Unit 4 flue gas emissions will be incorporated with Units 5,6 and 7 to a single Wet FGD scrubber system. Unit 4 will have a by-pass stack for startup, shutdown and malfunction.
205	LOW NOX BURNERS	
140	NSCR (NON-SELECTIVE CATALYTIC REDUCTION)	

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:		
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 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 BY-PASS STACK SHARED BY UNITS 4, 5, 6 & 7	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 • 6 - Boiler # 6 • 7 - Boiler #7	

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: 35 feet
8. Exit Temperature: 131° F	9. Actual Volumetric Flow Rate: 3282000 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): 478.25 North (km): 3381.61	14. Emission Point Latitude/Longitude... Latitude: 30° 34' .34" N Longitude: 87° 13' 36.5" W
15. Emission Point Comment: Existing stack used for by-pass operations for units 4&5@450ft;18ftdia;290degrees;Location:Z16,E478.53,N3381.49; Unit 6& 7@450ft;18ftdia, 316degrees, 2975540 acfm. location:Z16,E478.435,N3381.482	

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: 45.71	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .	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	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H027	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H046	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H047			NS	Yes
H095			NS	Yes
H106	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H107	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H113	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H114	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H169			NS	Yes
HAPS				Yes
NH3				Yes
NOX	LOW NOX BURNERS	NSCR (NON-SELECTIVE CATALYTIC REDUCTION)	EL	Yes
	WET SCRUBBER			

PB	HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	NS	Yes
SAM	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		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? ☐ Yes ☑ 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: ☐ 5 years ☐ 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.

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: DIOX - Dioxin/Furan	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: H014 - Antimony Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .04 lb/hour .16 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .004935 lb/kgal * 7.184 kgal/hr * 8760hr/yr * 1/2000 lb/ton = .16 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000092 lb/ton * 45.71 t/hr * 8760 hr/yr * 1/2000 lb/ton = .02 t/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil. Assume no reduction from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000091 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton =	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume no change from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000103 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)=.02	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from FGD.	

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? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000079 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000079 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)= .01 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 2 ppm as specification of used oil.Assume 20% reduction from FGD.	

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 .07 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00045 lb/ton * 45.71 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .07	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 10 ppm as specification of used oil.Assume 20 % reduction from FGD.	

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: H047 - Cobalt Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .04 lb/hour .16 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .005217 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .005217 lb/1000gal * 7.184 kgal/hr = .04; Annual= .005217 * 62931.84/2000 = .16 ton	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00282 lb/kgal * 7.184 kgal/hr=.02 lb/hr; Annual = .00282 * 62931.84/2000=0.09 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: 79.53 lb/hour 28.03 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.74 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= 1.74 lb/ton coal*45.71 ton/hr = 79.53; Annual = (79.53 * 456 hr) + (8304 hrs *79.53 * (1-.97))* 1/2000 lb/ton = 28.03 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual =@97%control + 19 days by-pass = 28.03 ton/yr; Assume97% reduction of HCL from FGD based on EPRI report.	

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: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7.7 lb/hour 4 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .16848 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .16848 lb/ton coal*45.71 ton/hr = 7.70lb/hr; Annual = (7.70 * 456 hr) + (8304 hrs *7.70 * (1-.93))* 1/2000 lb/ton = 4.0 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @93%control + 19 days by-pass = ton/yr;	

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 .08 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000542 lb/ton *45.71 ton/hr *(1-.20)reduction * 8760/2000 = .08	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from the FGD.	

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: .006 lb/hour .02 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .00014 lb/ton coal*45.71 ton/hr = .006lb/hr; Annual = (.006 lb/hr * 456 hr) + (8304 hrs *.006 lb/hr * (1-.45))* 1/2000 lb/ton = (30.12 lbs)or.02 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max hr potential emissions are based on by-pass mode. Annual = @45%control + 19 days by-pass= ton/yr;	

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: H133 - Nickel Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .17 lb/hour .75 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .02397 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .02397 lb/kgal * 7.184 kgal/hr * 8760 hr/yr * 1/2000 lb/ton = .75 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 50 ppm as specification of used oil. No change from FGD; highest rate for used oil segment.	

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: H151 - Polycyclic organic matter	2. Total Percent Efficiency of Control:
3. Potential Emissions: .02 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .003173 LB/1000 GAL 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .003173 lb/kgal * 7.184 kgal/hr= .02; Annual = .003173*62931.84 kgal/2000 = .10 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 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: .12 lb/hour .14 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .002541 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass mode)=.002541 lb/ton * 45.71 ton/hr =.12 lb/hr; Annual= (456 hrs *0.12)+ ((8304 hr * 0.12 lb/hr)*(1-.78)reduction)* 1/2000 lb/ton =.14 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @78%control + 19 days by-pass = ton/yr;Assume 78% reduction from FGD.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .001396 lb/kgal * 7.184 kgal/hr = .01 lb/hr; Annual = .001396 * 62931.84 kgal/yr/2000 = .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☑ 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: ☐ 5 years ☐ 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: NH3 - Ammonia	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: 5 ppmvd @ 3% O2; SNCR slip.	

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: 658.02 lb/hour 2882.13 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: [0.60 lb/mmBtu] [1096.7 mmBtu/hr] [8760 hr/yr] [1/2000]= 28882.13 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Plantwide Limit- NOx emissions from units 4-7 will not exceed 0.2 lb/MMBtu of heat input on a rolling 30day average. Acid Rain Limit.	

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 Southern System NOx Averaging Plan for compliance with Phase II NOx limits. See 40 CFR Part 76 for details. No hrly annual equivalent allowable emissions necessary.	

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: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: .01 lb/hour .04 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000259 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (by-pass)=.000259 lb/ton * 45.71 ton/hr = .01 lb/hr; Annual = .01 lb/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil.Assume 20% reduction from FGD.	

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: 329.01 lb/hour 202.01 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Max (By-pass)lb/hr = 1096.7 mmBtu/hr*0.3 lb/mmBtu = 329.01 lb/hr. TPY =(456 hrs * 137.09 lb/hr) + ((8304 hrs * 1096.7 mmBtu/hr*0.125 lb/mmBtu * (1-.70)reduction *1 ton/2000 lb = 202.01 TPY

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Max Hr = Soot Blow Standard; Annual Avg. Emission factor based on 0.1 lb/MMBtu, 21 hours (steady- state); 0.3 lb/MMBtu, 3 hours (soot-blowing). Assume 70% reduction from FGD.

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.	

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: 21.25 lb/hour 57.79 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass) =[.465 lb/ton of coal] [45.71 ton/hr]= 21.25lb/hr; Annual = (456 hr * 21.25 lb/hr)+[8304 hr/yr * 21.25 lb/hr * 1-.40)reduction]*[1/2000]=57.79 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 40% reduction from FGD.	

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: SAM - Sulfuric Acid Mist	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.88 lb/hour 13.27 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.14 LB/TON Reference: EPRI & LARRY MONROE	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr(By-Pass)=(3063*.008 *(2.4*1096.7)*1/2000)* .49*.63*.49 = 4.88 lb/hr; Annual =(456 hr * 4.88 lb/hr)+ ((8304 hr *4.88 * (1-.40)reduction * 1/2000 lb/ton = 13.27 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Larry Monroe Acid Mist Paper. Assume 40% reduction from FGD.Unit has hot & cold ESP+Air Heater.	

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 1146.8 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass)=2.4 lb/mmbtu * 1096 mmbtu/hr = 2632.8 lb/hr; Annual =(456 hr *2632.8)+ ((8304 hr *2632.8 * (1-.95))* 1/2000 = 1146.8 tons	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on coal firing during by-pass mode. Annual = @95%control + 19 days by-pass.	

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: 2632.1 lb/hour 11528.5 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: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 2632.1 lb/hour 11528.5 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: 2.74 lb/hour 12.01 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .06 LB/TON Reference: FIRE	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .06 lb/ton * 45.71 ton/hr = 2.74; Annual = 2.74 lb/hr * 8760/2000 = 12.01	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD;	

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: ☑ Rule ☐ 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: ☑ Rule ☐ 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 10

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ 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 2 of 10

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ 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 3 of 10

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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 4 of 10

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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 10

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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	

Continuous Monitoring System: Continuous Monitor 6 of 10

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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 7 of 10

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ 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 8 of 10

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ 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 9 of 10

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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 10 of 10

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ 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

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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment
   ☐ 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
   ☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements ☑ Applicable	☑ Attachment
2. Compliance Assurance Monitoring Plan ☐ Applicable	☐ Attachment
3. Alternative Methods of Operation ☑ Applicable	☑ Attachment
4. Alternative Modes of Operation (Emissions Trading) ☐ Applicable	☐ Attachment
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Acid Rain Part (Form No. 62-210.900(1)(a)) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Applicable ☐ Previously Submitted, Date:	☐ 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))	
☐ Applicable	☐ Attachment
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.)	
☐ Applicable	☐ Attachment
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Applicable	☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information	
☑ Applicable	☑ Attachment
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

(1) fuel analyses have previously been submitted, (2) a detailed description of the FGD control equipment is included with the facility attachments, and (3) a description of stack sampling facilities for the new FGD stack will be provided when available.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Criststacksiteplan.pdf	Crist Stack Site Plan.	Yes	10/24/2006
	Chimney Sketch rev1-Layout1.pdf	Crist Chimney Sketch Layout.	Yes	10/24/2006
Identification of Applicable Requirements	Crist5EPARuleList.pdf	Crist 5 EPA Rule List.	Yes	10/25/2006
	FDEPTitleVCoreList.pdf	Crist 5 FDEP Title V Core List.	Yes	10/25/2006
	Crist5FDEPRuleList.pdf	Crist 5 FDEP Rule List.	Yes	10/25/2006
Alternative Methods of Operation	Crist 5Methods.doc	Crist 5 Alternative Methods of Operation Updated.	Yes	10/20/2006

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 # 6

3. Emissions Unit Identification Number: 6

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-MAY-70	49	☑ Yes ☐ No

9. Package Unit Manufacturer: FOSTER WHEELER Model Number:

10. Generator Nameplate Rating: 369 MW

11. Emissions Unit Comment:
    Crist Unit 6 is a Foster Wheeler front wall fired, dry bottom boiler. The primary fuels are coal and natural gas. Distillate #2 fuel oil is combusted as a secondary fuel.

Emissions Unit Control Equipment

Code	Equipment	Description
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Cold side electrostatic precipitator manufactured by Wheelabrator; model number HaRDE.
107	SELECTIVE NONCATALYTIC REDUCTION FOR NOX	6 injection ports for injecting urea to achieve aprox. 20% reduction in NOx for compliance with facility-wide NOx cap of 0.2 lb/MMBtu
24	MODIFIED FURNACE/BURNER DESIGN	Delete item. Now have Low NOx Burners entry available.
1	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	Unit 6 flue gas emissions will be incorporated with Units 4,6 and 7 to a single Wet FGD scrubber system. Unit 6 will have a by-pass stack for startup, shutdown and malfunction.
205	LOW NOX BURNERS	Low NOx Burners were installed on Unit 6 as part of Phase I of the Acid Rain Program

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:
2.	Maximum Production Rate:
3.	Maximum Heat Input Rate: 3704.8 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: 3704.8 mmBtu/hr for coal and NG, 714.8 mmBtu/hr for #2 fuel oil and on-specification oil. 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 BY-PASS STACK SHARED BY UNITS 4, 5, 6 & 7	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 • 5 - Boiler #5 • 7 - Boiler #7		
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: 35 feet
8. Exit Temperature: 131° F	9. Actual Volumetric Flow Rate: 3282000 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): 478.25 North (km): 3381.61	14. Emission Point Latitude/Longitude... Latitude: 30° 34' .34" N Longitude: 87° 13' 36.5" W	
15. Emission Point Comment: Existing stack used for by-pass operations for units 4&5@450ft;18ftdia;290degrees;Location:Z16,E478.53,N3381.49; Unit 6& 7@450ft;18ftdia, 316degrees, 2975540 acfm. location:Z16,E478.435,N3381.482		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type): Boiler fired with pulverized bituminous coal.		
2. Source Classification Code (SCC): 10100202	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 154.37	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash: 9.3	9. Million Btu per SCC Unit: 24
10. Segment Comment: Unit 6 is 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 4

1. Segment Description (Process/Fuel Type): Boiler fired with No. 2 fuel oil.		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 5.184	5. Maximum Annual Rate: 45411.84	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: #2 oil used for startup and flame stabilization.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type): Boiler fired with natural gas.		
2. Source Classification Code (SCC): 10100601	3. SCC Units: Million Cubic Feet Natural Gas Burned	
4. Maximum Hourly Rate: 3.2	5. Maximum Annual Rate: 28032	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 4

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, PCB 50 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	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H027	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H046	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H047			NS	Yes
H095			NS	Yes
H106	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H107	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H113	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H114	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H169			NS	Yes
HAPS				Yes
NH3			WP	Yes
NOX	LOW NOX BURNERS	SELECTIVE NONCATALYTIC REDUCTION FOR NOX	EL	Yes
	WET SCRUBBER			

PB	HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	NS	Yes
SAM	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		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: 77.19 lb/hour 308 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .5 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: [.5 lb/ton of coal] [154.37 ton/hr] [8760 hr/yr] [1/2000]=307.367 tona/yr Source: AP-42	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for coal segment.	

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: DIOX - Dioxin/Furan	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: H014 - Antimony Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .03 lb/hour .11 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .004935 lb/kgal*5.184kgal/hr * 8760hr/yr * 1/2000 lb/ton = . ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: .01 lb/hour .06 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000092 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000092 lb/ton * 154.37 t/hr * 8760 hr/yr * 1/2000 lb/ton = .06 t/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil. Assume no reduction from FGD.	

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: .01 lb/hour .06 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000091 lb/ton*154.37 ton/hr * 8760 hr/yr * 1/2000 lb/ton = .06 t/y	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume no change from the FGD.	

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: .01 lb/hour .06 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000103 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000103 lb/ton*154.37on/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)=.02	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from the FGD.	

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: .01 lb/hour .04 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000079 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000079 lb/ton*154.37 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)= .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 2 ppm as specification of used oil.Assume 20% reduction from the FGD.	

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: .06 lb/hour .24 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00045 lb/ton*154.37 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .24	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 10 ppm as specification of used oil.Assume 20% reduction from FGD.	

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: H047 - Cobalt Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .03 lb/hour .12 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .005217 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .005217 lb/kgal * 5.184 kgal/hr * 8760 hr/yr * 1/2000 lb/ton =	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: .015 lb/hour .06 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00282 lb/kgal * 5.184 kgal/hr=.015 lb/hr; Annual = .00282 * 62931.84/2000=0.06 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: 268.6 lb/hour 94.7 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.74 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= 1.74 lb/ton coal*154.37 ton/hr = 268.6; Annual = (268.6 * 456 hr) + (8304 hrs *268.6 * (1-.97))* 1/2000 lb/ton = 94.70 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @97%control + 19 days by-pass = 94.7 ton/yr; Assume97% reduction of HCL from FGD based on EPRI report.	

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: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 26 lb/hour 13.49 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .168489 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .16848 lb/ton coal*154.37 ton/hr = 26.00lb/hr; Annual = (26.00 * 456 hr) + (8304 hrs *26.00 * (1-.93))* 1/2000 lb/ton = 13.49 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @93%control + 19 days by-pass = ton/yr;	

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: .08 lb/hour .29 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000542 lb/ton *154.37ton/hr *(1-.20)reduction * 8760/2000 =.29 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from the FGD.	

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: .02 lb/hour .05 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .00014 lb/ton coal*154.37 ton/hr = .02 lb/hr; Annual = (.02 lb/hr * 456 hr) + (8304 hrs *.02 lb/hr * (1-.45))* 1/2000 lb/ton = (108.5 lbs)or.05 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max hr potential emissions are based on by-pass mode. Annual = @45%control + 19 days by-pass= ton/yr;	

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: H133 - Nickel Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .12 lb/hour .54 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .02397 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .02397 lb/kgal*5.184 kgal/hr * 8760 hr/yr * 1/2000 lb/ton = .54 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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.

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: H151 - Polycyclic organic matter	2. Total Percent Efficiency of Control:
3. Potential Emissions: .02 lb/hour .07 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .003173 LB/1000 GAL 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .003173 lb/kgal * 5.184 kgal/hr= .02; Annual = .003173*45411.84 kgal/2000 = .07 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: .39 lb/hour .45 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass mode)=.002541 lb/ton * 154.37 ton/hr =.39 lb/hr; Annual= (456 hrs *0.39)+ ((8304 hr * 0.39 lb/hr)*(1-.78)reduction)* 1/2000 lb/ton =.45 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @78%control + 19 days by-pass = ton/yr;Assume 78% reduction from FGD.	

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 .03 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .001396 LB/1000 GAL 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .001396 lb/kgal * 5.184 kgal/hr = .01 lb/hr; Annual = .001396 * 45411.84 kgal/yr/2000 = .03 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: NH3 - Ammonia	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: 5 ppm designed target emission rate. Not emissions limited.	

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: 1667.2 lb/hour 7302.2 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .45 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr =[0.45 lb/mmBtu] [3704.8 mmBtu/hr]= 1667.2 lb/hr; Annual = 1667.2 lb/hr * 8760hr/yr * [1/2000]= 7302.2 tons/yr	
11. Pollutant Potential.Fugitive, and Actual Emissions Comment: See 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 2

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: .45 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 1667.16 lb/hour 7302.16 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 6 is part of the Southern System NOx Averaging Plan for compliance with Phase II NOx limits. See 40 CFR Part 76 for details. No hrly annual equivalent allowable emissions necessary.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (AMBIENT) reduce impact on ambient concentrations (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .2 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method): Facility-wide limit, 30-day rolling average except for periods when Unit 7 is shut down.	

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: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: .04 lb/hour .14 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000259 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (by-pass)=.000259 lb/ton * 154.37 ton/hr = .04 lb/hr; Annual = .04 lb/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .14 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil. Assume 20% reduction from FGD.	

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: 1111.44 lb/hour 682.43 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .3 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: 1 hr Max (By-pass)lb/hr = 3704.8 mmBtu/hr*0.3 lb/mmBtu (SB standard)= 1111.44lb/hr. TPY = (456 hrs * 3704.8 * .125lb/mmbtu) + ((8304 hrs * 3704.8 mmBtu/hr*0.125 lb/mmBtu * (1-.70) reduction *1 ton/2000 lb =682.43 TPY	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Annual =Emission factor avg based on 0.1 lb/MMBtu for 21 hours (steady- state)and 0.3 lb/MMBtu for 3 hours (soot-blowing). Assume 70% reduction from FGD. 19 days- bypass	

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: 1111.4 lb/hour 1475 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): Soot blow	

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: 370.5 lb/hour 1475 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.	

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: 71.78 lb/hour 195.19 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass) =[.465 lb/ton of coal] [154.37 ton/hr]= 71.78lb/hr; Annual = (456 hr * 71.78 lb/hr)+[8304 hr/yr * 71.78 lb/hr * 1-.40)reduction]*[1/2000]= 195.19 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 40% reduction from FGD.	

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: SAM - Sulfuric Acid Mist	2. Total Percent Efficiency of Control:
3. Potential Emissions: 26.16 lb/hour 71.13 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.14114 LB/TON Reference: AP-42	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr(By-Pass)=(3063*.008 *(2.4*3704.8)*1/2000)* .49*.49 = 26.16 lb/hr; Annual =(456 hr * 26.16 lb/hr)+ ((8304 hr *36.16 * (1-.40)reduction * 1/2000 lb/ton = 71.13 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Larry Monroe Acid Mist Paper. Assume 40% reduction from FGD.Unit has cold ESP+Air Heater.	

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: 8891.5 lb/hour 3873.14 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass)=2.4 lb/mmbtu * 3704.8 mmbtu/hr = 8891.5 lb/hr; Annual =(456 hr *8891.5)+ ((8304 hr *8891.5 * (1-.95))* 1/2000 = 3873.14 tons	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on coal firing during by-pass mode. Annual = @95%control + 19 days by-pass.	

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: 8891.52 lb/hour 38944.86 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing solid fuel.	

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: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 1715.52 lb/hour 7513.9 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing liquid fuel. Test not required unless liquid fuel is used.	

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: 9.26 lb/hour 40.57 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .06 lb/ton * 154.37 ton/hr =9.26 lb/hr ; Annual = 9.26 lb/hr * 8760/2000 = 40.57	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD;	

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: ☑ Rule ☐ 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: ☑ Rule ☐ 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 6

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Lear Siegler Model Number: SS-4542 Serial Number: 926231	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-SEP-93
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 6

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Teco Model Number: 43H Serial Number: 43H-38206-257	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 24-SEP-93
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 6

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Teco Model Number: 42D Serial Number: 42D-38570-258	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-SEP-93
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 6

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Siemens Model Number: ULTRAMAT 5E Serial Number: C4-136	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-SEP-93
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. Unit is required to monitor CO2 under 2-296.405(	
Status: Active	

Continuous Monitoring System: Continuous Monitor 5 of 6

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: UNITED SCIENCE Model Number: ULTRAFLOW100 Serial Number: 9707016A	
5. Installation Date: 01-SEP-93	6. Performance Specification Test Date: 24-SEP-93
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 6 of 6

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: UNITED SCIENCE Model Number: ULTRAFLOW100 Serial Number: 9707016B	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	
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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment
   ☐ 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
   ☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements ☑ Applicable	☑ Attachment
2. Compliance Assurance Monitoring Plan ☐ Applicable	☐ Attachment
3. Alternative Methods of Operation ☑ Applicable	☑ Attachment
4. Alternative Modes of Operation (Emissions Trading) ☐ Applicable	☐ Attachment
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Acid Rain Part (Form No. 62-210.900(1)(a)) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Applicable ☐ Previously Submitted, Date:	☐ 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))	
☐ Applicable	☐ Attachment
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.)	
☐ Applicable	☐ Attachment
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Applicable	☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information	
☑ Applicable	☑ Attachment
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

(1) fuel analyses have previously been submitted, (2) a detailed description of the FGD control equipment is included with the facility attachments, and (3) a description of stack sampling facilities for the new FGD stack will be provided when available.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Criststacksiteplan.pdf	Crist Stack Site Plan.	Yes	10/24/2006
	Chimney Sketch rev1-Layout1.pdf	Crist Chimney Sketch Layout.	Yes	10/24/2006
Identification of Applicable Requirements	Crist6EPARuleList.pdf	Crist 6 EPA Rule List.	Yes	10/25/2006
	FDEPTitleVCoreList.pdf	Crist 6 FDEP Title V Core List.	Yes	10/25/2006
	Crist6FDEPRuleList.pdf	Crist 6 FDEP Rule List.	Yes	10/25/2006
Alternative Methods of Operation	Crist 6Methods.doc	Crist 6 Alternative Methods of Operation Update.	Yes	10/20/2006

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 #7

3. Emissions Unit Identification Number: 7

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-AUG-73	49	☑ Yes ☐ No

9. Package Unit Manufacturer: FOSTER WHEELER Model Number:

10. Generator Nameplate Rating: 578 MW

11. Emissions Unit Comment:
    Crist Unit 7 is a Foster Wheeler rear wall fired, dry bottom boiler. The primary fuels are coal and natural gas. Distillate #2 fuel oil is combusted as a secondary fuel.

Emissions Unit Control Equipment

Code	Equipment	Description
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Cold side ESP manufactured by Buell; to be replaced w/new Alstom Power cold-side ESP by May 1, 2005
24	MODIFIED FURNACE/BURNER DESIGN	Delete item; Now have Low NOx Burners entry.
139	SCR (SELECTIVE CATALYTIC REDUCTION)	Automated ammonia injection with catalytic reduction; scheduled for completion by May 1, 2005. Completed and tested on Sept 27, 2005.
1	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	Unit 7 flue gas emissions will be incorporated with Units 4,5 and 6 to a single Wet FGD scrubber system. Unit 7 will have a by-pass stack for startup, shutdown and malfunction.
205	LOW NOX BURNERS	Low NOx Burners were installed as part of Phase I of the Acid Rain Program.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:	
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: 6406.4 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: 6406.4 mmBtu/hr for coal and NG, 1282 mmBtu/hr for #2 fuel oil and on-specification oil. 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 BY-PASS STACK SHARED BY UNITS 4, 5, 6 & 7	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 • 5 - Boiler #5 • 6 - Boiler # 6		
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: 35 feet
8. Exit Temperature: 131° F	9. Actual Volumetric Flow Rate: 3282000 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): 478.25 North (km): 3381.61	14. Emission Point Latitude/Longitude... Latitude: 30° 34' .34" N Longitude: 87° 13' 36.5" W	
15. Emission Point Comment: Existing stack used for by-pass operations for units 4&5@450ft;18ftdia;290degrees;Location:Z16,E478.53,N3381.49; Unit 6& 7@450ft;18ftdia, 316degrees, 2975540 acfm. location:Z16,E478.435,N3381.482 ·		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type): Boiler fired with pulverized bituminous coal.		
2. Source Classification Code (SCC): 10100202	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 266.93	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash: 9.3	9. Million Btu per SCC Unit: 24
10. Segment Comment: Unit 7 is 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 4

1. Segment Description (Process/Fuel Type): Boiler fired with No. 2 fuel oil.		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 5.184	5. Maximum Annual Rate: 45411.84	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: #2 oil used for startup and flame stabilization.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type): Boiler fired with natural gas.		
2. Source Classification Code (SCC): 10100601	3. SCC Units: Million Cubic Feet Natural Gas Burned	
4. Maximum Hourly Rate: 3.2	5. Maximum Annual Rate: 28032	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 4

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, PCB 50 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	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H027	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H046	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
H047			NS	Yes
H095			NS	Yes
H106	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H107	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H113	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H114	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H133			NS	Yes
H150			EL	Yes
H151			NS	Yes
H161			NS	Yes
H162	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
H169			NS	Yes
HAPS				Yes
NOX	SCR (SELECTIVE CATALYTIC REDUCTION)	LOW NOX BURNERS	EL	Yes
PB	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		EL	Yes

PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)	NS	Yes
SAM	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2	WET SCRUBBER HIGH EFFICIENCY (95.0-99.9%)		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: 133.47 lb/hour 584.58 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .5 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: [.5 lb/ton of coal] [266.93 ton/hr] [8760 hr/yr] [1/2000]= 584.58 tona/yr Source: AP-42	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD.	

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: DIOX - Dioxin/Furan	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: H014 - Antimony Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .05 lb/hour .2 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .004935 lb/kgal * 9.29 kgal/hr * 8760hr/yr * 1/2000 lb/ton = .20 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: .02 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000092 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000092 lb/ton * 266.93 t/hr * 8760 hr/yr * 1/2000 lb/ton = .1 t/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 5 ppm as specification of used oil. Assume no reduction from FGD.	

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: .02 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000091 lb/ton*266.93 ton/hr * 8760 hr/yr * 1/2000 lb/ton = .1 t/y	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume no change from FGD.	

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: .03 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000103 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000103 lb/ton * 266.93 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)=.1 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume a 20% reduction from FGD.	

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: .02 lb/hour .07 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000079 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000079 lb/ton * 266.93 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)= .07 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 2 ppm as specification of used oil. Assume 20% reduction from FGD.	

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: .12 lb/hour .42 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00045 lb/ton * 266.93 ton/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .42	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 10 ppm as specification of used oil. Assume a 20% reduction from FGD.	

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: H047 - Cobalt Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .05 lb/hour .21 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .005217 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .005217 lb/1000gal * 9.29 kgal/hr = .05; Annual= .005217 * 81406.68/2000 = .21 ton	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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: .03 lb/hour .11 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .00282 lb/kgal * 9.29 kgal/hr=.03 lb/hr; Annual = .00282 * 81406.68/2000=0.11 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment..	

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: 464.46 lb/hour 163.75 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.74 LB/TON Reference: EPRI TR-105611	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= 1.74 lb/ton coal*266.93 ton/hr = 464.46 lb/hr; Annual = (464.46 lb/hr * 456 hr) + (8304 hrs *464.46 lb/hr * (1-.97))* 1/2000 lb/ton = 163.75tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @97%control + 19 days by-pass. Assume97% reduction of HCL from FGD based on EPRI report.	

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: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 44.97 lb/hour 23.32 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .168489 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .16848 lb/ton coal*266.93 ton/hr = 44.97lb/hr; Annual = (44.97 lb/hr * 456 hr) + (8304 hrs *44.97 lb/hr * (1-.93))* 1/2000 lb/ton = 23.32 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @93%control + 19 days by-pass = ton/yr;	

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: .14 lb/hour .51 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .000542 lb/ton *266.93ton/hr *(1-.20)reduction * 8760/2000 = .51 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 20% reduction from the FGD.	

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: .04 lb/hour .1 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr= .00014 lb/ton coal*266.93 ton/hr = .04 lb/hr; Annual = (.04 lb/hr * 456 hr) + (8304 hrs *.04 * (1-.45))* 1/2000 lb/ton = (200.9 lbs)or.10 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max hr potential emissions are based on by-pass mode. Annual = @45%control + 19 days by-pass= ton/yr;	

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: H133 - Nickel Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: .22 lb/hour .98 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .02397 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .02397 lb/kgal * 9.29 kgal/hr * 8760 hr/yr * 1/2000 lb/ton = .98 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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.

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: H151 - Polycyclic organic matter	2. Total Percent Efficiency of Control:
3. Potential Emissions: .03 lb/hour .13 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .003173 LB/1000 GAL 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .003173 lb/kgal * 9.29 kgal/hr= .03; Annual = .003173*81406.68 kgal/2000 = .13 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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 tons/year	4. Synthetically Limited? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: .68 lb/hour .77 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass mode)=.002541 lb/ton * 266.93 ton/hr =.68 lb/hr; Annual= (456 hrs *0.68)+ ((8304 hr * 0.68 lb/hr)*(1-.78)reduction)* 1/2000 lb/ton =.77 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on by-pass mode. Annual= @78%control + 19 days by-pass = ton/yr;Assume 78% reduction from FGD.	

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 .06 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .001396 lb/kgal * 9.29kgal/hr = .01 lb/hr; Annual = .001396 * 81406.68kgal/yr/2000 = .06 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD; highest rate for oil segment.	

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? ☐ Yes ☐ 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: ☐ 5 years ☐ 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: NOX - Nitrogen Oxides	2. Total Percent Efficiency of Control:
3. Potential Emissions: 2242.2 lb/hour 4501.1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .35 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: By Pass Max Hr =[0.35 lb/mmBtu] [6404.4 mmBtu/hr]= 2242.2 lb/hr; Annual = [(456hr * 2242.2 lb/hr)+ 8304 hr *6406.4 mmbtu/hr *.15 lb/mmbtu] [1/2000]= 4501.1 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Plantwide Limit- NOx emissions from units 4-7 will not exceed 0.2 lb/MMBtu of heat input on a rolling 30day average. 0.15 lb/mmbtu limit for SCR operation. 19 days bypass operation.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .45 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 2882.88 lb/hour 12627 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 7 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.	

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: 27-SEP-05
3. Allowable Emissions and Units: .15 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 960.9 lb/hour 4208.7 tons/year
5. Method of Compliance: NOx CEMS, 30-day rolling average	
6. Allowable Emissions Comment (Description of Operating Method): SCR completed and tested on 09/27/05. Unit 7 must meet this interim standard until other control strategies are final and plant-wide NOx standard applies. Dead-line of May 1, 2006.	

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: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: .06 lb/hour .28 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .000259 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (by-pass)=.000259 lb/ton * 45.71 ton/hr = .01 lb/hr; Annual = .01 lb/hr * 8760 hr/yr * 1/2000 lb/ton * (1-.20)reduction = .04 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil. Assume 20% reduction from FGD.	

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: 1921.9 lb/hour 1180.1 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .3 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: 1 hr Max (By-pass)lb/hr = 6406.4 mmBtu/hr*0.3 lb/mmBtu = 1921.9 lb/hr. TPY =(456 hrs * 6406.4 mmbtu/hr * .125 lb/mmbtu) + ((8304 hrs * 6406.4 mmBtu/hr*0.125 lb/mmBtu * (1-.70) reduction *1 ton/2000 lb =1180.1 TPY	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max Hr= Soot Blow Standard; Annual Avg. Emission factor based on 0.1 lb/MMBtu for 21 hours (steady- state)plus 0.3 lb/MMBtu for 3 hours (soot-blowing). Assume 70% reduction from FGD.19 days =bypass.	

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: 1921.9 lb/hour 3507.5 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: 640.6 lb/hour 3507.5 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.	

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: 124.12 lb/hour 337.51 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass) =[.465 lb/ton of coal] [266.93 ton/hr]= 124.12 lb/hr; Annual = (456 hr * 124.12 lb/hr)+[8304 hr/yr * 124.12 lb/hr * 1-.40)reduction]*[1/2000]=337.51 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assume 40% reduction from FGD. 19 days for FGD bypass.	

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: SAM - Sulfuric Acid Mist	2. Total Percent Efficiency of Control:
3. Potential Emissions: 45.23 lb/hour 122.99 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.14114 LB/TON Reference: AP-42	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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr(By-Pass)=(3063*.008 *(2.4*6406.4)*1/2000)* .49*.49 = 45.23 lb/hr; Annual =(456 hr * 45.23 lb/hr)+ ((8304 hr *45.23 * (1-.40)reduction * 1/2000 lb/ton = 122.99 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Larry Monroe Acid Mist Paper. Assume 40% reduction from FGD.Unit has cold ESP+Air Heater. 19 days for FGD bypass.	

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: 15375.4 lb/hour 6697.5 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: Max Hr (By-pass)=2.4 lb/mmbtu * 6406.4 mmbtu/hr = 15375.4 lb/hr; Annual =(456 hr *15375.4) + ((8304 hr *15375.4 * (1-.95))* 1/2000 = 6697.5 tons	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Max potential emissions are based on coal firing during by-pass mode. Annual = @95%control + 19 days by-pass.	

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: 18-MAY-04
3. Allowable Emissions and Units: 2.4 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 15375.36 lb/hour 67344.08 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing solid fuel.	

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: 3525.5 lb/hour 15441.7 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM	
6. Allowable Emissions Comment (Description of Operating Method): While firing 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: 16.02 lb/hour 70.17 tons/year	4. Synthetically Limited? ☐ Yes ☑ 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: .06 lb/ton * 266.93 ton/hr = 16.02 lb/hr; Annual = 16.02 lb/hr * 8760/2000 = 70.17 ton/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: No change from FGD;	

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 3

1. Visible Emissions Subtype: VE20 - VISIBLE EMISSIONS - 20% NORMAL OPACITY	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: 27% Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: New opacity limit is effective after completion of the new ESP; compliance by COMS	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE40 - VISIBLE EMISSIONS - 40% NORMAL OPACITY	2. Basis for Allowable Opacity: ☑ Rule ☐ 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 3 of 3

1. Visible Emissions Subtype: VE60 - VISIBLE EMISSIONS - 60% NORMAL OPACITY	2. Basis for Allowable Opacity: ☑ Rule ☐ 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 7

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Teco Model Number: 43H Serial Number: 43H-38026-257	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-DEC-92
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 7

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Teco Model Number: 42D Serial Number: 42D-38571-258	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-DEC-92
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 3 of 7

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Siemens Model Number: ULTRAMAT 5E Serial Number: C5-137	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-DEC-92
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 4 of 7

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: United Science Model Number: Ultraflow 100 Serial Number: 9401632	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions. CEM flow monitors are required under Title IV 40 CFR Part 75.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 5 of 7

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Lear Siegler Model Number: SS-4542 Serial Number: 926232	
5. Installation Date: 01-DEC-92	6. Performance Specification Test Date: 01-DEC-92
7. Continuous Monitor Comment: Unit required to monitor opacity under 62-96.405(1)(f)1.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 6 of 7

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: United Science Model Number: Ultraflow 100 Serial Number: 9401817	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	
Status: Active	

Continuous Monitoring System: Continuous Monitor 7 of 7

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: LEAR SEIGLER Model Number: 700	Serial Number: 0720650
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	
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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment
   ☐ 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
   ☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements ☑ Applicable	☑ Attachment
2. Compliance Assurance Monitoring Plan ☐ Applicable	☐ Attachment
3. Alternative Methods of Operation ☑ Applicable	☑ Attachment
4. Alternative Modes of Operation (Emissions Trading) ☐ Applicable	☐ Attachment
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Acid Rain Part (Form No. 62-210.900(1)(a)) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Applicable ☐ Previously Submitted, Date:	☐ 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))	
☐ Applicable	☐ Attachment
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.)	
☐ Applicable	☐ Attachment
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Applicable	☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information	
☑ Applicable	☑ Attachment
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

(1) fuel analyses have previously been submitted, (2) a detailed description of the FGD control equipment is included with the facility attachments, and (3) a description of stack sampling facilities for the new FGD stack will be provided when available.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	Criststacksiteplan.pdf	Crist Stack Site Plan	Yes	10/24/2006
	Chimney Sketch rev1-Layout1.pdf	Crist Chimney Sketch Layout.	Yes	10/24/2006
Identification of Applicable Requirements	Crist7EPARuleList.pdf	Crist 7 EPA Rule List.	Yes	10/25/2006
	FDEPTitleVCoreList.pdf	Crist FDEP Title V Core List.	Yes	10/25/2006
	Crist7FDEPRuleList.pdf	Crist 7 FDEP Rule List.	Yes	10/25/2006
Alternative Methods of Operation	Crist 7Methods.doc	Crist 7 Alternative Methods of Operation Update.	Yes	10/20/2006

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:
   Coal, Limestone, Ash and Gypsum Materials Handling

3. Emissions Unit Identification Number: 9

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			49	☐ Yes ☑ No

9. Package Unit Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Fugitive emissions from unloading of coal and limestone & management of ash and gypsum disposal sites.Includes fugitive emissions from the coal piles, ash pile, gypsum pile & paved/unpaved roads.

Emissions Unit Control Equipment

No Control Equipment information submitted.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

No Capacity information submitted.

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: E-Crane Unloaders for Coal and Limestone	2. Emission Point Type Code: 4 - No true emission point	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: (F) FUGITIVE EMISSIONS, NO STACK EXISTS	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: ° F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: 0 feet	
13. Emission Point UTM Coordinates... Zone: 16 East (km): 478.5 North (km): 3381.3	14. Emission Point Latitude/Longitude... Latitude: 30° 33' 56" N Longitude: 87° 13' 35" W	
15. Emission Point Comment: Fugitive emissions from handling of coal, limestone, ash, gypsum and paved/unpaved roads.		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Material handling of coal and ash. Wind erosion related to acres of exposed area. Fugitives from roads.		
2. Source Classification Code (SCC): 30510103	3. SCC Units: Tons Material Processed	
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: Material handling of coal and ash.		
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?
PM			NS	Yes
PM10			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: PM - Particulate Matter - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): 100 to 350 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: See Material Handling Unit 9 Worksheet Attached.	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Material Handling Unit 9 Worksheet Attached.	

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: PM10 - Particulate Matter - PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): 50 to 150 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: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: See Crist Material Handling Unit 9 Worksheet Attached.	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: See Crist Material Handling Unit 9 Worksheet Attached.	

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.

No Visible Emissions information submitted.

H. CONTINUOUS MONITOR INFORMATION

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

No Continuous Monitoring information submitted.

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)
   ☑ Applicable ☐ Previously Submitted, Date: ☑ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ 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)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment
   ☐ 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
   ☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements ☐ Applicable	☐ Attachment
2. Compliance Assurance Monitoring Plan ☐ Applicable	☐ Attachment
3. Alternative Methods of Operation ☐ Applicable	☐ Attachment
4. Alternative Modes of Operation (Emissions Trading) ☐ Applicable	☐ Attachment
5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Acid Rain Part (Form No. 62-210.900(1)(a)) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) ☐ Applicable ☐ Previously Submitted, Date:	☐ Attachment
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Applicable ☐ Previously Submitted, Date:	☐ 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))	
☐ Applicable	☐ Attachment
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.)	
☐ Applicable	☐ Attachment
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Applicable	☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information	
☑ Applicable	☑ Attachment
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

This construction application adds limestone and gypsum handling to Emission Unit #9.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Process Flow Diagram	Process Flow Diagram.ppt	Crist Process Flow Diagram.	Yes	10/26/2006
Other Emissions Unit Information	GypsumDewatering.tif	Crist Gypsum Dewatering Diagram.	Yes	10/26/2006
	LimestonePrep1.tif	Crist Limestone Prep1 Diagram.	Yes	10/26/2006
	EU9CR2006.WK4	Emissions Calculations for Unit 9 (Use Excel to Open Document)	Yes	10/27/2006
	LimestonePrep2.tif	Crist Limestone Prep2 Diagram.	Yes	10/26/2006