

**APPLICATION FOR
TITLE V RENEWAL
UNITED STATES SUGAR CORPORATION**

CLEWISTON AND BRYANT MILLS

VOLUME 2 OF 2

**Prepared For:
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EMISSIONS UNIT INFORMATION

Section [5]

Boiler No. 8

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [5]

Boiler No. 8

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Boiler No. 8

3. Emissions Unit Identification Number: **028**

4. Emissions Unit Status Code: A	5. Commence Construction Date: NOV 2003	6. Initial Startup Date: MAR 2005	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:
Membrane wall, balanced-draft stoker boiler fired with carbonaceous fuel and distillate fuel oil (Grade No. 2) with a maximum sulfur content of 0.05 percent by weight. Fuel oil can include facility-generated, on-specification used oil.

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Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Electrostatic Precipitator

Wet Sand Separator

Selective Non-Catalytic Reduction System (SNCR)

2. Control Device or Method Code(s): **010, 099, 107**

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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: 550,000 lb/hr steam
3. Maximum Heat Input Rate: 1,030 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment: Maximum heat input rate based on 1-hour maximum steam rate of 550,000 lb/hr for carbonaceous fuel firing. The maximum permitted 24-hour average heat input rate for firing carbonaceous fuel is 936 MMBtu/hr corresponding to 500,000 lb/hr steam. The maximum permitted heat input rate for firing No. 2 fuel oil is 562 MMBtu/hr (Permit No. 0510003-024-AC/PSD-FL333A). The permitted annual steam production limit is 3.6135x10⁹ lb of steam per consecutive 12-month period.

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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: BLR-8		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 199 feet	7. Exit Diameter: 10.92 feet	
8. Exit Temperature: 265 °F	9. Actual Volumetric Flow Rate: 425,400 acfm	10. Water Vapor: 24 %	
11. Maximum Dry Standard Flow Rate: 246,000 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: <p>Stack parameters based on biomass firing at maximum 24-hour heat input rate. Maximum Dry Standard Flow Rate is at 7-percent oxygen.</p>			

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

1. Segment Description (Process/Fuel Type): External combustion boilers; Industrial; Bagasse; All boiler sizes		
2. Source Classification Code (SCC): 1-02-011-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 143.06	5. Maximum Annual Rate: 939,875	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.09 (dry)	8. Maximum % Ash: 8.4 (dry)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Maximum hourly rate based on 1,030 MMBtu/hr (1-hour maximum), and maximum annual rate based on 75-percent capacity factor or 6,767,100 MMBtu/yr.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External combustion boilers; Industrial; Distillate Oil; Grades 1 and 2		
2. Source Classification Code (SCC): 1-02-005-01		3. SCC Units: 1,000 Gallons
4. Maximum Hourly Rate: 4.161	5. Maximum Annual Rate: 6,073.6	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment: Based on 562 MMBtu/hr from No. 2 fuel oil and Permit No. 0510003-024-AC.		

EMISSIONS UNIT INFORMATION

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	099	010	EL
PM ₁₀	099	010	EL
SO ₂			EL
NO _x	107		EL
CO			EL
VOC			EL
SAM			NS
H017 (Benzene)			NS
H095 (Formaldehyde)			NS
H106 (Hydrogen Chloride)	010		EL
H114 (Mercury)			EL
HAPs			NS
NH ₃ (Ammonia)			EL

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POLLUTANT DETAIL INFORMATION

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Particulate Matter Total - PM

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 25.75 lb/hour 84.6 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.025 lb/MMBtu Reference: MACT Limit		7. Emissions Method Code: 0	
8. Calculation of Emissions: Maximum hourly rate: 1,030 MMBtu/hr x 0.025 lb/MMBtu = 25.75 lb/hr Annual: 6,767,100 MMBtu/yr x 0.025 lb/MMBtu ÷ 2,000 lb/ton = 84.6 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Potential emissions representative of bagasse firing. Based on Permit No. 0510003-024-AC/PSD-FL-333A and 40 CFR 63, Subpart DDDDD, Table 1.			

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POLLUTANT DETAIL INFORMATION

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Particulate Matter Total - PM

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.025 lb/MMBtu	4. Equivalent Allowable Emissions: 25.75 lb/hour 84.6 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): MACT limit, 40 CFR 63, Subpart DDDDD, Table 1.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.026 lb/MMBtu	4. Equivalent Allowable Emissions: 26.8 lb/hour 88 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): BACT limit from Permit No. 0510003-024-AC. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 26.8 lb/hour 88.0 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.026 lb/MMBtu Reference: BACT Limit		7. Emissions Method Code: 0	
8. Calculation of Emissions: Maximum hourly rate: $1,030 \text{ MMBtu/hr} \times 0.026 \text{ lb/MMBtu} = 26.8 \text{ lb/hr}$ Annual: $6,767,100 \text{ MMBtu/yr} \times 0.026 \text{ lb/MMBtu} \div 2,000 \text{ lb/ton} = 88.0 \text{ TPY}$			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Potential emissions representative of bagasse firing. Based on Permit No. 0510003-024-AC/PSD-FL-333A.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Particulate Matter - PM₁₀

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.026 lb/MMBtu	4. Equivalent Allowable Emissions: 26.8 lb/hour 88.0 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): BACT limit. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

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POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide - SO₂

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control:
3. Potential Emissions: 61.8 lb/hour 203.0 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.06 lb/MMBtu Reference: Permit	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse: 1-hour Average: 1,030 MMBtu/hr x 0.06 lb/MMBtu = 61.8 lb/hr Maximum 24-hour Average: 936 MMBtu/hr x 0.06 lb/MMBtu = 56.2 lb/hr Annual Average: 6,767,100 MMBtu/hr x 0.06 lb/MMBtu ÷ 2,000 lb/ton = 203.0 TPY No. 2 Fuel Oil: Hourly: 562 MMBtu/hr x 0.05 lb/MMBtu = 28.1 lb/hr Annual: 819,936 MMBtu/yr x 0.05 lb/MMBtu x 1 ton/2,000 lb = 20.5 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Potential emissions representative of bagasse firing. Emission factor based on Permit No. 0510003-024-AC/PSD-FL-333A.	

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POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide - SO₂

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.06 lb/MMBtu	4. Equivalent Allowable Emissions: 61.8 lb/hour 203.0 tons/year
5. Method of Compliance: EPA Method 6C	
6. Allowable Emissions Comment (Description of Operating Method): 24-hour and annual limit is 0.06 lb/MMBtu. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05 lb/MMBtu	4. Equivalent Allowable Emissions: 28.1 lb/hour 20.5 tons/year
5. Method of Compliance: Fuel analysis	
6. Allowable Emissions Comment (Description of Operating Method): Emissionn representative of No. 2 fuel oil firing with 0.05-percent sulfur. Annual emissions based on limit 6,073,600 gal/yr.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

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Nitrogen Oxides - NO_x

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 309.0 lb/hour 473.7 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.14 lb/MMBtu, 30-day rolling average Reference: Permit No. 0510003-24-AC/PSD-FL-333A	7. Emissions Method Code: 0
8. Calculation of Emissions: Maximum hourly rate based on uncontrolled emissions of 0.30 lb/MMBtu: 1,030 MMBtu/hr x 0.30 lb/MMBtu = 309.0 lb/hr Annual: 6,767,100 MMBtu/yr x 0.14 lb/MMBtu ÷ 2,000 lb/ton = 473.7 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Emission rate based on Permit No. 0510003-024-AC/PSD-FL-333A.	

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POLLUTANT DETAIL INFORMATION

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Nitrogen Oxides - NO_x

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.14 lb/MMBtu, 30-day rolling average	4. Equivalent Allowable Emissions: 131.0 lb/hour 473.7 tons/year
5. Method of Compliance: NO_x CEMS	
6. Allowable Emissions Comment (Description of Operating Method): 'BACT limit based on 30-day rolling average. Hourly emissions also reflect 30-day rolling average.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

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POLLUTANT DETAIL INFORMATION

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Carbon Monoxide - CO

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1,286.4 lb/hour 1,285 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.38 lb/MMBtu, 12-month rolling average Reference: PSD Permit 0510003-024-AC/PSD-FL-333A		7. Emissions Method Code: 0	
8. Calculation of Emissions: 30-day rolling average based on 40 CFR 63, Subpart DDDDD: 400 ppmvd @ 7-percent O₂ x 246,000 dscfm @ 7-percent O₂ x 60 min/hr x 2,116.8 lb/ft² ÷ (1,545.6/28) ft-lb_r/lb_m-°R ÷ 528°R = 428.8 lb/hr Annual based on 30-day rolling average: 428.8 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 1,878 TPY. Annual limit based on PSD-FL-333A: 0.38 lb/MMBtu (12-month rolling average) 6,767,100 MMBtu/yr x 0.38 lb/MMBtu ÷ 2,000 lb/ton = 1,285 TPY Maximum hourly rate based on 3 times the 30-day rolling average limit: 428.8 lb/hr x 3 = 1,286.4 lb/hr			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Annual limit based on 12-month rolling average, based on Permit No. 0510003-024-AC/PSD-FL-333A.			

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POLLUTANT DETAIL INFORMATION

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Carbon Monoxide - CO

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.38 lb/MMBtu	4. Equivalent Allowable Emissions: lb/hour 1,285 tons/year
5. Method of Compliance: CO CEMS	
6. Allowable Emissions Comment (Description of Operating Method): BACT limit from PSD-FL-333A based on 12-month rolling average. The lb/MMBtu limit excludes periods of startup, shutdown, and malfunction (SSM). Annual tons per year limit includes periods of SSM.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 400 ppmvd @ 7-percent O₂	4. Equivalent Allowable Emissions: 428.8 lb/hour 1,878 tons/year
5. Method of Compliance: CO CEMS	
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 63, Subpart DDDDD, Table 1. Limit and hourly and annual equivalent emissions based on 30-day rolling average.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

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POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 51.5 lb/hour 169.2 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.05 lb/MMBtu Reference: BACT Limit	7. Emissions Method Code: 0
8. Calculation of Emissions: Maximum hourly rate: 1,030 MMBtu/hr x 0.05 lb/MMBtu = 51.5 lb/hr Annual: 6,767,100 MMBtu/yr x 0.05 lb/MMBtu ÷ 2,000 lb/ton = 169.2 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Potential emissions representative of bagasse firing. Based on Permit No. 0510003-024-AC/PSD-FL-333A.	

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POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds - VOC

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05 lb/MMBtu	4. Equivalent Allowable Emissions: 51.5 lb/hour 169.2 tons/year
5. Method of Compliance: EPA Methods 18 and 25A	
6. Allowable Emissions Comment (Description of Operating Method): BACT limit. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

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Hydrogen Chloride - HCl

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: HCl		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 20.6 lb/hour 67.67 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.02 lb/MMBtu Reference: 40 CFR 63, Subpart DDDDD, Table 1.		7. Emissions Method Code: 0	
8. Calculation of Emissions: 0.02 lb/MMBtu x 1,030 MMBtu/hr = 20.6 lb/hr 0.02 lb/MMBtu x 6,767,100 MMBtu/yr ÷ 2,000 lb/ton = 67.67			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

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Boiler No. 8

POLLUTANT DETAIL INFORMATION

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Hydrogen Chloride - HCl

**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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.02 lb/MMBtu	4. Equivalent Allowable Emissions: 20.6 lb/hour 67.67 tons/year
5. Method of Compliance: Annual stack testing using EPA Method 26A	
6. Allowable Emissions Comment (Description of Operating Method): Based on 40 CFR 63, Subpart DDDDD, Table 1.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.00309 lb/hour 0.0102 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 3 x 10⁻⁶ lb/MMBtu Reference: 40 CFR 63, Subpart DDDDD, Table 1.		7. Emissions Method Code: 0	
8. Calculation of Emissions: 3 x 10⁻⁶ lb/MMBtu x 1,030 MMBtu/hr = 0.00309 lb/hr 3 x 10⁻⁶ lb/MMBtu x 6,767,100 MMBtu/yr ÷ 2,000 lb/ton = 0.0102 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Emission factor based on bagasse firing only.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Mercury - H114

**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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3 x 10⁻⁶ lb/MMBtu	4. Equivalent Allowable Emissions: 0.00309 lb/hour 0.0102 tons/year
5. Method of Compliance: Bagasse analysis	
6. Allowable Emissions Comment (Description of Operating Method): Based on 40 CFR 63, Subpart DDDDD, Table 1.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

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POLLUTANT DETAIL INFORMATION

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Ammonia - NH₃

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 13.0 lb/hour 57.0 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 20 ppmvd @ 7-percent O₂ Reference: PSD-FL-333A		7. Emissions Method Code: 0	
8. Calculation of Emissions: 20 ppmvd @ 7-percent O₂ x 246,000 dscfm @ 7-percent O₂ x 60 min/hr x 2,116.8 lb_r/ft² + (1545.6/17) ft-lb_r/lb_m-°R ÷ 528°R = 13.0 lb/hr 13.0 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 57.0 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Emission factor based on Permit No. PSD-FL-333A.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Boiler No. 8

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Ammonia - NH₃

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 20 ppmvd @ 7-percent O₂	4. Equivalent Allowable Emissions: 13.0 lb/hour 57.0 tons/year
5. Method of Compliance: Annual stack test by method EPA CTM-027.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. PSD-FL-333A.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [5]
Boiler No. 8

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Rule 62-212.400(5), F.A.C., BACT and NSPS Subpart Db.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION

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Boiler No. 8

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: ABB-Kent Taylor or equivalent Model Number: 621D Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on 40 CFR 63, Subpart DDDDD and Permit No. 0510003-024-AC/PSD-FL-333A.	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: EM	2. Pollutant(s): NO_x
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on BACT and Permit No. 0510003-024-AC/PSD-FL-333A.	

EMISSIONS UNIT INFORMATION

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Boiler No. 8

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 3

1. Parameter Code: O ₂	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on BACT and Permit No. 0510003-024-AC/PSD-FL-333A.	

Continuous Monitoring System: Continuous Monitor ____ of ____

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

EMISSIONS UNIT INFORMATION

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Boiler No. 8

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU5-I1</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU5-I2</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU5-I3</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU-I4</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

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Boiler No. 8

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU5-IV1</u> <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: <u>CAM Plan</u> <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU5-IV3</u> <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

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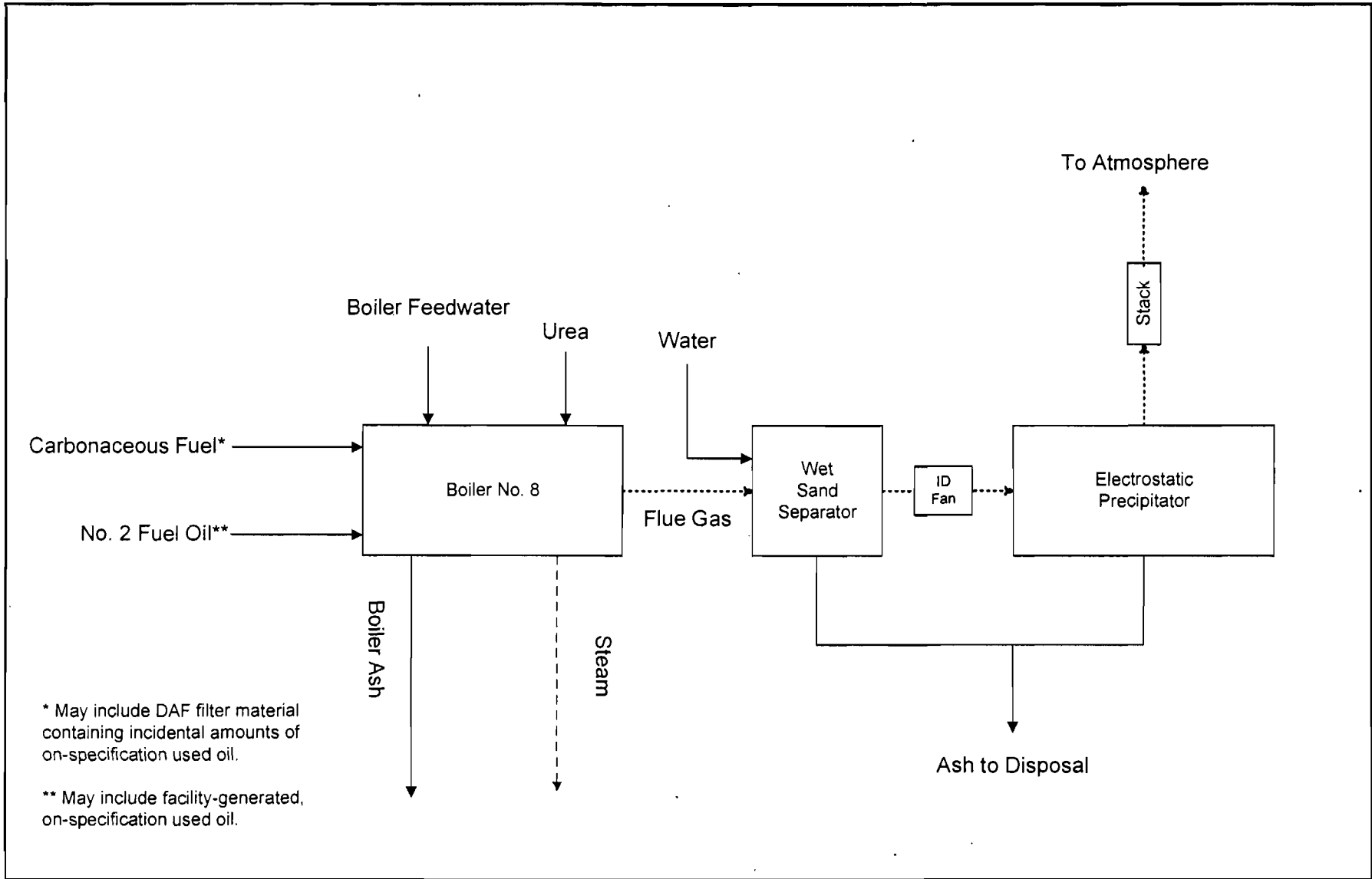
Boiler No. 8

Additional Requirements Comment

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ATTACHMENT USS-EU5-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU5-11
 Boiler No. 8 Process Flow Diagram
 U.S. Sugar Corporation
 Clewiston Mill, Florida

Process Flow Legend
 Solid/Liquid —————>
 Gaseous>
 Steam - - - - ->

File: 0537540/4/4.4/USS-EU5-11.vsd
 Date: 5/24/05



ATTACHMENT USS-EU5-12

FUEL ANALYSIS

ATTACHMENT USS-EU5-I2

Boiler No. 8 Fuel Analysis

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	--	6.83
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.1%	84.7%
Hydrogen	5.9%	15.3%
Nitrogen	0.35%	0.015% ^c
Oxygen	40.9%	0.38%
Sulfur	0.03% - 0.09%	0.05% ^c
Ash/Inorganic	0.87% - 8.4%	0.06% ^d
Moisture	49% - 55%	0.51% ^d

Represents typical values.

^a Source: Clewiston Mill fuel analysis averages.

^b Wet basis for bagasse. Represents normal minimum.

^c Permit limits, Permit No. 0510003-017-AV.

^d Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984.
Represents average fuel characteristics.

ATTACHMENT USS-EU5-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU5-I3a
CONTROL EQUIPMENT PARAMETERS FOR BOILER NO. 8
AT U.S. SUGAR CLEWISTON MILL

WET SAND SEPARATORS*

Control Device Type Manufacturer and Model No.	Wet Cyclone Thermal Energy Systems
Inlet Flue Gas Temp (°F)	400
Inlet Design Flue Gas Flow Rate (acfm)	230,000
Inlet Expected Flue Gas Flow Rate (acfm)	212,700
Inlet Moisture (% Volume)	24
Cyclone Diameter (ft)	22
Cyclone Height (ft)	35
No. of Spray Nozzles (Cyclone)	5
No. of Spray Nozzles (Inlet Duct)	9
Total Water Flow to Nozzles (gpm)	713
Pressure Drop (in H ₂ O)	4
Overall PM Collection Efficiency (%)	80

*There are two identical units operating in parallel; data is for each unit.

ATTACHMENT USS-EU5-13b
CONTROL EQUIPMENT PARAMETERS FOR BOILER NO. 8
U.S. SUGAR CLEWISTON MILL
ELECTROSTATIC PRECIPITATOR

Manufacturer and Model No.	PPC Industries Model No. 41R-1536-5712P		
Inlet Flue Gas Temp (°F)	335		
Inlet Design Flue Gas Flow Rate (acfm)	432,500		
Moisture (% Volume)	20		
No. of Precipitators	1		
Precipitation Type	Rigid Electrode		
Total Number of Fields	5		
Total Installed Collection Area (ft ²)	154,360		
Gas Velocity (ft/s)	3.25		
Specific Collection Area (ft ² /1,000 acfm)	356		
Power Consumption (KW)	250		
Pressure Drop (in H ₂ O)	0.5		
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency %
Particulate Matter	5,346	25.8	99.5

Design Inlet loading calculation:

Uncontrolled: 5.19 lb/MMBtu x 1,030 MMBtu/hr = 5,346 lb/hr

ESP outlet loading (max) = 25.75 lb/hr (based on 0.025 lb/MMBtu)

ESP efficiency (min) = (5,346 - 25.75) / 5,346 = 99.5%

**ATTACHMENT USS-EU5-13c
CONTROL EQUIPMENT PARAMETERS FOR BOILER NO. 8
U.S. SUGAR CLEWISTON MILL**

SELECTIVE NON-CATALYTIC REDUCTION SYSTEM

Manufacturer and Model No.	FuelTech		
Flue Gas Temp At Injections (°F)	1,800-2,000		
Flue Gas Flow Rate (acfm)	425,000		
Moisture (% Volume)	24		
No. of Injection Levels	3		
Total No. of Injections	28		
NO _x - OUT (urea) usage (max gal/hr)	76		
Maximum Ammonia Slip (ppm)	20		
Pollutants	Inlet Loading (lb/MMBtu)	Outlet Loading (lb/MMBtu)	Control Efficiency %
Nitrogen Oxides	0.28 - 0.32	0.14	44 - 50

ATTACHMENT USS-EU5-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU5-I4**PROCEDURES FOR STARTUP AND SHUTDOWN****Clewiston Boiler No. 8**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions will be taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 8. Boiler room foreman and operating personnel will receive proper training on emissions control procedures.

Cold Startup (approximately 6 to 12 hours)

1. Turn on wet cyclone.
2. Feed clean wood into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose, or light a fuel oil or natural gas burner at the lowest rate.
4. Observe the stack plume and adjust if necessary, by adjusting fuel, atomizing air, and combustion air to obtain proper combustion.
5. Feed carbonaceous fuel from the mill to the boiler slowly.
6. Energize electrostatic precipitator (ESP).
7. Activate SNCR system.
8. As the furnace gets hotter and the carbonaceous fuel is burning better, decrease fossil fuel until burners can be turned off.
9. Continue to observe the stack plume, the cyclone water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, cyclone and ESP to maintain optimum operating conditions.
10. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on wet cyclone
3. Check the boiler and cyclone water levels, and make sure they are functioning properly.

4. Light a fossil fuel burner, continue to observe the stack plume, cyclone water levels, and burners.
5. Feed carbonaceous fuel from the mill to the boiler slowly at first.
6. Energize ESP.
7. Activate SNCR system.
8. As the furnace gets hotter and the carbonaceous fuel is burning better, decrease fossil fuel until burners can be turned off. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the fossil fuel supply until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
9. Continue to observe the stack plume, cyclone water level, and carbonaceous fuel level, making adjustments to drafts, fuel, cyclone and ESP to maintain optimum operating conditions.
10. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and cyclone water levels and make adjustments to maintain safe and optimum operating conditions.
3. After fuel flow is stopped, deactivate ESP, wet cyclone, and SNCR system.

ATTACHMENT USS-EU5-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU5-IV1a**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Boiler No. 8**

40 CFR 60.40b(a): 40 CFR 63, Subpart Db Applicability
40 CFR 60.40b(j): 40 CFR 63, Subpart Db Applicability
40 CFR 60.42b(a): Standard for Sulfur Dioxide
40 CFR 60.42b(j)(2): Standard for Sulfur Dioxide
40 CFR 60.43b(e): Standard for Particulate Matter and Opacity
40 CFR 60.43b(f): Standard for Particulate Matter and Opacity
40 CFR 60.43b(g): Standard for Particulate Matter and Opacity
40 CFR 60.45b(a): Compliance and Performance Test Methods for Sulfur Dioxide
40 CFR 60.45b(j): Compliance and Performance Test Methods for Sulfur Dioxide
40 CFR 60.46b(a): Compliance and Performance Test Methods for PM
40 CFR 60.46b(d)7: Compliance and Performance Test Methods for PM
40 CFR 60.47b(f): Emission Monitoring for Sulfur Dioxide
40 CFR 60.48b(a): Emission Monitoring for Particulate Matter and Nitrogen Oxides
40 CFR 60.49b(a): Reporting and Recordkeeping Requirements
40 CFR 60.49b(d): Reporting and Recordkeeping Requirements
40 CFR 60.49b(f): Reporting and Recordkeeping Requirements
40 CFR 60.49b(h)(1): Reporting and Recordkeeping Requirements
40 CFR 60.49b(h)(3): Reporting and Recordkeeping Requirements
40 CFR 60.49b(j): Reporting and Recordkeeping Requirements
40 CFR 60.49b(o): Reporting and Recordkeeping Requirements
40 CFR 60.49b(r): Reporting and Recordkeeping Requirements
62-204.800(b)(3), F.A.C.: NSPS Subpart Db – Adopted by Reference
62-212.400, F.A.C.: Prevention of Significant Deterioration
62-296.410(2), F.A.C.: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C.: Carbonaceous Fuel Burning Equipment

62.297.310(1), F.A.C.: General Compliance Test Requirements
62-297-310(2)(b), F.A.C.: General Compliance Test Requirements
62-297-310(3), F.A.C.: General Compliance Test Requirements
62-297-310(4), F.A.C.: General Compliance Test Requirements
62-297-310(5), F.A.C.: General Compliance Test Requirements
62-297-310(6), F.A.C.: General Compliance Test Requirements
62-297-310(7), F.A.C.: General Compliance Test Requirements
62-297-310(8), F.A.C.: General Compliance Test Requirements
62-297.401(1), F.A.C.: EPA Test Method 1
62-297.401(2), F.A.C.: EPA Test Method 2
62-297.401(3), F.A.C.: EPA Test Method 3
62-297.401(4), F.A.C.: EPA Test Method 4
62-297.401(5), F.A.C.: EPA Test Method 5
62-297.401(6), F.A.C.: EPA Test Method 6
62-297.401(6c), F.A.C.: EPA Test Method 6C
62-297.401(7), F.A.C.: EPA Test Method 7
62-297.401(7e), F.A.C.: EPA Test Method 7E
62-297.401(8), F.A.C.: EPA Test Method 6C
62-297.401(9), F.A.C.: EPA Test Method 9
62-297.401(10), F.A.C.: EPA Test Method 10
62-297.401(18), F.A.C.: EPA Test Method 18
62-297.401(25a), F.A.C.: EPA Test Method 25A
40 CFR 63 – Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
(See Attachment USS-EU5-IV1b)

**ATTACHMENT USS-EU5-IV1b
NATIONAL EMISSION STANDARDS
U.S. SUGAR BOILER NO. 8**

**Subpart DDDDD – National Emission Standards for Hazardous Air
Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	Sec. 63.7480 What is the purpose of this subpart?	
Y	This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.	
Y	Sec. 63.7485 Am I subject to this subpart?	
Y	You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in Sec. 63.7575 that is located at, or is part of, a major source of HAP as defined in Sec. 63.2 or Sec. 63.761 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in Sec. 63.7491.	Clewiston is a major source of HAPs, and Boiler No. 8 has a heat input capacity of greater than 10 MMBtu/hr.
Y	Sec. 63.7490 What is the affected source of this subpart?	
Y	(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.	
N	(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in Sec. 63.7575.	
Y	(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in Sec. 63.7575.	Construction of Boiler No. 8 began after Jan. 13, 2003.
Y	(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.	Construction of Boiler No. 8 began after Jan. 13, 2003.
N	(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in Sec. 63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.	
N	(d) A boiler or process heater is existing if it is not new or reconstructed.	
N	Sec. 63.7491 Are any boilers or process heaters not subject to this subpart?	
N	The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.	
N	(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB, subpart Cb or subpart Eb.	
N	(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.	
N	(c) An electric utility steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity, and supplies more than one-third of its potential electric output capacity, and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.	
N	(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).	
N	(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.	
N	(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.	
N	(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.	
N	(h) A hot water heater as defined in this subpart.	
N	(i) A refining kettle covered by 40 CFR part 63, subpart X.	
N	(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.	
N	(k) Blast furnace stoves as described in the EPA document, entitled "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants--Background Information for Proposed Standards," (EPA-453/R-01-005).	

Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Applicable?	What This Subpart Covers	Applicability Rationale
N	(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.	
N	(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).	
N	(n) Temporary boilers as defined in this subpart.	
N	(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.	
Y	Sec. 63.7495 When do I have to comply with this subpart?	
Y	(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.	Boiler No. 8 will comply upon startup.
N	(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.	
N	(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.	
N	(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.	
N	(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.	
Y	(d) You must meet the notification requirements in Sec. 63.7545 according to the schedule in Sec. 63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.	
Y	Emission Limits and Work Practice Standards	
Y	Sec. 63.7499 What are the subcategories of boilers and process heaters?	
Y	The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in Sec. 63.7575.	Boiler No. 8 is in the large solid fuel category.
Y	Sec. 63.7500 What emission limits, work practice standards, and operating limits must I meet?	
Y	(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.	
Y	(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under Sec. 63.7507.	Boiler No. 8 must meet MACT standards for new sources.
Y	Table 1: PM - 0.025 lb/MMBtu, or TSM - 0.0003 lb/MMBtu*	New source standard.
Y	HCl - 0.02 lb/MMBtu*	New source standard.
Y	Hg - 3E-06 lb/MMBtu	New source standard.
Y	CO - 400 ppmvd @ 7% O ₂ , 30-day rolling average	New source standard.
Y	* May opt to demonstrate compliance with health-based alternative for HCl and TSM.	New source standard.
Y	(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under Sec. 63.8(f).	Boiler No. 8 uses the combination of wet scrubber and ESP control devices.
Y	Tables 2, 3 and 4: PM, TSM, Hg - if using ESP control with additional wet control system: maintain minimum voltage and secondary current or total power input to the ESP at or above compliance test values.	Boiler No. 8 will use ESP control with additional wet control system: maintain minimum voltage and secondary current or total power input to the ESP at or above compliance test values.

**Subpart DDDDD – National Emission Standards for Hazardous Air
Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	HCl - maintain minimum scrubber effluent pH, pressure drop and liquid flow rate at or above compliance test values.	Boiler No. 8 will maintain minimum scrubber effluent pH, pressure drop and liquid flow rate at or above compliance test values.
Y	Fuel Analysis - maintain fuel type such that Hg, TSM and HCl emission rates are less than applicable limits.	Boiler No. 8 will use Fuel Analysis and maintain fuel type such that Hg emission rate is less than applicable limit.
Y	(b) As provided in Sec. 63.6(g), EPA may approve use of an alternative to the work practice standards in this section.	Boiler No. 8 is requesting some alternatives to test procedures.
Y	General Compliance Requirements	
Y	Sec. 63.7505 What are my general requirements for complying with this subpart?	
Y	(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.	
Y	(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in Sec. 63.6(e)(1)(i).	
Y	(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to Sec. 63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.	Boiler No. 8 will demonstrate compliance with Hg limits through fuel analysis.
Y	(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under Sec. 63.8(f).	Boiler No. 8 will demonstrate compliance with TSM and HCl limits through fuel analysis.
Y	(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.	A site-specific monitoring is being submitted.
Y	(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);	A site-specific monitoring is being submitted.
Y	(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and	A site-specific monitoring is being submitted.
Y	(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).	A site-specific monitoring is being submitted.
Y	(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.	A site-specific monitoring is being submitted.
Y	and (i) Ongoing operation and maintenance procedures in accordance with the general requirements of Sec. 63.8(c)(1), (c)(3), (c)(4)(ii);	A site-specific monitoring is being submitted.
Y	(ii) Ongoing data quality assurance procedures in accordance with the general requirements of Sec. 63.8(d); and	A site-specific monitoring is being submitted.
Y	and (iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of Sec. 63.10(c), (e)(1), (e)(2)(i).	A site-specific monitoring is being submitted.
Y	(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.	A site-specific monitoring is being submitted.
Y	(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.	A site-specific monitoring is being submitted.

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and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	(e) If you have an applicable emission limit or work practice standard, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in Sec. 63.6(e)(3).	A SSM Plan will be developed prior to startup of Boiler No. 8.
Y	Sec. 63.7506 Do any boilers or process heaters have limited requirements?	
N	(a) New or reconstructed boilers and process heaters in the large liquid fuel subcategory or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section and meet the CO work practice standard in Table 1 to this subpart.	Boiler No. 8 is not in the liquid fuel subcategory.
N	(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in Sec. 63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.	Boiler No. 8 is not in the liquid fuel subcategory.
N	(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance report required in Sec. 63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.	Boiler No. 8 is not in the liquid fuel subcategory.
N	(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in Sec. 63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(1) Existing large and limited use gaseous fuel units.	Boiler No. 8 is not in the gaseous fuel subcategory.
N	(2) Existing large and limited use liquid fuel units.	Boiler No. 8 is not in the liquid fuel subcategory.
N	(3) New or reconstructed small liquid fuel units that burn only gaseous fuels or distillate oil. New or reconstructed small liquid fuel boilers and process heaters that commence burning of any other type of liquid fuel must comply with all applicable requirements of this subpart and subpart A of this part upon startup of burning the other type of liquid fuel.	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in Sec. 63.9(b) and are not subject to any requirements in this subpart or in subpart A of this part (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subpart A of this part).	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(1) Existing small solid fuel boilers and process heaters.	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(2) Existing small liquid fuel boilers and process heaters.	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(3) Existing small gaseous fuel boilers and process heaters.	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	(4) New or reconstructed small gaseous fuel units.	Boiler No. 8 is not in the gaseous fuel or liquid fuel subcategories.
N	Sec. 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?	

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Applicable?	What This Subpart Covers	Applicability Rationale
N	(a) As an alternative to the requirement for large solid fuel boilers located at a single facility to demonstrate compliance with the HCl emission limit in Table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.	
N	(b) In lieu of complying with the TSM emission standards in Table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for complying with the TSM emission standards in Table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions) under the procedures prescribed in appendix A to this subpart.	
Y	Testing, Fuel Analyses, and Initial Compliance Requirements	
Y	Sec. 63.7510 What are my initial compliance requirements and by what date must I conduct them?	
Y	(a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to Sec. 63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to Sec. 63.7521 and Table 6 to this subpart, establishing operating limits according to Sec. 63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to Sec. 63.7525.	Boiler No. 8 will demonstrate compliance through a combination of methods.
Y	(b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to Sec. 63.7521 and Table 6 to this subpart and establish operating limits according to Sec. 63.7530 and Table 8 to this subpart.	Boiler No. 8 will demonstrate compliance with the Hg limit through fuel analysis,
Y	(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to Sec. 63.7525(a).	Boiler No. 8 will be subject to the CO work practice standard.
N	(d) For existing affected sources, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified for your source in Sec. 63.7495 and according to the applicable provisions in Sec. 63.7(a)(2) as cited in Table 10 to this subpart.	Boiler No. 8 is not an existing affected source.
Y	(e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and November 12, 2004, you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after November 12, 2004 or within 180 days after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).	Boiler No. 8 will demonstrate compliance with the promulgated emission limits and work practice standards within 180 days of startup.
N	(f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and November 12, 2004, and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after November 12, 2004 or within 3 years after startup of the affected source, whichever is later.	Boiler No. 8 will demonstrate compliance with the promulgated emission limits and work practice standards within 180 days of startup.
N	(g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.	Boiler No. 8 commenced construction prior to November 12, 2004.
Y	Sec. 63.7515 When must I conduct subsequent performance tests or fuel analyses?	
Y	(a) You must conduct all applicable performance tests according to Sec. 63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.	

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Applicable?	What This Subpart Covers	Applicability Rationale
Y	(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.	
Y	(c) If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.	
Y	(d) If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.	
N	(e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to Sec. 63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.	Boiler No. 8 is not in any of the limited use subcategories, and has a heat input capacity less than 100 MMBtu/hr.
Y	(f) You must conduct a fuel analysis according to Sec. 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in Sec. 63.7540.	
Y	(g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to Sec. 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in Sec. 63.7550.	
Y	Sec. 63.7520 What performance tests and procedures must I use?	
Y	(a) You must conduct all performance tests according to Sec. 63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in Sec. 63.7(c) if you elect to demonstrate compliance through performance testing.	Boiler No. 8 will demonstrate compliance with the PM and HCl limits through performance testing.
Y	(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.	
N	(c) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to Sec. 63.7506(a).	Boiler No. 8 is not in one of the liquid fuel subcategories.
Y	(d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.	Boiler No. 8 will demonstrate compliance with the PM and HCl limits through performance testing.
Y	(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.	
Y	(f) You must conduct three separate test runs for each performance test required in this section, as specified in Sec. 63.7(e)(3). Each test run must last at least 1 hour.	Boiler No. 8 will demonstrate compliance with the PM and HCl limits through performance testing.
Y	(g) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A to part 60 of this chapter to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.	Boiler No. 8 will demonstrate compliance with the PM and HCl limits through performance testing.
Y	Sec. 63.7521 What fuel analyses and procedures must I use?	
Y	(a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.	Boiler No. 8 will be required to conduct fuel analysis for TSM, Hg and HCl.

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Applicable?	What This Subpart Covers	Applicability Rationale
Y	(b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.	Boiler No. 8 will submit a site-specific fuel analysis plan for TSM, Hg and HCl.
Y	(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.	Boiler No. 8 will submit a site-specific fuel analysis plan for TSM, Hg and HCl.
Y	(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.	Boiler No. 8 will submit a site-specific fuel analysis plan for TSM, Hg and HCl.
Y	(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.	
Y	(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.	
Y	(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.	
Y	(iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.	
Y	(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.	Boiler No. 8 will submit a site-specific fuel analysis plan for TSM, Hg and HCl.
N	(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.	Boiler No. 8 will not rely upon a fuel analysis from a fuel supplier.
Y	(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.	Boiler No. 8 will submit a site-specific fuel analysis plan for TSM, Hg and HCl.
Y	(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.	
Y	(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.	Boiler No. 8 will submit a request for an alternative test procedure since it is not practical to stop the belt feeder.
Y	(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.	
Y	(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.	
Y	(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.	
Y	(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.	
Y	(iii) Transfer all samples to a clean plastic bag for further processing.	
Y	(d) Prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.	
Y	(1) Thoroughly mix and pour the entire composite sample over a clean plastic sheet.	
Y	(2) Break sample pieces larger than 3 inches into smaller sizes.	
Y	(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.	
Y	(4) Separate one of the quarter samples as the first subset.	
Y	(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.	

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Applicable?	What This Subpart Covers	Applicability Rationale
Y	(6) Grind the sample in a mill.	
Y	(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.	
Y	(e) Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.	
N	Sec. 63.7522 Can I use emission averaging to comply with this subpart?	Boiler No. 8 is not eligible for the emissions averaging option.
N	(a) As an alternative to meeting the requirements of Sec. 63.7500, if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in this section in a State that does not choose to exclude emission averaging.	
N	(b) For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on November 12, 2004 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on November 12, 2004.	
N	(c) You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (d), (e), and (f) of this section.	
N	(d) The weighted average emissions from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in Sec. 63.7495.	
N	(e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2) of this section.	
N	(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.	
N	Where:	
N	AveWeighted = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Sec. 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Hm = Maximum rated heat input capacity of boiler, i, in units of million Btu per hour.	
N	n = Number of large solid fuel boilers participating in the emissions averaging option.	
N	(2) If you are not capable of monitoring heat input, you can use Equation 2 of this section as an alternative to using equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.	
N	Where:	
N	AveWeighted = Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Sec. 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Sm = Maximum steam generation by boiler, i, in units of pounds.	
N	Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.	
N	(f) You must demonstrate continuous compliance on a 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) and (2). The first 12-month rolling-average period begins on the compliance date specified in Sec. 63.7495.	

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Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
N	(1) For each calendar month, you must use Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.	
N	Where:	
N	AveWeighted Emissions = 12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Er = Emission rate, calculated during the most recent compliance test, (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Sec. 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.	
N	n = Number of large solid fuel boilers participating in the emissions averaging option.	
N	(2) If you are not capable of monitoring heat input, you can use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.	
N	Where:	
N	AveWeighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Er = Emission rate, calculated during the most recent compliance test (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Sec. 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.	
N	Sa = Actual steam generation for each calendar month by boiler, i, in units of pounds.	
N	Cf = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.	
N	(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (g)(1) through (4).	
N	(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.	
N	(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:	
N	(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;	
N	(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;	
N	(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;	
N	(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in Sec. 63.7520;	
N	(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;	
N	(vi) If you request to monitor an alternative operating parameter pursuant to Sec. 63.7525, you must also include:	
N	(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and	
N	(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and	

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Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
N	(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.	
N	(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:	
N	(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and	
N	(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.	
N	(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:	
N	(i) Any averaging between emissions of differing pollutants or between differing sources; or	
N	(ii) The inclusion of any emission source other than an existing large solid fuel boiler.	
Y	Sec. 63.7525 What are my monitoring, installation, operation, and maintenance requirements?	
Y	(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in Sec. 63.7495.	Boiler No. 8 will be subject to the CO work practice standard.
Y	(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR, part 60, appendix B, and according to the site-specific monitoring plan developed according to Sec. 63.7505(d).	Boiler No. 8 will be subject to the CO work practice standard.
Y	(2) You must conduct a performance evaluation of each CEMS according to the requirements in Sec. 63.8 and according to PS 4A of 40 CFR part 60, appendix B.	Boiler No. 8 will be subject to the CO work practice standard.
Y	(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.	Boiler No. 8 will be subject to the CO work practice standard.
Y	(4) The CEMS data must be reduced as specified in Sec. 63.8(g)(2).	Boiler No. 8 will be subject to the CO work practice standard.
Y	(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.	Boiler No. 8 will be subject to the CO work practice standard.
Y	(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.	Boiler No. 8 will be subject to the CO work practice standard.
N	(b) If you have an applicable opacity operating limit, you must install, operate, certify, and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in Sec. 63.7495.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(2) You must conduct a performance evaluation of each COMS according to the requirements in Sec. 63.8 and according to PS 1 of 40 CFR part 60, appendix B.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(3) As specified in Sec. 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.

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Applicable?	What This Subpart Covers	Applicability Rationale
N	(4) The COMS data must be reduced as specified in Sec. 63.8(g)(2).	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in Sec. 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of Sec. 63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
N	(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.	Boiler No. 8 will not be subject to an opacity standard since it uses a wet scrubber in combination with an ESP.
Y	(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in Sec. 63.7495.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(5) Record the results of each inspection, calibration, and validation check.	Boiler No. 8 will have CMS for the wet scrubber and the ESP.
Y	(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.	Boiler No. 8 will have a liquid flow measuring device on the wet scrubber.
Y	(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.	Boiler No. 8 will have a liquid flow measuring device on the wet scrubber.
Y	(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.	Boiler No. 8 will have a liquid flow measuring device on the wet scrubber.
Y	(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.	Boiler No. 8 will have a liquid flow measuring device on the wet scrubber.

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Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	(4) Conduct a flow sensor calibration check at least semiannually.	Boiler No. 8 will have a liquid flow measuring device on the wet scrubber.
Y	(e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(4) Check pressure tap pluggage daily.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.	Boiler No. 8 will have a pressure measuring device on the wet scrubber.
Y	(f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.	Boiler No. 8 will have a pH measuring device on the wet scrubber.
Y	(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.	Boiler No. 8 will have a pH measuring device on the wet scrubber.
Y	(2) Ensure the sample is properly mixed and representative of the fluid to be measured.	Boiler No. 8 will have a pH measuring device on the wet scrubber.
Y	(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.	Boiler No. 8 will have a pH measuring device on the wet scrubber.
Y	(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.	Boiler No. 8 will be required to measure ESP operating parameters.
N	(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.	Boiler No. 8 will not utilize sorbent injection.
N	(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.	Boiler No. 8 will not utilize sorbent injection.
N	(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.	Boiler No. 8 will not utilize sorbent injection.

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and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
N	(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.	Boiler No. 8 will not utilize sorbent injection.
N	(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.	Boiler No. 8 will not use a fabric filter.
N	(4) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.	Boiler No. 8 will not use a fabric filter.
N	(5) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA 454/R-98-015, September 1997.	Boiler No. 8 will not use a fabric filter.
N	(6) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.	Boiler No. 8 will not use a fabric filter.
N	(7) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.	Boiler No. 8 will not use a fabric filter.
N	(8) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.	Boiler No. 8 will not use a fabric filter.
N	(9) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.	Boiler No. 8 will not use a fabric filter.
N	(10) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.	Boiler No. 8 will not use a fabric filter.
N	(11) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.	Boiler No. 8 will not use a fabric filter.
Y	Sec. 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?	
Y	(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to Sec. 63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Sec. 63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.	Boiler No. 8 will conduct initial performance tests for PM and HCl and fuel analysis for Hg.
N	(b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to Sec. 63.7506(a).	Boiler No. 8 is not in one of the liquid fuel subcategories.
Y	(c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in Sec. 63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to Sec. 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.	Boiler No. 8 will conduct initial performance tests for PM, PM and HCl and fuel analysis for Hg.
Y	(1) You must establish the maximum chlorine fuel input (C _{input}) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.	Boiler No. 8 will conduct initial performance tests and fuel analysis for HCl.
Y	(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.	
Y	(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Q _i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (C _i).	
Y	(iii) You must establish a maximum chlorine input level using Equation 5 of this section.	
Y	Where:	
Y	C _{input} = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.	

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Applicable?	What This Subpart Covers	Applicability Rationale
Y	C_i = Arithmetic average concentration of chlorine in fuel type, i , analyzed according to Sec. 63.7521, in units of pounds per million Btu.	
Y	Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .	
Y	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.	
N	(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSMinput) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.	Boiler No. 8 will not choose to comply with the alternative TSM limit.
N	(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.	
N	(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (Q_i) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (M_i).	
N	(iii) You must establish a baseline TSM input level using Equation 6 of this section.	
N	Where:	
N	TSMinput = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.	
N	M_i = Arithmetic average concentration of TSM in fuel type, i , analyzed according to Sec. 63.7521, in units of pounds per million Btu.	
N	Q_i = Fraction of total heat input from based fuel type, i , based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .	
N	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.	
N	(3) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.	Boiler No. 8 will comply with the Hg limit through fuel analysis.
N	(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.	
N	(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).	
N	(iii) You must establish a maximum mercury input level using Equation 7 of this section.	
N	Where:	
N	Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.	
N	HG_i = Arithmetic average concentration of mercury in fuel type, i , analyzed according to Sec. 63.7521, in units of pounds per million Btu.	
N	Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .	
N	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.	

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Applicable?	What This Subpart Covers	Applicability Rationale
Y	(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.	
Y	(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in Sec. 63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.	Boiler No. 8 will utilize a wet scrubber.
Y	(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in Sec. 63.7575, as your operating limits during the three-run performance test.	Boiler No. 8 will utilize an ESP.
N	(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in Sec. 63.7575, as your operating limit during the three-run performance test.	Boiler No. 8 will not utilize a dry scrubber.
N	(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in Sec. 63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.	Boiler No. 8 will not utilize a fabric filter.
Y	(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to Sec. 63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.	Boiler No. 8 will comply with the Hg limit through fuel analysis.
Y	(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.	The worst case fuel will be bagasse.
Y	(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.	
Y	Where:	
Y	P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.	
Y	mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to Sec. 63.7521, in units of pounds per million Btu.	
Y	SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to Sec. 63.7521, in units of pounds per million Btu.	
Y	t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.	
Y	(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.	Boiler No. 8 will comply with the HCl limit through fuel analysis and a site-specific risk analysis.
Y	Where:	
Y	HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.	
Y	C _{i90} = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.	
Y	Q _i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q _i .	
Y	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.	
Y	1.028 = Molecular weight ratio of HCl to chlorine.	

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Applicable?	What This Subpart Covers	Applicability Rationale
N	(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.	Boiler No. 8 will not choose to comply with the alternative TSM limit.
N	Where:	
N	TSM = TSM emission rate from the boiler or process heater in units of pounds per million Btu.	
N	Mi90 = 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.	
N	Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.	
N	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.	
Y	(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.	Boiler No. 8 will comply with the Hg limit through fuel analysis.
Y	Where:	
Y	Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.	
Y	HGi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.	
Y	Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.	
Y	n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.	
Y	(e) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Sec. 63.7545(e).	
Y	Continuous Compliance Requirements	
Y	Sec. 63.7535 How do I monitor and collect data to demonstrate continuous compliance?	
Y	(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by Sec. 63.7505(d).	
Y	(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.	
Y	(c) You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.	Boiler No. 8 will have a CEMS for CO.
Y	Sec. 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?	
Y	(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.	
Y	(1) Following the date on which the initial performance test is completed or is required to be completed under Sec. 63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.	

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Y	(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).	
N	(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 9 of Sec. 63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.	Boiler No. 8 will demonstrate compliance with HCl by performance testing.
N	(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Sec. 63.7521(b).	
N	(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.	
N	(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 9 of Sec. 63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.	
Y	(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of Sec. 63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of Sec. 63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Sec. 63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Sec. 63.7530(c).	
N	(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of Sec. 63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.	Boiler No. 8 will not choose to comply with the alternative TSM limit.
N	(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Sec. 63.7521(b).	
N	(ii) You must determine the new mixture of fuels that will have the highest content of TSM.	
N	(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of Sec. 63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.	
N	(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of Sec. 63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of Sec. 63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Sec. 63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Sec. 63.7530(c).	Boiler No. 8 will not choose to comply with the alternative TSM limit.
Y	(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of Sec. 63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.	Boiler No. 8 will comply with the Hg limit through fuel analysis.
Y	(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Sec. 63.7521(b).	
Y	(ii) You must determine the new mixture of fuels that will have the highest content of mercury.	
Y	(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of Sec. 63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.	

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N	(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of Sec. 63.7530. If the results of recalculating the maximum mercury input using Equation 7 of Sec. 63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Sec. 63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Sec. 63.7530(c).	Boiler No. 8 will comply with the Hg limit through fuel analysis.
N	(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions according to your SSMP, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.	Boiler No. 8 will not utilize a fabric filter.
Y	(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to Sec. 63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.	Boiler No. 8 will have a CEMS for CO.
Y	(i) You must continuously monitor carbon monoxide according to Sec. 63.7525(a) and 63.7535.	
Y	(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.	
Y	(iii) Keep records of carbon monoxide levels according to Sec. 63.7555(b).	
Y	(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in Sec. 63.7550.	
Y	(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in Sec. 63.7505(e).	
Y	(d) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).	
N	Sec. 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?	Boiler No. 8 is not eligible for the emissions averaging provision.
N	(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (4) of this section.	
N	(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in Sec. 63.7522(f) and (g);	
N	(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;	
N	(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and	
N	(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.	

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N	(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.	
Y	Notification, Reports, and Records	
Y	Sec. 63.7545 What notifications must I submit and when?	
Y	(a) You must submit all of the notifications in Sec. Sec. 63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.	
N	(b) As specified in Sec. 63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.	Boiler No. 8 will startup after Nov. 12, 2004.
N	(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by Sec. 63.9(b)(2).	
N	(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by Sec. 63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.	
Y	(c) As specified in Sec. 63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.	Boiler No. 8 must submit the initial notification within 15 days of startup.
Y	(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.	Boiler No. 8 will submit the Notification of Intent at least 30 days prior to beginning testing.
Y	(e) If you are required to conduct an initial compliance demonstration as specified in Sec. 63.7530(a), you must submit a Notification of Compliance Status according to Sec. 63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to Sec. 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.	The Notification of Compliance Status will be submitted within 60 days following completion of the performance tests.
Y	(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.	
Y	(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.	
Y	(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.	
Y	(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.	
Y	(5) Identification of whether you plan to demonstrate compliance by emissions averaging.	
Y	(6) A signed certification that you have met all applicable emission limits and work practice standards.	
Y	(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.	
Y	(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.	

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Y	(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.	
Y	Sec. 63.7550 What reports must I submit and when?	
Y	(a) You must submit each report in Table 9 to this subpart that applies to you.	
Y	(b) Unless the EPA Administrator has approved a different schedule for submission of reports under Sec. 63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.	
Y	(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in Sec. 63.7495.	
Y	(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Sec. 63.7495.	
Y	(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.	
Y	(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.	
Y	(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.	
Y	(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.	
Y	(1) Company name and address.	
Y	(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.	
Y	(3) Date of report and beginning and ending dates of the reporting period.	
Y	(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.	
Y	(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.	
Y	(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of Sec. 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of Sec. 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of Sec. 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).	

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Y	(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of Sec. 63.7530, the maximum TSM input operating limit using Equation 6 of Sec. 63.7530, or the maximum mercury input operating limit using Equation 7 of Sec. 63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.	
Y	(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.	
Y	(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in Sec. 63.10(d)(5)(i).	
Y	(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.	
Y	(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in Sec. 63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.	
Y	(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.	
Y	(1) The total operating time of each affected source during the reporting period.	
Y	(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.	
Y	(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.	
Y	(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.	
Y	(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in Sec. 63.7505(d).	
Y	(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (i.e., what you deviated from).	
Y	(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.	
Y	(3) The date, time, and duration that each CMS was out of control, including the information in Sec. 63.8(c)(8).	
Y	(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.	
Y	(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.	
Y	(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.	
Y	(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.	
Y	(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.	
Y	(9) A brief description of the source for which there was a deviation.	
Y	(10) A brief description of each CMS for which there was a deviation.	
Y	(11) The date of the latest CMS certification or audit for the system for which there was a deviation.	

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Y	(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.	
Y	(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.	
N	(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in Sec. 63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.	Boiler No. 8 is not in the new gaseous fuel category.
N	(1) Company name and address.	
N	(2) Identification of the affected unit.	
N	(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.	
N	(4) Type of alternative fuel that you intend to use.	
N	(5) Dates when the alternative fuel use is expected to begin and end.	
Y	Sec. 63.7555 What records must I keep?	
Y	(a) You must keep records according to paragraphs (a)(1) through (3) of this section.	
Y	(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).	
Y	(2) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.	
Y	(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii).	
Y	(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.	
Y	(1) Records described in Sec. 63.10(b)(2) (vi) through (xi).	
Y	(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in Sec. 63.6(h)(7)(i) and (ii).	
Y	(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in Sec. 63.8(d)(3).	
Y	(4) Request for alternatives to relative accuracy test for CEMS as required in Sec. 63.8(f)(6)(i).	
Y	(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.	
Y	(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.	
Y	(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.	
Y	(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.	
Y	(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.	

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Y	(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of Sec. 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of Sec. 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.	
N	(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of Sec. 63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of Sec. 63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.	Boiler No. 8 is not choosing to comply with the alternative TSM limit.
Y	(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of Sec. 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of Sec. 63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.	
N	(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.	Boiler No. 8 does not have a 10 percent capacity factor limitation.
N	(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.	
N	(2) Fuel use records for the days the boiler or process heater was operating.	
Y	Sec. 63.7560 In what form and how long must I keep my records?	
Y	(a) Your records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).	
Y	(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.	
Y	(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to Sec. 63.10(b)(1). You can keep the records off site for the remaining 3 years.	
Y	Other Requirements and Information	
Y	Sec. 63.7565 What parts of the General Provisions apply to me?	
Y	Table 10 to this subpart shows which parts of the General Provisions in Sec. Sec. 63.1 through 63.15 apply to you.	
Y	Sec. 63.7570 Who implements and enforces this subpart?	
Y	(a) This subpart can be implemented and enforced by U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.	
Y	(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.	
Y	(1) Approval of alternatives to the non-opacity emission limits and work practice standards in Sec. 63.7500(a) and (b) under Sec. 63.6(g).	

Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Applicable?	What This Subpart Covers	Applicability Rationale
Y	(2) Approval of alternative opacity emission limits in Sec. 63.7500(a) under Sec. 63.6(h)(9).	
Y	(3) Approval of major change to test methods in Table 5 to this subpart under Sec. 63.7(e)(2)(ii) and (f) and as defined in Sec. 63.90.	
Y	(4) Approval of major change to monitoring under Sec. 63.8(f) and as defined in Sec. 63.90.	
Y	(5) Approval of major change to recordkeeping and reporting under Sec. 63.10(f) and as defined in Sec. 63.90.	
Y	Sec. 63.7575 What definitions apply to this subpart?	
Y	Terms used in this subpart are defined in the CAA, in Sec. 63.2 (the General Provisions), and in this section as follows:	
Y	Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.	
Y	Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.	
Y	Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.	
Y	Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.	
Y	Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.	
Y	Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388-99I.11, "Standard Specification for Classification of Coals by Rank 11" (incorporated by reference, see Sec. 63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.	
Y	Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.	
Y	Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.	
Y	Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.	
Y	Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:	
Y	(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;	
Y	(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or	
Y	(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.	
Y	(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.	
Y	Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-02a, "Standard Specifications for Fuel Oils 1" (incorporated by reference, see Sec. 63.14(b)).	

**Subpart DDDDD – National Emission Standards for Hazardous Air
Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.	
Y	Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.	
Y	Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper.	
Y	Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.	
Y	Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.	
Y	Firetube boiler means a boiler in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.	
Y	Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.	
Y	Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.	
Y	Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.	
Y	Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.	
Y	Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210[deg]F (99[deg]C).	
Y	Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.	
Y	Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.	
Y	Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.	
Y	Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.	
Y	Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.	

Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Applicable?	What This Subpart Covers	Applicability Rationale
Y	Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.	
Y	Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.	
Y	Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.	
Y	Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.	
Y	Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.	
Y	Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.	
Y	Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.	
Y	Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.	
Y	Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.	
Y	Natural gas means:	
Y	(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or	
Y	(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835-03a, "Standard Specification for Liquid Petroleum Gases" (incorporated by reference, see Sec. 63.14(b)).	
Y	Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.	
Y	Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.	
Y	Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.	
Y	Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.	
Y	Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396-02a, "Standard Specifications for Fuel Oils 1" (incorporated by reference, see Sec. 63.14(b)).	
Y	Responsible official means responsible official as defined in 40 CFR 70.2.	
Y	Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.	

**Subpart DDDDD – National Emission Standards for Hazardous Air
Pollutants for Industrial, Commercial, and Institutional Boilers
and Process Heaters**

Applicable?	What This Subpart Covers	Applicability Rationale
Y	Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.	
Y	Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.	
Y	Solid fuel -includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.	
Y	Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.	
Y	Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.	
Y	Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.	
Y	Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.	
Y	Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.	
Y	Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.	
Y	Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof that is promulgated pursuant to section 112(h) of the CAA.	

FINAL DETERMINATION

GOLDER ASSOCIATES INC.

NOV 08 2004

GAINESVILLE

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation - Air Permitting South Program
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400

BOILER 8
CONSTRUCTION

PROJECT

Air Permit No. PSD-FL-333A
Project No. 0510003-024-AC
U.S. Sugar Clewiston Sugar Mill and Refinery
Boiler 8 Project

In accordance with original Permit No. PSD-FL-333, Boiler 8 is being constructed at existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. This current permitting action revises the original air construction permit for Boiler 8 to specifically address the shakedown period for the boiler/SNCR system, authorized periods of uncontrolled NOx emissions, and the firing of de-watered DAF filter material.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on September 13, 2004. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on September 30, 2004. The Department received the proof of publication on October 11, 2004. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, the EPA Region 4 Office, or the National Park Service. With regard to the DAF filter material described in Appendix I, the applicant requests that the fuel sulfur restriction ($\leq 0.05\%$ sulfur by weight) be removed. The applicant points out that fuel oil from other boilers could also be included in the DAF filter material. The other boilers are authorized to fire fuel oil containing sulfur as high as 2.5% by weight. In addition, the applicant notes that any sulfur dioxide emissions generated from the DAF filter material would be minimal. The Department agrees that the restriction on fuel sulfur for the small amounts of DAF filter material is unnecessary. Fuel sulfur contents are already limited in the existing air construction and operation permits for each boiler. The requirement was removed from the permit.

The Department also revised the first two sentences under the "Statement of Basis" to better describe the project.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Clewiston Sugar Mill and Refinery
Air Permit No. PSD-FL-333A
Project No. 0510003-024-AC
Revised Permit

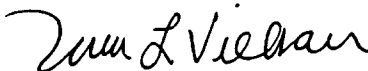
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. PSD-FL-333A, which revises the original air construction permit to specifically address the shakedown period for the boiler/SNCR system, authorized periods of uncontrolled NOx emissions, and the firing of de-watered DAF filter material. The new equipment will be installed at existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

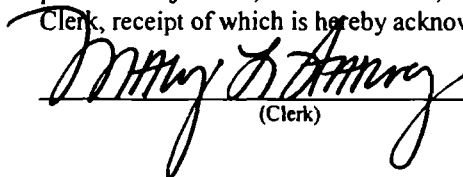
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11/04/04 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. David Buff, Golder Associates Inc.

Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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


(Clerk)

11/04/04
(Date)



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery Air Permit No. PSD-FL-333A Project No. 0510003-024-AC Facility ID No. 0510003 SIC Nos. 2061, 2062 Permit Expires: July 1, 2007

FACILITY AND LOCATION

The United States Sugar Corporation operates the existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

STATEMENT OF BASIS

Boiler 8 is being constructed under original Permit No. PSD-FL-333 issued on November 20, 2003. It will be a new bagasse-fired boiler with a maximum heat input rate of 1030 MMBtu/hour. This permitting action is a revision of the original air construction permit to specifically address the shakedown period for the boiler and SNCR system, authorized periods of uncontrolled NOx emissions, and the firing of de-watered DAF filter material. The revised permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

Michael G. Cooke

Michael G. Cooke, Director
Division of Air Resource Management

11/3/04

Effective Date

"More Protection, Less Process"

Printed on recycled paper.

SECTION 1. GENERAL INFORMATION

PROJECT DESCRIPTION

The United States Sugar Corporation proposes to construct Boiler 8 (EU-028), which will fire bagasse as the primary fuel. Distillate oil will be fired as a restricted alternate fuel for startup and supplemental uses. Air pollution control equipment includes a wet cyclone/electrostatic precipitator (ESP) combination to remove particulate matter and a selective non-catalytic reduction system (SNCR) to reduce nitrogen oxides. Good combustion design and operating practices will be used to minimize emissions of carbon monoxide, volatile organic compounds, and organic hazardous air pollutants. Bagasse and distillate oil ($\leq 0.05\%$ sulfur by weight) will be used to minimize the potential for emissions of sulfuric acid mist and sulfur dioxide. Monitoring equipment will continuously monitor and record emissions of carbon monoxide and nitrogen oxides. To minimize fugitive particulate matter from the bagasse handling system (EU-027), bagasse conveyors will be enclosed and dust collectors installed on the conveyor transfer points. The project will also potentially cause small increases in actual annual emissions from miscellaneous existing activities in the refinery.

REGULATORY CLASSIFICATION

Title III: The existing facility is a potential major source of hazardous air pollutants (HAP).

Title IV: The existing facility has no units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

NSPS: Boiler 8 is subject to the applicable New Source Performance Standards of Subpart Db in 40 CFR 60.

NESHAP: Boiler 8 is subject to the applicable National Emissions Standards for Hazardous Air Pollutants of Subpart DDDDD in 40 CFR 63.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Requirements

Appendix D. NSPS Requirements

Appendix E. Summary of Final BACT Determinations

Appendix F. Good Combustion and Operating Practices

Appendix G. Quarterly CO and NO_x Emissions Report

Appendix H. Shakedown Period

Appendix I. De-Watered DAF Filter Material

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department. Permit No. PSD-FL-333A revises original Permit No. PSD-FL-333 to specifically address the shakedown period for the boiler and SNCR system, authorized periods of uncontrolled NO_x emissions, and the firing of de-watered DAF filter material.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. **Permitting Authority:** All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. **Rule Citations:** Appendix A of this permit explains the methods used to cite rules, regulations, and permits.
4. **General Conditions:** The permittee shall comply with the general conditions specified in Appendix B of this permit. [Rule 62-4.160, F.A.C.]
5. **Common Requirements:** The permittee shall comply with the common regulatory requirements specified in Appendix C of this permit. [Chapters 62-4, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.]
6. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40 of the Code of Federal Regulations (CFR) adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
7. **Construction and Expiration:** The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid for any of the following reasons: construction is not commenced within 18 months after issuance of this permit; construction is discontinued for a period of 18 months or more; or construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.; 40 CFR 52.21(r)(2); 40 CFR 51.166(j)(4)]
8. **New or Additional Conditions:** For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
9. **Relaxations of Restrictions on Pollutant Emitting Capacity.** If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the

SECTION 2. ADMINISTRATIVE REQUIREMENTS

time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]

10. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rule 62-4.030 and Chapters 62-210 and 62-212, F.A.C.]
11. **Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office with a copy to the Department's New Source Review Section in the Bureau of Air Regulation. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
028	<p><i>Description:</i> Boiler 8 will be a membrane wall boiler with balanced draft stoker, overfire air, rotating feeders, and pneumatic spreaders. It will be designed to generate superheated steam at 600 psig and 750° F for use in the sugar mill and refinery.</p> <p><i>Fuels:</i> The primary fuel will be bagasse (SCC No. 1-02-011-01). Distillate oil (SCC No. 1-02-005-01) containing no more than 0.05% sulfur by weight will be fired as a restricted alternate fuel for startup and supplemental uses.</p> <p><i>Capacity:</i> The maximum continuous steam production is 500,000 pounds per hour based on a maximum heat input rate of 936 MMBtu per hour (24-hour averages).</p> <p><i>Controls:</i> Particulate matter is controlled by wet cyclone collectors followed by an electrostatic precipitator (ESP). Nitrogen oxides are reduced by a urea-based selective non-catalytic reduction (SNCR) system. The boiler design with good combustion and operating practices will be used to minimize emissions of carbon monoxide, volatile organic compounds, and organic hazardous air pollutants. Very low sulfur fuels will be used minimize the potential for emissions of sulfuric acid mist and sulfur dioxide.</p> <p><i>Stack Parameters:</i> The stack will be 13.0 feet in diameter (maximum) and 199 feet tall (minimum). Exhaust flue gas will exit the stack at the following approximate conditions: an exit temperature of 330° F and a volumetric flow rate of 400,000 acfm at 5.5% oxygen (225,000 dscfm at 7% oxygen).</p> <p><i>CEMS:</i> Emissions of carbon monoxide and nitrogen oxides will be monitored and recorded by continuous emissions monitoring systems (CEMS).</p>

{Permitting Note: In accordance with Rule 62-212.400, F.A.C., the Department established permit standards for Boiler 8 that represent the Best Available Control Technology (BACT) for emissions of nitrogen oxides (NOx), particulate matter (PM/PM10), sulfuric acid mist (SAM), sulfur dioxide (SO2), and volatile organic compounds (VOC). Based on a netting analysis that included emissions decreases resulting from the shut down of existing Boiler 3, the project did not require PSD preconstruction review for carbon monoxide (CO) emissions. The final BACT determinations are presented in Appendix E of this permit. Boiler 8 is also subject to the following applicable requirements: Rule 62-296.405, F.A.C. (fossil fuel fired steam generators with more than 250 MMBtu per hour of heat input); Rule 62-296.410, F.A.C. (carbonaceous fuel burning equipment); the federal New Source Performance Standards (NSPS) of Subpart Db (industrial boilers) in 40 CFR 60, which is adopted by reference in Rule 62-204.800, F.A.C.; and the federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) of Subpart DDDDD (industrial boilers) in 40 CFR 63.}

EQUIPMENT

1. **Shutdown of Boiler 3:** No later than ten (10) days after occurrence, the permittee shall provide written notification to the Compliance Authority of first fire in Boiler 8. Shakedown of the boiler is defined in Appendix H of this permit. During the authorized shakedown period:
 - a. Boiler 8 may operate with the other existing boilers to ensure proper integration with the sugar mill and refinery. Any fuel oil fired in Boilers 1, 2, and 3 shall contain no more than 1.6% sulfur by weight.
 - b. Boilers 3 and 8 may operate concurrently for no more than 90 individual days during which the combined steam production from Boilers 3 and 8 shall not exceed a daily average of 250,000 pounds per hour. After first fire and shakedown of Boiler 8, Boiler 3 shall be permanently shutdown prior to commencement of commercial operation of Boiler 8 or after completion of the crop season, whichever occurs first. For this facility, the sugarcane crop season is defined as October through April and the off-season is defined as May through September.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

No later than ten (10) days after occurrence, the permittee shall provide written notification to the Compliance Authority of the permanent shutdown of Boiler 3 and of beginning commercial operation of Boiler 8. *{Permitting Note: Emissions decreases from the shutdown of Boiler 3 were used in the netting analysis to avoid PSD review of CO emissions for this project. The authorized shakedown period provides a reasonable period to start up the newly designed Boiler 8, test operations, and make necessary adjustments. A limited amount of concurrent operation is allowed because Boiler 8 is replacing Boiler 3 and must be fully tested during the crop season.}* [Design; Rule 62-212.400(2)(e) and (g), F.A.C.]

2. **Construction of Boiler 8:** The permittee is authorized to construct a balanced draft, membrane wall, spreader stoker boiler to generate superheated steam at design conditions of 600 psig and 750° F for use in the sugar mill and refinery. The design thermal efficiency is 62% and the maximum 1-hour steam production rate is 550,000 pounds per hour based on a maximum 1-hour heat input rate of 1030 MMBtu per hour. Rotating feeders, pneumatic spreaders, a traveling grate, and overfire air will be used to fire the primary fuel of bagasse. Low NOx burners will be used to fire distillate oil as a restricted alternate fuel for startup and supplemental uses. Bottom ash will be removed to ash ponds by a submerged conveyor. Within 90 days of selecting the final design and vendor, the permittee shall submit the final primary design details of the proposed boiler. [Design]
3. **Air Pollution Control Equipment:** To comply with the standards of this permit, the permittee shall install the following air pollution control equipment.
 - a. **Wet Cyclone Collectors:** The permittee shall design, install, operate, and maintain a pre-control device prior to the electrostatic precipitator (ESP) to remove entrained sand and large particles in the flue gas. The purpose of the pre-control device is to prevent excessive equipment wear and overloading of the ESP. The preliminary design is to locate two wet cyclone collectors in parallel before the induced draft fan. Upon written approval of the Department, equivalent equipment may be installed.
 - b. **ESP:** The permittee shall design, install, operate, and maintain an electrostatic precipitator (ESP) to remove particulate matter from the flue gas exhaust and achieve the particulate matter standards specified in this permit. The ESP shall include an automated rapping system that can adjust rapping frequency and intensity to prevent re-entrainment of fly ash. The ESP shall be on line and functioning properly whenever bagasse is fired.
 - c. **SNCR:** The permittee shall design, install, operate, and maintain a urea-based selective non-catalytic reduction (SNCR) system to reduce nitrogen oxide emissions in the flue gas exhaust and achieve the nitrogen oxides emissions standards specified in this permit. The system shall include automated control of urea injection for at least three injection zones to respond to varying load and flue gas conditions. Urea injection rates and zones will be determined based on parameters such as the current injection rate, furnace temperature profile, fuels, steam load, oxygen level, carbon monoxide level, and nitrogen oxide emissions.

Within 90 days of selecting the final equipment designs and vendors, the permittee shall submit the final primary design details for the proposed pollution controls. [Design; Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

PERFORMANCE REQUIREMENTS

4. **Authorized Fuels:** Boiler 8 shall fire bagasse as the primary fuel and distillate oil as a restricted alternate fuel for startup and supplemental uses. Bagasse is the fibrous material remaining after sugarcane is milled. Only new No. 2 (or superior) distillate oil containing no more than 0.05% sulfur by weight shall be fired. In addition, incidental amounts of de-watered DAF filter material may be commingled with bagasse and

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

fired in Boiler 8 in accordance with the requirements in Appendix I of this permit. [Design; Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

5. **Boiler Capacities and Restrictions:** The maximum continuous steam production capacity (24-hour average) is 500,000 pounds per hour based on a maximum heat input rate of 936 MMBtu per hour (24-hour average). The total maximum heat input from the oil burners is 562 MMBtu per hour (4161 gallons/hour). Boiler 8 shall not exceed the following operational levels.
- 12,000,000 pounds of steam per day (equivalent to 500,000 pounds of steam per hour and 936 MMBtu per hour, 24-hour averages);
 - $3.6135 \times 10^{+09}$ pounds of steam per consecutive 12 months (equivalent to 6,767,100 MMBtu per year);
 - 99,864 gallons of distillate oil per day (equivalent to 13,488 MMBtu per day); and
 - 6,073,600 gallons of distillate oil per consecutive 12 months (equivalent to 819,936 MMBtu per year).

The hours of operation are not restricted (8760 hours/year). *{Permitting Note: The short-term restrictions form the basis of the Air Quality Analysis. The restriction on annual steam production is a surrogate for heat input and allowed the project to avoid PSD applicability for carbon monoxide emissions. The annual oil firing restriction results in an annual capacity factor of 10% or less, which avoids specific requirements in NSPS Subpart Db.}* [Design; Applicant Request; Rules 62-4.070(3), 62-212.400(2)(g), 62-210.200(PTE), F.A.C.; NSPS Subpart Db]

6. **Good Combustion and Operating Practices:** The permittee shall follow the good combustion and operating practices identified in Appendix F of this permit. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

EMISSIONS STANDARDS

{Permitting Note: See Appendix E of this permit for a summary of the final BACT determinations.}

7. **Standards Based on Stack Tests:** The following emission standards apply when firing bagasse, distillate oil, or a combination of these fuels under normal operation at steady-state conditions. The mass emission rates (pounds per hour) are based on the maximum 24-hour heat input rate. Unless otherwise specified, compliance with these standards shall be based on the average of three test runs conducted under steady-state conditions at permitted capacity.
- Ammonia Slip:** As determined by EPA Conditional Test Method CTM-027, ammonia slip shall not exceed 20 ppmvd @ 7% oxygen. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]
 - Carbon Monoxide (CO):** To the extent practicable, short term emissions of carbon monoxide shall be controlled by implementing the good combustion and operating practices identified in Appendix F. *{Permitting Note: The Department intends to re-open this permit and include the 40 CFR 63 Subpart DDDDD requirements as appropriate.}* [Rules 62-4.070(3), F.A.C.]
 - Nitrogen Oxides (NO_x):** As determined by EPA Method 7E stack test, NO_x emissions shall not exceed 0.14 lb/MMBtu and 131.0 pounds per hour. *{Permitting Note: This standard is an "initial demonstration standard" intended to show the capabilities of the SNCR system as designed. After the initial compliance test, subsequent compliance shall be demonstrated with the long-term CEMS-based standard specified in Condition 8b.}* [Rule 62-212.400(5)(c), F.A.C.]
 - Opacity:** As determined by EPA Method 9 observations or COMS, the stack opacity shall not exceed 20% based on a 6-minute average. [Rule 62-212.400(5)(c), F.A.C.]
 - Particulate Matter (PM/PM₁₀):** As determined by EPA Method 5 stack test, PM emissions shall not exceed 0.026 lb/MMBtu and 24.3 pounds per hour. [Rule 62-212.400(5)(c), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

- f. Sulfur Dioxide (SO₂): As determined by EPA Method 6C stack test, SO₂ emissions shall not exceed 0.06 lb/MMBtu and 56.2 pounds per hour. *{Permitting Note: This emission standard is also a surrogate for sulfuric acid mist (SAM) emissions.}* [Rule 62-212.400(5)(c), F.A.C.]
- g. Volatile Organic Compounds (VOC): As determined by EPA Methods 18 and 25A stack tests, VOC emissions shall not exceed 0.05 lb/MMBtu and 46.8 pounds per hour measured as propane. For this permit, "VOC" emissions shall be defined as the total hydrocarbons (THC) measured by EPA Method 25A less the sum of the methane and ethane emissions as measured by EPA Method 18 on a concurrent sample. Alternatively, the permittee may elect to assume that all THC are regulated VOC emissions. [Rule 62-212.400(5)(c), F.A.C.]
8. Standards Based on CEMS: The following emission standards apply when firing bagasse, distillate oil, or a combination of these fuels and under all load conditions.
- a. Carbon Monoxide (CO): As determined by CEMS data, CO emissions shall not exceed 0.38 lb/MMBtu during any consecutive 12 months excluding periods of startup, shutdown, and malfunction. As determined by CEMS data, CO emissions shall not exceed 1285 tons during any consecutive 12 months including periods of startup, shutdown, and malfunction. *{Permitting Note: Compliance with the annual mass emission standard ensures that the project is not subject to PSD preconstruction review for CO emissions.}* [Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]
- b. Nitrogen Oxides (NO_x): As determined by CEMS data, NO_x emissions shall not exceed 0.14 lb/MMBtu based on a 30-day rolling average. [Rule 62-212.400(5)(c), F.A.C.]
- {Permitting Note: Appendix H of this permit specifies additional requirements regarding the initial shakedown period and initial demonstration of compliance for the CEMS-based standards.}*

STARTUP, SHUTDOWN, AND MALFUNCTION REQUIREMENTS

9. Malfunction Notifications: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority in accordance with the following. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction. [Rules 62-210.700(6) and 62-4.130, F.A.C.]
10. Excess Emissions - Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]
11. Excess Emissions - Allowed: Unless otherwise specified by this permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
12. Excess Emissions - CO, NO_x, and Opacity Requirements: As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions supersede the provisions in Rule 62-210.700(1), F.A.C.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

- a. *CO Emissions*: Provided best operational practices are used to minimize emissions, CO CEMS data collected during startups, shutdowns, and malfunctions may be excluded from the determination of compliance with the CO standard based on heat input rate (lb/MMBtu, 12-month rolling average). However, all valid CO CEMS data collected (including startup, shutdown, and malfunction) shall be used to determine compliance with the CO mass emission rate standard (tons per consecutive 12-months, rolling total).
- b. *NOx Emissions*: NOx CEMS data collected during startup, shutdown, malfunction, and authorized periods of uncontrolled NOx monitoring may be excluded from the determination of compliance with the 30-day rolling emissions standard, provided:
 - 1) Best operational practices are used to minimize emissions;
 - 2) For startups and shutdowns, the SNCR system has not yet attained proper operating conditions and is not functional;
 - 3) For malfunctions, excluded data shall not exceed two hours in any 24-hour period (eight 15-minute CEMS blocks or quadrants of an hour). The permittee shall notify the Compliance Authority within one working day of detecting the malfunction; and
 - 4) For two hours each month, the permittee may operate the boiler without the SNCR system in order to collect uncontrolled NOx emissions data with the CEMS. For purposes of collecting uncontrolled NOx emissions data to adjust the SNCR system, excluded data shall not exceed two, 1-hour values during any calendar month. *{Permitting Note: Based on the final design specifications, uncontrolled NOx emissions are expected to be 0.30 lb/MMBtu. Uncontrolled NOx data collected during these periods will be used to adjust the SNCR system as necessary.}*
- c. *Opacity*: During startup and shutdown, the stack opacity shall not exceed 20% opacity based on a 6-minute block average, except for one 6-minute block per hour that shall not exceed 27% opacity. This alternate opacity standard does not impose a separate annual testing requirement.

CO and NOx CEMS data excluded due to startup, shutdown, malfunction, or authorized periods of uncontrolled NOx monitoring shall be summarized and reported in the "Quarterly CO and NOx Emissions Report" required by this permit. *{Permitting Note: Allowances for these periods are provided for carbon monoxide and nitrogen oxides because compliance is continuously demonstrated by CEMS data. Similarly, an alternate standard is identified for opacity during startup and shutdown because compliance is readily observable. As sulfur dioxide emissions are a function of the fuel sulfur, it is not expected that startups or shutdowns would cause excess emissions of this pollutant. It is possible that emissions of particulate matter and volatile organic compounds could exceed the permit standards in terms of "lb/MMBtu" during startups and shutdowns. However, the Department has good reason to believe that the mass emission rates of these pollutants (lb/hour) will not exceed the specified standards due to reduced loads and fuel firing rates. In any case, the specified test methods are generally applicable only during steady-state operation. Therefore, no alternate emissions standards are specified and compliance shall be determined by the test methods and procedures specified in this permit.}*

TESTING REQUIREMENTS

13. **Boiler Performance Test**: Within 180 days of first fire on bagasse, the permittee shall conduct a test to determine the boiler thermal efficiency. The test shall be conducted when firing only bagasse and shall be at least three hours long. The boiler steam conditions and production rate shall be monitored and recorded during the test. The bagasse fuel firing rate (tons per hour) shall be calculated and recorded based on the steam parameters. A sample of the as-fired bagasse shall be analyzed for the heating value (Btu/lb) and moisture content (%). The actual heat input rate (MMBtu/hour) shall be determined using two methods:

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

(a) steam parameters with enthalpies and the measured thermal efficiency, and (b) steam parameters with enthalpies and the design boiler thermal efficiency of 62%. Results of the test shall be submitted to the Department within 45 days of completion. The boiler thermal efficiency test shall be repeated during the 12-month period prior to renewal of any operation permit. If the tested boiler thermal efficiency is less than 90% of the design boiler thermal efficiency, then the tested thermal efficiency shall be used in any future calculations of the heat input rate until a new test is conducted. [Rule 62-4.070(3), F.A.C.]

14. **Initial and Annual Stack Tests:** In accordance with test methods specified in this permit, Boiler 8 shall be tested to demonstrate initial compliance with the emission standards for ammonia slip, NOx, PM, SO2, VOC, and opacity. The tests shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup. Subsequent compliance stack tests for ammonia slip, PM, SO2, VOC, and opacity shall also be conducted during each federal fiscal year (October 1st to September 30th). Tests shall be conducted between 90% and 100% of the maximum 24-hour continuous heat input rate when firing only bagasse. CO CEMS data shall be reported for each run of the required tests for NOx and VOC emissions. NOx CEMS data shall be reported for each run of the required tests for ammonia slip. Also, CEMS data for NOx emissions may be used to demonstrate compliance with the initial stack test standards for this pollutant. The Department may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. *{Permitting Note: All initial tests must be conducted between 90% and 100% of permitted capacity; otherwise, this permit will be modified to reflect the true maximum capacity as constructed.}* [Rules 62-212.400(5)(c) and 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8]

15. **Test Methods:** Any required stack tests shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments
CTM-027	Measurement of Ammonia Slip <i>{Note: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}</i>
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content <i>{Notes: Methods shall be performed as necessary to support other methods.}</i>
6C	Measurement of SO2 Emissions (Instrumental)
7E	Measurement of NOx Emissions (Instrumental)
9	Visual Determination of the Opacity
10	Measurement of Carbon Monoxide Emissions (Instrumental) <i>{Note: The method shall be based on a continuous sampling train.}</i>
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography) <i>{Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.}</i>
19	Calculation Method for NOx, PM, and SO2 Emission Rates
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "<http://www.epa.gov/ttn/emc/ctm.html>". The other methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

MONITORING REQUIREMENTS

16. **Steam Parameters:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain continuous monitoring and recording devices for the following parameters: steam temperature ($^{\circ}$ F), steam pressure (psig), and steam production rate (lb/hour). Records shall be maintained on site and made available upon request. [Design; Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]
17. **Fuel Monitoring:** The permittee shall monitor each fuel in accordance with the following provisions. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]
- Distillate Oil:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain an oil flow meter with integrator. At the end of each day that oil is fired, the oil flow meter integrator shall be read and recorded in a written log. Initial compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to the Compliance Authority. During each federal fiscal year (October 1st to September 30th), the permittee shall take a sample from the storage tank and analyze for the fuel sulfur content. Sampling for the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90 (or more recent versions when available). For each delivery of distillate oil, the permittee shall maintain a permanent record of each certified fuel sulfur analysis provided by the fuel vendor. Records shall specify the date of delivery, the gallons delivered, the fuel sulfur content and test method.
 - Bagasse:** A representative sample of bagasse shall be taken each calendar quarter and analyzed for the following: heating value (Btu/lb, as fired and dry); moisture content (percent by weight); sulfur content (percent by weight, dry); and ash content (percent by weight, dry). Records of the results of these tests shall be maintained on site and made available upon request.
18. **CEMS:** The permittee shall install, calibrate, operate and maintain continuous emission monitoring systems (CEMS) to measure and record concentrations of CO, NO_x, and O₂ in the exhaust of Boiler 8 in a manner sufficient to demonstrate continuous compliance with the CEMS standards specified in this permit. The permittee shall notify the Compliance Authority within one working day of discovering emissions in excess of a CEMS standard subject to the specified averaging period. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial stack tests.
- CO Monitors.** The CO monitor shall be installed to determine emissions from the boiler stack and shall meet the requirements of Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. The monitor shall have automatic dual span capabilities with maximum span values of 1000 ppmvd and 10,000 ppmvd.
 - NO_x Monitors.** The NO_x monitor shall be installed to determine emissions from the boiler stack and shall meet the requirements of Performance Specification 2 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. The monitor shall have a maximum span value of 250 ppmvd.
 - Diluent Monitors.** An oxygen monitor shall be installed at each CO and NO_x monitor location to correct measured CO and NO_x emissions to the required oxygen concentrations. The O₂ monitor shall

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

meet the requirements of Performance Specification 3 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 3A in Appendix A of 40 CFR 60. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60.

- d. *1-Hour Averages (CO and NOx)*. 1-hour block averages shall begin at the top of each hour. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the 1-hour average is not valid. The permittee shall use all valid measurements or data points collected during an hour to calculate the 1-hour averages. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour. If the CEMS measures concentration on a wet basis, the CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results shall be recorded in terms of "lb/MMBtu".
- e. *24-Hour Averages (CO)*: Each 24-hour block shall begin at midnight of each operating day and shall be determined by averaging 24 consecutive 1-hour averages for each operating day. If the boiler operates less than 24 hours during the block, the 24-hour average shall be determined by averaging the available valid 1-hour block averages for actual boiler operation. Final results shall be recorded in terms of "lb/MMBtu" and "pounds per day". [Rule 62-212.400(BACT), F.A.C.]
- f. *30-Day Averages (NOx)*: The 30-day rolling average shall be determined by averaging all 1-hour averages for 30 successive boiler operating days. A boiler operating day begins and ends at midnight of each day and includes any day that fuel is combusted. Final results shall be recorded in terms of "lb/MMBtu".
- g. *Annual Averages (CO)*: The 12-month rolling total shall be determined by summing the daily CO mass emission rates (pounds per day) for the 12-month period. The result shall be reported in terms of "tons per consecutive 12 months".
- h. *Data Exclusion*. Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Condition No. 12 in this section. All periods of data excluded shall be consecutive for each such episode. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
- i. *Availability*. Monitor availability for each CEMS shall be 95% or greater in any calendar quarter. The quarterly excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department's Compliance Authority.

[Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

19. **Alternate Opacity Monitoring Plan:** Based on written approval from EPA Region 4, the permittee shall employ the following alternate sampling procedures in lieu of the requirement to install and operate a COMS. The procedures apply to the firing of distillate oil.
- A certified EPA Method 9 observer shall perform a twelve-minute opacity test once per daylight shift during the period that the highest distillate oil firing rate occurs.
 - A certified EPA Method 9 observer shall perform a twelve-minute opacity test when the boiler achieves the normal operational load after a cold boiler startup with distillate oil.
 - Required observations shall be made in accordance with the provisions of EPA Method 9.
 - The observer shall maintain a log, which includes all of the information required by EPA Method 9 for each set of observations and the distillate oil firing rate (gph) during the observations.
 - Within 30 days after each calendar quarter, the permittee shall submit a copy of the observation log to the Compliance Authority for each observation performed during the quarter. The information shall also include a summary of the fuel usage and fuel analysis to verify that Boiler 8 has not exceeded the 10% annual capacity factor limit.
 - The permittee shall follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained.
 - If Boiler 8 exceeds the annual capacity factor limit of 10% for the combustion of distillate oil or is unable to regularly comply with the applicable opacity standard in §60.43b(f) when firing distillate oil, the permittee shall install and operate a COMS in accordance with the provisions of NSPS Subparts A and Db to demonstrate compliance with the opacity standards of the permit.

{Permitting Note: In a letter dated September 22, 2003, EPA Region 4 approved the above Alternate Opacity Monitoring Plan.} [Applicant Request; Rule 62-4.070(3), F.A.C.; §60.48b(a)]

20. **ESP Monitoring Plan:** To ensure proper functioning and effective performance of the electrostatic precipitator (ESP), the permittee shall submit a final ESP Monitoring Plan in accordance with the following requirements.
- Testing Program:** Within 90 days of the initial compliance stack tests, the permittee shall complete a testing program designed to establish the minimum total secondary power input to the ESP that indicates effective performance.
 - Monitoring Provisions:** As part of the application for a Title V air operation permit, the permittee shall submit a final ESP Monitoring Plan that includes the following:
 - Based on the testing program, the plan shall specify the minimum total ESP secondary power input requirement (kW, 3-hour block average) that indicates effective performance.
 - The plan shall identify procedures to continuously monitor the ESP secondary voltage and secondary current, which will be used to calculate and record the total ESP secondary power input.
 - Continuous measurements shall be averaged into 15-minute blocks, which in turn will be averaged into 1-hour and 3-hour block averages beginning at the top of each hour, excluding monitoring malfunctions, associated repairs, and required QA/QC activities.
 - Excursions below the minimum level specified require investigation and corrective action.
 - The proposed plan shall incorporate appropriate QA/QC requirements to ensure valid data.

[Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

21. **SNCR Urea Injection:** In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a flow meter to measure and record the urea injection rate for the SNCR

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 8

system. The permittee shall document the general range of urea flow rates required to meet the NO_x standard over the range of load conditions by comparing NO_x emissions with urea flow rates. During NO_x monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

22. Wet Cyclone: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain the following equipment on each wet cyclone: flow meter to monitor the water flow rate (gph) and a manometer (or equivalent) to monitor the pressure drop (inches of water). At least once each 8-hour work shift, the flow rate and pressure drop shall be observed and recorded in a written log. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

RECORDS AND REPORTS

23. Stack Test Reports: In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: steam production rate (lb/hour), heat input rate (MMBtu/hour), calculated bagasse firing rate (tons/hour), and emission rates (lb/MMBtu and ppmvd @ 7% oxygen). [Rule 62-4.070(3), F.A.C.]
24. Monthly Operations Summary: By the tenth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month of operation: hours of operation, distillate oil consumption, pounds of steam per month, and the updated 12-month rolling totals for each of these operating parameters. The Monthly Operations Summary shall be maintained on site and made available for inspection when requested by the Department. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
25. Quarterly CO and NO_x Emissions Report: Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing CO and NO_x emissions including periods of startups, shutdowns, malfunctions, authorized uncontrolled NO_x emissions monitoring and CEMS systems monitor availability for the previous quarter. If CO or NO_x CEMS data is excluded from a compliance determination during the quarter due to a malfunction, the permittee shall include a description of the malfunction, the actual emissions recorded, and the actions taken to correct the malfunction. See Appendix G of this permit for the reporting format. [Rules 62-4.070(3), 62-4.130, and 62-210.400(5)(c), F.A.C.]

FEDERAL REQUIREMENTS

26. NSPS Subpart Db: Boiler 8 is subject to the applicable New Source Performance Standards of Subpart Db in 40 CFR 60 for "Industrial-Commercial-Institutional Steam Generating Units". Appendix D of this permit summarizes these requirements.
27. NESHAP Subpart DDDDD: Boiler 8 is subject to the applicable National Emissions Standards for Hazardous Air Pollutants of Subpart DDDDD in 40 CFR 63 for "Industrial/Commercial/Institutional Boilers and Process Heaters". *{Permitting Note: The final rule for Subpart DDDDD was not yet published in the Federal Register when draft permit for this revision was issued. The final rule does not become effective until November 11, 2004. The entire rule is available from EPA or can be downloaded from the Department's web site at "<http://www.dep.state.fl.us/air/permitting/writertools/t3neshap.htm>".}*

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Bagasse Handling System

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
027	Bagasse Handling System

EQUIPMENT

1. Modification of Existing System: The permittee is authorized to modify the existing bagasse handling system to accommodate the additional bagasse required for Boiler 8. These changes include: expanding conveyor belt C4; adding a new conveyor belt to feed bagasse to Boiler 8; eliminating transfer belt conveyor No. 2 and increasing the bagasse throughput of the handling system. [Design; Rule 62-212.400(2)(e) and (g), F.A.C.]
2. Air Pollution Control Equipment: To minimize fugitive particulate matter, bagasse conveyors shall be enclosed. Dust collectors shall be installed on the conveyor transfer points. The preliminary design for the bagasse conveyor dust collection system is based on the following specifications.

Dust Collector	Manufacturer	Model No.	Flow Rate (acfm)	Outlet (grains/afc)	Approximate Outlet Height (feet)
1	Prime Systems	BV-6X8-120	3550	0.02	57
2	Prime Systems	BV-8X8-120	3100	0.02	62
3	Prime Systems	BV-8X7-120	4725	0.02	61
4	Prime Systems	BV-6X8-120	3550	0.02	57
5	Prime Systems	BV-6X8-120	3550	0.02	57

{Permitting Note: This system has previously been permitted and is under construction. The original plan called for the installation of six dust collectors. With the elimination of transfer belt conveyor No. 2, only the five duct collectors described above will be installed.} [Design]

EMISSIONS STANDARDS

3. Opacity: As determined by EPA Method 9, there shall be no visible emissions (\leq 5% opacity) from the dust collector outlets. [Rule 62-212.400(5)(c), F.A.C.]

TESTING REQUIREMENTS

4. Opacity Tests: Within 180 days of completing construction of the bagasse handling system and during the sugar mill season, an initial test shall be conducted in accordance with EPA Method 9 to demonstrate compliance with the opacity standard. Tests shall be conducted while the sugar mill and boilers are in normal operation. Each test shall be at least 30 minutes in duration. Subsequent tests shall be repeated for each federal fiscal year (October 1st to September 30th) to demonstrate compliance with the opacity standard. [Rules 62-212.400(5)(c) and 62-297.310(7)(a)4, F.A.C.]

REPORTS

5. Test Report: Within 45 days of conducting an opacity test, the permittee shall submit a report to the Compliance Authority summarizing the results of the test. [Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDICES

Contents

- Appendix A. Citation Formats
- Appendix B. General Conditions
- Appendix C. Common Requirements
- Appendix D. NSPS Requirements
- Appendix E. Summary of Final BACT Determinations
- Appendix F. Good Combustion and Operating Practices
- Appendix G. Quarterly CO and NOx Emissions Report
- Appendix H. Shakedown Period
- Appendix I. De-Watered DAF Filter Material

SECTION 4. APPENDIX A

Citation Formats

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number

"001" identifies the specific permit project

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7 or §60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B

General Conditions

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (X);
 - b. Determination of Prevention of Significant Deterioration (X); and
 - c. Compliance with New Source Performance Standards (X).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

Common Requirements

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at this facility.}

Definitions

1. **Excess Emissions:** Emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions which occur during startup, shutdown, soot-blowing, load changing or malfunction. [Rule 62-210.200(106), F.A.C.]
2. **Shutdown:** The cessation of the operation of an emissions unit for any purpose. [Rule 62-210.200(231), F.A.C.]
3. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions. [Rule 62-210.200(246), F.A.C.]
4. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. [Rule 62-210.200(160), F.A.C.]

Emissions and Controls

5. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
6. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
7. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
8. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
9. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
10. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
11. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
12. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
13. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as confining, containing, covering, and/or applying water to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

SECTION 4. APPENDIX C

Common Requirements

14. Fossil Fuel Steam Generators with More Than 250 Million Btu per Hour Heat Input: *{Permitting Note: Rule 62-296.405(2), F.A.C. specifies that that new units are subject to the applicable standards in NSPS Subparts D or Da for opacity, particulate matter, sulfur dioxide, and nitrogen oxides. However, NSPS Subpart D is not applicable because the project is also subject to the more recent NSPS Subpart Db, which states that such units are not also subject to NSPS Subpart D. See §60.40b(j) in Appendix D. NSPS Subpart Da is not applicable to this project because the boiler is not an electric utility steam generating unit.}*
15. Carbonaceous Fuel Burning Equipment: Rule 62-296.410(2)(b), F.A.C. establishes the following standards for new emissions units with burners of a capacity equal to or greater than 30 MMBtu per hour total heat input.
- Visible Emissions*: 30 percent opacity except that 40 percent opacity is permissible for not more than two minutes in any one hour.
 - Particulate Matter*: 0.2 pounds per MMBtu of heat input of carbonaceous fuel plus 0.1 pounds per million Btu heat input of fossil fuel.

{Permitting Note: The BACT standards specified in the permit are much more stringent than the standards specified in Rules 62-296.405(2) and 62-296.410(2)(b), F.A.C.}

TESTING REQUIREMENTS

16. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
17. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
18. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
19. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
- Required Sampling Time*. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

SECTION 4. APPENDIX C

Common Requirements

20. Determination of Process Variables

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

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

21. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
22. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
23. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
24. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.
 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.

SECTION 4. APPENDIX C

Common Requirements

13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

25. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. Information recorded and stored as an electronic file shall be made available within at least three days of a request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
26. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

SECTION 4. APPENDIX D

NSPS Requirements

The following emissions unit is subject to applicable New Source Performance Standards (NSPS) in 40 CFR 60 and adopted by reference in Rule 62-204.800(7)(b), F.A.C.

EU No.	Description
028	Boiler 8 – Spreader stoker boiler firing bagasse rated at a maximum continuous steam production rate of 500,000 pounds per hour (24-hour average)

40 CFR 60, Subpart A - NSPS General Provisions

Boiler 8 shall comply with the applicable General Provisions of Subpart A in the New Source Performance Standards including 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). The General Provisions are not included in this permit, but can be obtained from the Department upon request.

40 CFR 60, Subpart Db – NSPS for Industrial-Commercial-Institutional Steam Generating Units

Boiler 8 shall comply with the applicable requirements of Subpart Db in 40 CFR 60, which are adopted by reference in Rule 62-204.800(7)(b), F.A.C. Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference. The term “Administrator” when used in 40 CFR 60 shall mean the Department’s Secretary or the Secretary’s designee. Department notes and related requirements are shown in italics immediately following the pertinent section. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.}

§60.40b Applicability and Delegation of Authority

- (a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million Btu/hour.
- (j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).
- (g) In delegating implementation and enforcement authority to a State under Section 111(c) of the Act, the following authorities shall be retained by the Administrator and not transferred to a State: (1) §60.44b(f); (2) §60.44b(g); and (3) §60.49b(a)(4).

{Permitting Note: NSPS Subpart Db applies because the maximum heat input from oil firing is 562 MMBtu per hour for the new unit.}

§60.41b Definitions

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydro-desulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (incorporated by reference - see §60.17).

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

SECTION 4. APPENDIX D

NSPS Requirements

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, re-circulated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m³ (70,000 Btu/hour-ft³).

Low heat release rate means a heat release rate of 730,000 J/sec-m³ (70,000 Btu/hour-ft³) or less.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 0.5 lb/million BTU heat input.

§60.42b Standard for Sulfur Dioxide

- (j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil (0.5% sulfur by weight). The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (2) maintaining fuel receipts as described in §60.49b(r).

{Permitting Note: NSPS Subpart Db does not impose a specific SO₂ emission standard for the boiler flue gas or a percent reduction requirement because the permit restricts distillate oil to no more than 0.05% sulfur by weight. The permit includes fuel sampling, analysis, and record keeping requirements to monitor the fuel sulfur content.}

§60.43b Standard for Particulate Matter

- (b) On and after the date on which the performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce sulfur dioxide emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 0.10 lb/million Btu heat input. *{Not applicable; see "Permitting Note" at end of section.}*
- (f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (g) The particulate matter and opacity standards apply at all times, except during periods of startup, shutdown or malfunction.

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NSPS Requirements

{Permitting Note: NSPS Subpart Db does not impose a particulate matter emission standard for the boiler flue gas because no equipment will be necessary to reduce SO₂ emissions. The permit limits stack opacity to this level or less.}

§60.44b Standard for Nitrogen Oxides

(a) Except as provided under paragraph (k) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following emission limits:

(1) Natural gas and distillate oil:

(i) Low heat release rate: 0.10 lb/million BTU of heat input (expressed as NO₂)

{Not applicable; see "Permitting Note" at end of section.}

(c) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain nitrogen oxides in excess of the emission limit for the coal or oil, or mixture of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section, unless the affected facility has an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.

(h) For purposes of paragraph (i) of this section, the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction. *{Not applicable; see "Permitting Note" at end of section.}*

(i) Compliance with the emission limits under this section is determined on a 30-day rolling average basis. *{Not applicable; see "Permitting Note" at end of section.}*

{Permitting Note: Boiler 8 is a low heat release rate boiler (20,497 Btu/ft³ on bagasse and 11,184 Btu/ft³ on distillate oil) and will fire distillate oil during startup or as a supplemental fuel. As described in paragraph (c) above, NSPS Subpart Db does not impose a NO_x standard for the boiler flue gas when firing a combination of bagasse and distillate oil because the permit limits distillate oil firing to an annual capacity factor of no more than 10%.}

§60.45b Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

(j) The owner or operator of an affected facility that combusts very low sulfur oil (\leq 0.5% sulfur by weight) is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: NSPS Subpart Db does not impose a specific SO₂ emissions limit for the boiler flue gas because the boiler will combust only distillate oil. The permit limits distillate oil to no more than 0.05% sulfur by weight and includes fuel sampling, analysis, and record keeping requirements to monitor the fuel sulfur content.}

§60.46b Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides

(a) The opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The nitrogen oxides emission standards under §60.44b apply at all times.

(d) To determine compliance with the particulate matter and emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8 using the following procedures and reference methods: (7) Method 9 is used for determining the opacity of stack emissions.

{Permitting Note: NSPS Subpart Db imposes only an opacity standard because the boiler is restricted to an annual capacity factor of no more than 10% for firing oil. The permit requires testing in accordance with EPA Method 9.}

§60.47b Emission Monitoring for Sulfur Dioxide

(f) The owner or operator of an affected facility that combusts very low sulfur oil (\leq 0.5% sulfur by weight) is not subject to the emission monitoring requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

SECTION 4. APPENDIX D

NSPS Requirements

{Permitting Note: The permit limits distillate oil to no more than 0.05% sulfur by weight and includes fuel sampling, analysis, and record keeping requirements to monitor the fuel sulfur content.}

§60.48b Emissions Monitoring for Particulate Matter and Nitrogen Oxides

- (a) The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. *{Permitting Note: In lieu of the continuous opacity monitoring requirements, EPA Region 4 approved the alternate sampling procedure specified in the permit on September 22, 2003. The procedure includes additional EPA Method 9 observations when firing distillate oil.}*

§60.49b Reporting and Recordkeeping Requirements

- (a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:
- (1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,
 - (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42b(d)(1), §60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), §60.44b(c), (d), (e), (i), (j), (k), §60.45b(d), (g), §60.46b(h), or §60.48b(i), and
 - (3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.
- (b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §60.42b, §60.43b, and §60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B. *{Not applicable; see "Permitting Note" at end of section.}*
- (f) For facilities subject to the opacity standard under §60.43b, the owner or operator shall maintain records of opacity.
- (h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.
- (1) Any affected facility subject to the opacity standards under §60.43b(e) or to the operating parameter monitoring requirements under §60.13(i)(1).
 - (3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).
- (r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under §60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Quarterly reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the preceding quarter.

{Permitting Note: In lieu of the continuous opacity monitoring requirements, EPA Region 4 approved the alternate sampling procedure specified in the permit on September 22, 2003. The procedure includes additional EPA Method 9 observations when firing distillate oil. The permit limits distillate oil to no more than 0.05% sulfur by weight and includes fuel sampling, analysis, and record keeping requirements to monitor the fuel sulfur. The permit also restricts the firing of distillate oil to an annual capacity factor of no more than 10%.}

SECTION 4. APPENDIX E
Summary of Final BACT Determinations

Project Description

U.S. Sugar Corporation proposes to install a balanced draft, membrane wall, spreader stoker boiler to generate superheated steam at 600 psig and 750° F for use in the sugar mill and refinery. The design thermal efficiency is 62% and the maximum 1-hour steam production rate is 550,000 pounds per hour based on a maximum 1-hour heat input rate of 1030 MMBtu per hour. The maximum continuous steam production is 500,000 pounds per hour based on a maximum heat input rate of 936 MMBtu per hour (24-hour averages). Rotating feeders, pneumatic spreaders, a traveling grate, and overfire air will be used fire the primary fuel of bagasse. Distillate oil will be fired as a restricted alternate fuel for startup and supplemental uses. Bottom ash will be removed to ash ponds by a submerged conveyor. The project will also modify the existing bagasse handling system to accommodate the additional bagasse required for Boiler 8. These changes include: expanding conveyor belt C4; adding a new conveyor belt to feed bagasse to Boiler 8; eliminating transfer belt conveyor No. 2 and increasing the bagasse throughput of the bagasse handling system.

Air Pollution Control Equipment

Boiler 8: Particulate matter will be controlled by wet cyclone collectors followed by an electrostatic precipitator (ESP) with approximately a 99% reduction. Nitrogen oxides are reduced by a urea-based selective non-catalytic reduction (SNCR) system (~ 50% reduction). Other NOx reduction techniques include low NOx burners for distillate oil, overfire air, and low nitrogen fuels. The boiler design with good combustion and operating practices will be used to minimize emissions of carbon monoxide, volatile organic compounds, and organic hazardous air pollutants. Very low sulfur fuels will be used minimize the potential for emissions of sulfuric acid mist and sulfur dioxide.

Bagasse Handling System: To minimize fugitive particulate matter from the bagasse handling system, bagasse conveyors will be enclosed and dust collectors will be installed on the conveyor transfer points.

Final BACT Determinations

In accordance with Rule 62-212.400, F.A.C., the Department establishes the following standards for Boiler 8 that represent the Best Available Control Technology (BACT) for emissions nitrogen oxides (NOx), particulate matter (PM/PM10), sulfuric acid mist (SAM), sulfur dioxide (SO2), and volatile organic compounds (VOC).

Pollutant	Standards - Stack Test ^a	Standards – CEMS ^b
<i>EU-027: Bagasse Handling System</i>		
Opacity ^c	There shall be no visible emissions (≤ 5% opacity) from the dust collector outlets.	
<i>EU-028: Boiler 8</i>		
CO ^d	Good Combustion Practices	0.38 lb/MMBtu, 12-month rolling average 1285 tons per consecutive 12 months, (rolling total)
NOx	0.14 lb/MMBtu {Initial demonstration standard; subsequent compliance based on CEMS.}	0.14 lb/MMBtu, 30-day rolling average
PM	0.026 lb/MMBtu	Not Applicable
SO2	0.06 lb/MMBtu	Not Applicable
(Surrogate for SAM)	Fuel Specification: Distillate oil shall be new No. 2 oil containing no more than 0.05% sulfur by weight.	
VOC	0.05 lb/MMBtu	Not Applicable
Opacity ^c	During normal operation, stack opacity shall not exceed 20% based on a 6-minute block average. During startup or shutdown, stack opacity shall not exceed 20% based on a 6-minute block average except for one 6-minute block per hour that shall not exceed 27%.	

- a. These standards apply when firing bagasse, distillate oil, or a combination of these fuels under normal operation at steady-state conditions. The permit also establishes maximum hourly mass emission rates based on operation at permitted capacity. Compliance with the standards based on stack tests shall be determined by the following EPA stack test methods: NOx (EPA Method 7E); PM (EPA Method 5); SO2 (EPA Method 6C); VOC (EPA Methods 18 and

SECTION 4. APPENDIX E

Summary of Final BACT Determinations

25A, as propane); and opacity (EPA Method 9). Compliance with these standards shall be based on the average of three test runs conducted under steady-state conditions at permitted capacity.

- b. These standards apply when firing bagasse, distillate oil, or a combination of these fuels and under all load conditions. Compliance with the CO and NO_x CEMS-based standards shall be demonstrated by data collected from the required continuous emissions monitoring systems (CEMS) required for these pollutants. The permit allows specific NO_x CEMS data to be excluded from the compliance determination (30-day rolling average) when the SNCR system is not functioning due to startup, shutdown, malfunction, or authorized periods of uncontrolled NO_x monitoring. The CO monitor shall meet the requirements of Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The NO_x monitor shall meet the requirements of Performance Specification 2 in Appendix B of 40 CFR 60. An oxygen monitor shall be installed and meet the requirements of Performance Specification 3 in Appendix B of 40 CFR 60 to correct the CO and NO_x emission rates.
- c. NSPS Subpart Db requires a Continuous Opacity Monitoring System (COMS) for new industrial boilers firing "coal, oil, wood or mixtures of these fuels", which applies at all times except startup, shutdown, or malfunction. Therefore, the COMS is required by NSPS Subpart Db when Boiler 8 fires distillate oil alone or in combination with bagasse. In lieu of the COMS requirements for Boiler 8, EPA Region 4 approved (September 22, 2003) an alternate sampling procedure that includes additional EPA Method 9 observations when firing distillate oil. In addition, the draft permit requires monitoring the total ESP secondary voltage as an indicator of proper functioning as well as effective performance of the ESP.
- d. Based on a netting analysis that included emissions decreases resulting from the shut down of existing Boiler 3, the project did not require PSD preconstruction review for carbon monoxide (CO) emissions. The permit requires the permanent shutdown of Boiler 3 prior to the commercial operation of new Boiler 8.

The Department's technical review and rationale for the BACT determinations are presented in Technical Evaluation and Preliminary Determination issued concurrently with the draft permit for the original project.

SECTION 4. APPENDIX F

Good Combustion and Operating Practices

The determination of Best Available Control Technology (BACT) for emissions of carbon monoxide and volatile organic compounds (VOC) from Boiler 8 relied on an efficient boiler design and good combustion and operating practices. To the extent practicable, the permittee shall employ the following procedures to minimize emissions and promote good combustion and pollution control.

Startup and Shutdown

1. **Training:** All operators and supervisors shall be properly trained to operate and maintain Boiler 8 as well as the pollution control and monitoring equipment in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions during startups, shutdowns, and malfunctions.
 2. **Boiler Startup:** During a normal startup, Boiler 8 will fire distillate oil to gradually warm up the boiler components. At a target steam temperature rise of 100° F to 120° F per hour, it will take approximately 4 to 5 hours to reach the desired superheater steam temperature of 500° F. Once this temperature is reached, bagasse will be fed until a fire is established across the entire grate. The full steaming rate can be reached about 30 to 60 minutes after first feeding bagasse.
 3. **PM Controls:** The wet cyclone collectors will be activated before firing any fuel. Prior to activation, the ESP will be purged with ambient air for about 30 to 60 minutes. Distillate oil may be fired during startup prior to energizing the electrostatic precipitator (ESP). The ESP will be on line and functioning properly before any bagasse is fired. The ESP will remain on line until the bagasse feed has stopped and combustion on the grate is substantially complete.
 4. **NOx Controls:** When the SNCR manufacturer's minimum operating temperature requirement is met, the SNCR system will be activated for NOx control. For a cold startup, this temperature is generally reached within 4 - 5 hours of initial distillate oil firing. During normal operation, the SCNR control system will automatically adjust the urea injection rate and zones to meet the specified NOx standard based on the current urea injection rate, boiler load, furnace temperature, and NOx emissions. During shutdown, the SNCR system shall remain operational until the operating temperature drops below the minimum requirement.
 5. **Good Combustion Practices:** To the extent practicable, the permittee shall maintain the following flue gas levels as indicators of good combustion:
 - a. **Oxygen:** The permittee shall install, maintain, and operate a flue gas oxygen monitor on Boiler 8. When firing bagasse during normal operation, the flue gas oxygen content is expected to range from 3% and 4%. High fuel moisture, high ash content, and low load conditions may result in higher flue gas oxygen contents (5% - 6%). When firing only distillate oil, the flue gas exhaust oxygen content is expected to range from 8% and 9% due to tramp air required for cooling of the stoker, pneumatic distributors, and overfire air nozzles. Operators shall ensure that the flue gas oxygen content is sufficient for good combustion.
 - b. **Carbon Monoxide (CO):** Carbon monoxide is an indicator of incomplete fuel combustion. In addition to insufficient oxygen, high fuel moisture, high ash content and low load conditions may result in elevated levels of carbon monoxide. When firing bagasse during normal operation, the boiler exhaust carbon monoxide content is expected to be in the range of 400 ppmvd @ 7% oxygen based on a 24-hour average, excluding emissions during startup and shutdown. The required carbon monoxide CEMS shall report daily CO emission averages in these units. The operator shall use the measured CO emissions at the stack as an indicator of the combustion efficiency and adjust boiler operating conditions as necessary. *{Permitting Note: The stack exhaust is expected to be 1% - 2% (oxygen content) higher than the boiler exhaust due to infiltration from the entire system.}*
- When firing carbonaceous fuels such as bagasse, many factors may affect efficient combustion. The above levels represent adherence to good combustion practices under normal operating conditions. Operation outside these levels is not a violation in and of itself. Repeated operation beyond these levels without taking corrective actions to regain good combustion could be considered "circumvention" in accordance with Rule 62-210.650, F.A.C.
6. **Boiler Shutdown:** To initiate shutdown, the bagasse fuel feed is terminated. The SNCR systems shall remain functional until operating conditions fall outside of the manufacturer's recommendations. The wet cyclone collectors and ESP shall continue to operate until bagasse combustion on the fuel grate is substantially complete.

SECTION 4. APPENDIX G
Quarterly CO and NOx Emissions Report

Current Title V Permit No. _____

Facility Name U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery		ARMS ID No. 0510003	ARMS EU ID No. 028
Emissions Unit Description Boiler 8 is a spreader stoker boiler with maximum continuous steam rate of 500,000 lb/hour. Control equipment includes: CO/VOC – Efficient combustion design and good operating practices NOx – Low NOx oil burners and selective non-catalytic reduction (SNCR) system PM/PM10 – Wet cyclone collectors and electrostatic precipitators			
Primary Fuel Bagasse – Fibrous plant material remaining after sugarcane is milled		Auxiliary Fuels Distillate oil (≤ 0.05% sulfur by weight)	
Year	Calendar Quarter of Operation Covered (Check one.) ___ 1 ___ 2 ___ 3 ___ 4		Unit Operation in Calendar Quarter _____ hours
Continuous Emissions Monitoring System (CEMS) Information			
Pollutant Monitored: ___ CO ___ NOx		Manufacturer: _____	
Date of last certification or audit: _____		Model No. _____	
Emission Data Summary		CEMS Performance Summary	
1. Standard: _____		1. Hours of CEMS downtime in reporting period due to:	
2. Hours of excess emissions in reporting period due to:		a. Monitor equipment malfunctions _____	
a. Startup/shutdown _____		b. Non-monitor equipment malfunctions _____	
b. Control equipment problems _____		c. Quality assurance calibration _____	
c. Process problems _____		d. Other known causes _____	
d. Other known causes _____		e. Unknown causes _____	
e. Unknown causes _____		2. Total hours of CEMS downtime _____	
2. Total hours of excess emissions _____		3. $\frac{\text{(Total hours of CEMS downtime)}}{\text{(Total hours of source operating time)}} \times (100\%) \dots$ _____	
3. $\frac{\text{(Total hours of excess emissions)}}{\text{(Total hours of source operating time)}} \times (100\%) \dots$ _____			
<i>Note: Report "excess emissions" for any emission averages that are in excess of a permitted emissions standard and averaging period.</i>		<i>If monitor availability is not at least 95%, provide a report identifying the problems and a plan of corrective actions that will be taken to achieve 95% availability</i>	
Emissions Data Exclusion			
1. Report the number of 1-hour emissions averages excluded the reporting period due to:			
a. Startups: _____		c. Malfunctions: _____	e. Total _____
b. Shutdowns: _____		d. Uncontrolled NOx Monitoring: _____	
3. On a separate page, summarize each malfunction event, the cause (if known), and corrective actions taken.			
4. On a separate page, describe any changes to the CEMS, process equipment, or control equipment during last quarter.			
Emission Rates			
On a separate page, report the actual emissions for: each rolling 12-month total (tons) of CO emissions for each month in the quarter, and each 30-day rolling NOx average (ppmvd @ 7% oxygen) for each compliance period in the quarter.			
Certification			
I certify that the information contained in this report is true, accurate, and complete.			
Print Name / Title		Signature / Date	

SECTION 4. APPENDIX H

Shakedown Period

Boiler 8 will be a new type of spreader-stoker specifically designed for the efficient combustion of bagasse. Bagasse is the fibrous byproduct remaining from sugarcane after the milling process. The sugarcane milling season runs from October through April. The proposed startup date for the new boiler is January of 2005, which is approximately halfway through the sugarcane milling season. It is expected that a short, initial shakedown period will be necessary for the boiler prior to shakedown of the SNCR system. Although the facility also includes a refinery that operates during the milling off-season, Boiler 8 is not expected to operate much during the off season unless refinery steam demands are high enough to take advantage of large steam production rate from this unit. For these reasons, the Department authorizes the following shakedown period in accordance with the specific conditions, which are in addition to those specified in Section 3 of the permit.

1. **Shakedown:** Shakedown is limited to the first 360 calendar days after first fire in the boiler and shall not exceed 180 operational days after first fire in the boiler. An "operational day" is any day that Boiler 8 fires any fuel. During shakedown, Boiler 8 shall not operate more than 60 days during the off-season. For this plant, the sugarcane crop season is defined as October through April and the off-season is defined as May through September. Shakedown is complete once commercial operation is established. In addition, shakedown shall end no later than 60 days after Boiler 8 achieves a maximum continuous rating of 450,000 lb/hour of steam based on a 24-hour average.
2. **SNCR System:** During the shakedown period, the permittee is authorized to operate the boiler without the SNCR system for purposes of commissioning the boiler and collecting uncontrolled NOx emissions data, provided:
 - a. During the first 90 operational days of shakedown, operation without the SNCR system functioning shall not exceed a total of 240 hours;
 - b. After the first 90 operational days of shakedown, operation without the SNCR system functioning shall not exceed 2 hours each day; and
 - c. Notwithstanding the above periods, the operator shall fully utilize the SNCR system to the extent practicable and according to the manufacturer's recommended procedures.
3. **CO and NOx CEMS:** The CO and NOx CEMS shall be installed and certified within the first 45 operational days of shakedown. CEMS data collected on the first full day following completion of the shakedown period shall be used to begin demonstrating compliance with the CEMS-based emissions standards of the permit.
4. **Initial Stack Tests:** All initial stack tests required by this permit shall be conducted during the defined shakedown period, but no later than 60 days after achieving the maximum production rate, which is defined as a maximum continuous rating of 450,000 lb/hour of steam based on a 24-hour average. The permittee shall provide written notification to the Permitting and Compliance Authorities within 10 days of achieving this maximum production rate.

{Permitting Note: After demonstrating compliance and commencing commercial operation, the conditions of Appendix H will become obsolete and need not be included in the Title V air operation permit. The above requirements do not supersede any federal requirements regarding shakedowns for purposes of complying with NSPS or NESHAP regulations. Boiler 8 has a maximum heat input rate greater than 100 MMBtu/hour and is permitted to fire bagasse as the primary fuel with distillate oil as a startup and supplemental fuel. As such, it is an "affected facility" as defined in NSPS Subpart Db of 40 CFR 60. This NSPS regulates emissions of sulfur dioxide, particulate matter, opacity, and nitrogen oxides for the firing of coal, oil, or natural gas (or mixtures of these fuels with other fuels). However, the NSPS standards for particulate matter and sulfur dioxide are not applicable because the new boiler does not employ add-on controls to reduce sulfur dioxide emissions. Instead, sulfur dioxide emissions are limited by the firing of very low sulfur distillate oil and bagasse. In turn, the nitrogen oxide emission standard does not apply because the annual capacity factor for the very low sulfur distillate oil is less than 10% as conditioned by the permit. Only opacity is regulated by NSPS Subpart Db for this new boiler when firing distillate oil. Boiler 8 is also subject to the applicable requirements of NESHAP Subpart DDDDD in 40 CFR 63.}

SECTION 4. APPENDIX I
De-Watered DAF Filter Material

Description

As a maintenance practice, surface areas at the mill are periodically washed with water to remove debris. The wash water is collected in a series of drains and directed to the Dissolved Aeration Flotation (DAF) system to remove solids. Collected materials include bagasse, used oil, and lime. Bagasse results from spills at the sugar mill and boiler conveyor system. Small amounts of used oil consisting of hydraulic fluid and lubrication oil may be spilled or leaked to the floor from miscellaneous equipment throughout the sugar mill. A conservative estimate of use oil washed to the drains is 500 pounds per day. This used oil does not contain any polychlorinated byphenols (PCBs). Slaked lime is added to the DAF system to act as a coagulant in the clarification process. Drain water passes through the DAF filter and is discharged to the facility's permitted wastewater treatment system.

The DAF filter removes approximately 15,000 pounds of material per day, which consists of roughly 13,500 pounds of liquid per day and 1500 pounds of solids per day. The filter material is then pressed to remove approximately 10,000 pounds of liquids per day, which is also transferred to the permitted wastewater treatment system. The remaining "de-watered" DAF filter material now contains approximately 3000 pounds of water, 1500 pounds of solids (mostly bagasse), and 500 pounds of used oil (assuming all of the oil remains with the solids). Disregarding the used oil, the de-watered DAF filter material would consist mostly of bagasse with a moisture content of about 65% by weight. The sugar mill boiler typically fire bagasse with a moisture content of about 55% by weight. As much as 2.5 tons per day and 915 tons per year of DAF filter material could be generated. The amounts are not significant compared to the capacity of the existing boilers to fire a high-moisture solid fuel.

Requirements

1. Firing: The permittee may co-fire incidental amounts de-watered DAF filter material. To the extent practicable, the de-watered DAF filter material shall be commingled with bagasse in the existing conveyor system and distributed among the operational boilers. [Rule 62-4.070, F.A.C.]
 2. Expansion: Prior to expanding the DAF system, the permittee shall notify the Permitting Authority and determine whether an air construction permit is required. [Rule 62-4.070, F.A.C.]
 3. Used Oil Specifications: The de-watered DAF filter material may contain incidental amounts of used oil (lubrication oil or hydraulic fluids) generated on site at this facility. The permittee shall maintain records sufficient to document that the used oil meets the following requirements:
 - a. The used oil shall not contain PCBs.
 - b. The used oil shall meet the following EPA specifications for "on-specification used oil" in Subpart B of 40 CFR 279:

Arsenic shall not exceed 5.0 ppm;
Cadmium shall not exceed 2.0 ppm;
Chromium shall not exceed 10.0 ppm;
Lead shall not exceed 100.0 ppm;
Total halogens shall not exceed 1000.0 ppm; and
The flash point shall not be less than 100 degrees F.
- Used oil that does not meet the above requirements shall not be burned at this facility. [Rule 62-4.070, F.A.C.; Subpart B, 40 CFR 279]
4. Records: The permittee shall keep records sufficient to document compliance with the above requirements. The records shall be made available when requested by the Compliance Authority. [Rule 62-4.070, F.A.C.]

ATTACHMENT USS-EU5-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU5-IV3**ALTERNATIVE METHODS OF OPERATION**

U.S. Sugar Clewiston Boiler No. 8 is permitted to fire bagasse as the primary fuel and distillate fuel oil as a restricted alternate fuel for startup and supplemental use. The boiler has a maximum steam production capacity of 500,000 lb/hr based on a maximum heat input rate of 936 MMBtu/hr (24-hour average). The sulfur content of distillate fuel oil is limited to 0.05 percent by weight. The operating hours of the boiler are not limited (8,760 hr/yr). Bagasse can include DAF filter material containing incidental amounts of on-specification used oil.

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Sugar Processing Operations

3. Emissions Unit Identification Number: **015, 016, 017, 018, 019, 020, 022, and 029**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:
This emission unit represents the sugar processing operation (refinery), which produces bulk and bagged sugar. See Attachment USS-EU6-A11 for a list of sources included in the refinery.

EMISSIONS UNIT INFORMATION

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Sugar Processing Operations

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The emissions from the VHP sugar dryer, White Sugar Dryer No. 1, vacuum systems, conditioning silos, bins, and packaging operations are controlled with baghouses. There are a total of 11 baghouses.

The emissions from the granular carbon regeneration furnace are controlled with a direct flame afterburner and a wet venturi/impingement plate scrubber system.

Process enclosure.

Emissions from the White Sugar Dryer No. 2 are controlled with four high-efficiency cyclones followed by a wet scrubber.

2. Control Device or Method Code(s): 018, 053, 054, 055, 099

EMISSIONS UNIT INFORMATION

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Sugar Processing Operations

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: 803,000 TPY refined sugar					
3. Maximum Heat Input Rate:	million Btu/hr				
4. Maximum Incineration Rate:	pounds/hr tons/day				
5. Requested Maximum Operating Schedule:	<table><tr><td>24 hours/day</td><td>7 days/week</td></tr><tr><td>52 weeks/year</td><td>8,760 hours/year</td></tr></table>	24 hours/day	7 days/week	52 weeks/year	8,760 hours/year
24 hours/day	7 days/week				
52 weeks/year	8,760 hours/year				
6. Operating Capacity/Schedule Comment:	<p>Maximum production rate refers to bulk and bagged refined sugar loaded out from this facility. Maximum daily rate is 2,250 tons per day.</p>				

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

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: S-1 through S-13		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: See Attachment USS-EU6-A11.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 78 feet	7. Exit Diameter: 7.0 x 6.0 feet	
8. Exit Temperature: 110 °F	9. Actual Volumetric Flow Rate: 115,000 acfm	10. Water Vapor: 10 %	
11. Maximum Dry Standard Flow Rate: 96,000 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Stack parameters represent White Sugar Dryer No. 2 stack. See Attachment USS-EU6-A11 for a list of stacks and their parameters in this emissions unit.			

EMISSIONS UNIT INFORMATION

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Sugar Processing Operations

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): Food and Agriculture - Sugar Cane Processing; General		
2. Source Classification Code (SCC): 3-02-015-01		3. SCC Units: Tons Sugar Produced
4. Maximum Hourly Rate: 100	5. Maximum Annual Rate: 803,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Maximum hourly and annual rates refer to the amount of refined sugar produced by the fluidized bed drying system and loaded via the bulk shipment facility. Maximum daily loadout rate limited to 2,250 tons per day.		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): Food and Agriculture - Sugar Cane Processing; Other not classified		
2. Source Classification Code (SCC): 3-02-015-99		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 85	5. Maximum Annual Rate: 730,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Maximum hourly and annual rates based on 2,000 TPD, and refers to the amount of refined sugar that could be processed through packaging operations.		

EMISSIONS UNIT INFORMATION

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Sugar Processing Operations

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type): In Process Fuel Use; Distillate Oil; General		
2. Source Classification Code (SCC): 3-90-005-89		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 0.09	5. Maximum Annual Rate: 788.4	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Maximum rates refer to the amount of No. 2 fuel oil burned in the granular carbon regeneration furnace (GCRF) and afterburner.		

Segment Description and Rate: Segment ____ of ____

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

EMISSIONS UNIT INFORMATION

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Sugar Processing Operations

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018	054	EL
PM₁₀	018	054	NS
SO₂	053	055	EL
NO_x			NS
CO			NS
VOC	099	053	EL

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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	2. Total Percent Efficiency of Control:
3. Potential Emissions: 8.77 lb/hour 38.40 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions: See Attachment USS-EU6-F1.8 for emission calculations.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

**Section [6]
Sugar Processing Operations**

POLLUTANT DETAIL INFORMATION

**Page [1] of [3]
Particulate Matter Total - PM**

**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 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.63 lb/hr	4. Equivalent Allowable Emissions: 1.63 lb/hour 7.12 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to VHP Sugar Dryer (EU 015) (Point ID S-11). As a surrogate parameter for PM, VE must be less than 5-percent opacity.	

Allowable Emissions Allowable Emissions 2 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.43 lb/hr	4. Equivalent Allowable Emissions: 1.43 lb/hour 6.28 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to existing White Sugar Dryer No. 1 (EU 016) (Point ID S-10). As a surrogate parameter for PM, VE must be less than 5-percent opacity.	

Allowable Emissions Allowable Emissions 3 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7 lb/hr	4. Equivalent Allowable Emissions: 0.7 lb/hour 3.07 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Granular Carbon Regeneration Furnace (EU 017) (Point ID S-12).	

EMISSIONS UNIT INFORMATIONSection [6]
Sugar Processing Operations**POLLUTANT DETAIL INFORMATION**Page [1] of [3]
Particulate Matter Total - PM**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 4 of 8**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.005 gr/dscf	4. Equivalent Allowable Emissions: 4.20 lb/hour 18.38 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-026-AC/PSD-FL-346. Applies to new White Sugar Dryer (EU 029) (Point ID S-13).	

Allowable Emissions Allowable Emissions 5 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.19 lb/hr	4. Equivalent Allowable Emissions: 0.19 lb/hour 0.84 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Vacuum Systems (EU 018). As a surrogate parameter for PM, VE must be less than 5-percent opacity (Point IDs S-1, S-2, and S-3).	

Allowable Emissions Allowable Emissions 6 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.17 lb/hr	4. Equivalent Allowable Emissions: 0.17 lb/hour 0.74 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Conditioning Silos (EU 019) (Point IDs S-7, S-8, and S-9).	

EMISSIONS UNIT INFORMATION

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 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

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 Particulate Matter Total - PM

**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 7 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/hr	4. Equivalent Allowable Emissions: 0.25 lb/hour 1.07 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Screening and Distribution (EU 020) (Point IDs S-5 and S-6). As a surrogate parameter for PM, VE must be less than 5-percent opacity.	

Allowable Emissions Allowable Emissions 8 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.21 lb/hr	4. Equivalent Allowable Emissions: 0.21 lb/hour 0.90 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Packaging Baghouse (EU 022) (Point ID S-4). As a surrogate parameter for PM, VE must be less than 5-percent opacity.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

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 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

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 Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.42 lb/hour 19.38 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Granular Carbon Regen Furnace: 1.0 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 4.38 TPY Alcohol Usage: 100% VOC of 30,000 lb/yr x 1 ton/2,000 lb = 15.0 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Hourly emission limit includes 1.0 lb/hr for the Granular Carbon Regeneration Furnace and 3.42 lb/hr for Alcohol Usage.	

EMISSIONS UNIT INFORMATION

Section [6]
 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

Page [2] of [3]
 Volatile Organic Compounds - VOC

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.0 lb/hr	4. Equivalent Allowable Emissions: 1.0 lb/hour 4.38 tons/year
5. Method of Compliance: EPA Method 18 or 25A	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Applies to Granular Carbon Regeneration Furnace only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 15.0 tons/yr	4. Equivalent Allowable Emissions: lb/hour 15.0 tons/year
5. Method of Compliance: EPA Method 18 or 25A	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Applies to Alcohol Usage only in Sugar Refinery.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Sugar Processing Operations

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Sulfur Dioxide - SO₂

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.64 lb/hour 2.80 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.05% S fuel Reference: Permit No. 0510003-017-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 90 gal/hr x 0.05% x 7.1 lb/gal x 2 lb SO₂/lb sulfur = 0.64 lb/hr Annual: 788,400 gal/yr x 0.05% x 7.1 lb/gal x 2 lb SO₂/lb sulfur x 1 ton/2,000 lb = 2.8 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Annual emissions based on maximum 788,400 gallons of fuel oil per year.			

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Sugar Processing Operations**POLLUTANT DETAIL INFORMATION**Page [3] of [3]
Sulfur Dioxide - SO₂**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% S fuel	4. Equivalent Allowable Emissions: 0.64 lb/hour 2.80 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Applies to Granular Carbon Regeneration Furnace only.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

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: VE05	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit No. 0510003-017-AV. Applies to refinery and dryer baghouses.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: 10	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit Nos. 0510003-017-AV and 0510003-026-AC/PSD-FL-346. Applies to Granular Carbon Regeneration Furnace and White Sugar Dryer No. 2.	

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: TEMP	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Temperature of afterburner on Granular Carbon Regeneration Furnace. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: White Sugar Dryer No. 2 wet scrubber water flow rate. Permit No. 0510003-026-AC/PSD-FL-346.	

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 3

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: White Sugar Dryer No. 2 wet scrubber pressure drop. Permit No. 0510003-026-AC/PSD-FL-346.	

Continuous Monitoring System: Continuous Monitor ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU6-I1</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU6-I2</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU6-I3</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU6-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [6]

Sugar Processing Operations

Additional Requirements Comment

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ATTACHMENT USS-EU6-A11

**SOURCES AND RESPECTIVE STACK PARAMETERS INCLUDED
IN THE SUGAR PROCESSING OPERATION**

ATTACHMENT USS-EU6-A11

SOURCES AND RESPECTIVE STACK PARAMETERS INCLUDED IN THE SUGAR PROCESSING OPERATION

Source/Vent Name	EU ID	Stack No.	Stack/Vent Release Height (ft)	Stack/Vent Diameter (ft)	Exhaust Flow (acfm)	Exit Velocity ^a (ft/sec)	Gas Exit Temp. (°F)
VHP Sugar Dryer	015	S-11	10	4.79	127,000	0.29	115
White Sugar Dryer No. 1	016	S-10	75	7.31	113,000	0.29	115
Granular Carbon Furnace	017	S-12	30	2.00	4,300	22.8	160
<u>Vacuum Systems</u>							
Screening & Distribution Vacuum	018	S-1	65	0.50	1,705	0.29	68
100-lb Bagging Vacuum System	018	S-2	65	0.50	1,564	0.29	90
5-lb Bagging Vacuum System	018	S-3	65	0.50	1,585	0.29	90
<u>Conditioning Silos</u>							
Conditioning Silo No. 2	019	S-7	130	1.37	3,000	0.29	110
Conditioning Silo No. 4	019	S-8	130	1.37	3,000	0.29	110
Conditioning Silo No. 6	019	S-9	130	1.37	3,000	0.29	110
<u>Screening, Distributing, Packaging, Powdered Sugar/Starch</u>							
Screening and Distribution #1	020	S-5	72	0.95	3,200	0.29	125
Screening and Distribution #2	020	S-6	72	1.94	10,500	0.29	125
<u>Sugar Packaging Baghouse</u>							
Packaging Baghouse	022	S-4	60	1.94	11,500	0.29	125
White Sugar Dryer No. 2	029	S-13	78	7 × 6	115,000	45.6	113

^a All sources but the Granular Carbon Furnace have horizontal discharge.

ATTACHMENT USS-EU6-F1.8

EMISSION CALCULATIONS

Attachment USS-EU6-F1.8a. Potential Emissions of PM from the Sugar Refinery Sources, U.S. Sugar Corp., Clewiston

Source/Vent Name	EU No.	Source ID	Exhaust	Exhaust	Hours of Operation	PM/PM ₁₀ Emissions	
			Grain Loading (gr/dscf)	Gas Flow (dscfm)		(lb/hr) ^a	(TPY)
V.H.P. Sugar Dryer	015	S-11	0.001723	110,042	8,760	1.63	7.12
White Sugar Dryer No. 1	016	S-10	0.00177	94,488	8,760	1.43	6.28
Granular Carbon Regen. Furnace	017	S-12	--	--	8,760	0.70	3.07
White Sugar Dryer No. 2	029	S-13	0.0051	96,000	8,760	4.20	18.38
					TOTAL =	7.96	34.85
<u>Vacuum Systems</u>							
Screening and Distribution Vacuum	018	S-1	0.00754	990	8,760	0.06	0.28
100 lb Bagging Vacuum System	018	S-2	0.00856	872	8,760	0.06	0.28
5 lb Bagging Vacuum System	018	S-3	0.00759	984	8,760	0.06	0.28
					TOTAL =	0.19	0.84
<u>Conditioning Silos</u>							
Conditioning Silo No. 2	019	S-7	0.0025	2,641	8,760	0.06	0.25
Conditioning Silo No. 4	019	S-8	0.0025	2,641	8,760	0.06	0.25
Conditioning Silo No. 6	019	S-9	0.0025	2,641	8,760	0.06	0.25
					TOTAL =	0.17	0.74
<u>Screening and Distribution</u>							
Screening and Distribution #1	020	S-5	0.0025	2,668	8,760	0.06	0.25
Screening and Distribution #2	020	S-6	0.0025	8,735	8,760	0.19	0.82
					TOTAL =	0.24	1.07
<u>Sugar Packaging Baghouse</u>							
Packaging Dust Collector	022	S-4	0.0025	9,589	8,760	0.21	0.90
					GRAND TOTAL =	8.77	38.40

^a Based on permit emission limits.

Note: lb/hr = pounds per hour

TPY = tons per year

Attachment USS-EU6-F1.8b. Potential Emissions of Criteria Pollutants from the Granular Carbon Furnace (EU 017),
U.S. Sugar Corporation, Clewiston

Regulated Pollutant	Maximum Hourly (lb/hr)	Basis	Maximum Annual (TPY) ^a
Particulate Matter (PM)	0.7	Permit Limit	3.07
Particulate Matter (PM ₁₀)	0.63	90% of PM	2.76
Sulfur Dioxide (SO ₂)	0.64	b	2.80
Nitrogen Oxides (NO _x)	3.0	c	13.14
Carbon Monoxide (CO)	3.0	c	13.14
VOC	1.0	Permit Limit	4.38

^a Based on 8,760 hours of operation.

^b Average hourly rate. Based on stoichmetric calculation for conversion of sulfur into sulfur dioxide:
 $90 \text{ gal/hr} \times 0.05\% \times 7.1 \text{ lb/gal} \times 2 \text{ lb SO}_2/\text{lb sulfur} = 0.64 \text{ lb/hr}$.

^c Estimated emissions obtained from design information provided by BSP Thermal Systems, Inc.

Attachment USS-EU6-F1.8c. Potential Emissions of Criteria Pollutants from Alcohol Usage in the Sugar Refinery (EU 021)
U.S. Sugar Corporation, Clewiston

Material	VOC Content (percent)	Maximum Gallons Used (gal/yr)	Pounds Used ^a (lb/yr)	VOC Emissions (TPY)
Isopropyl Alcohol	100	4,587	30,000	15.00

^a The density of the isopropyl alcohol is 6.54 lb/gal.

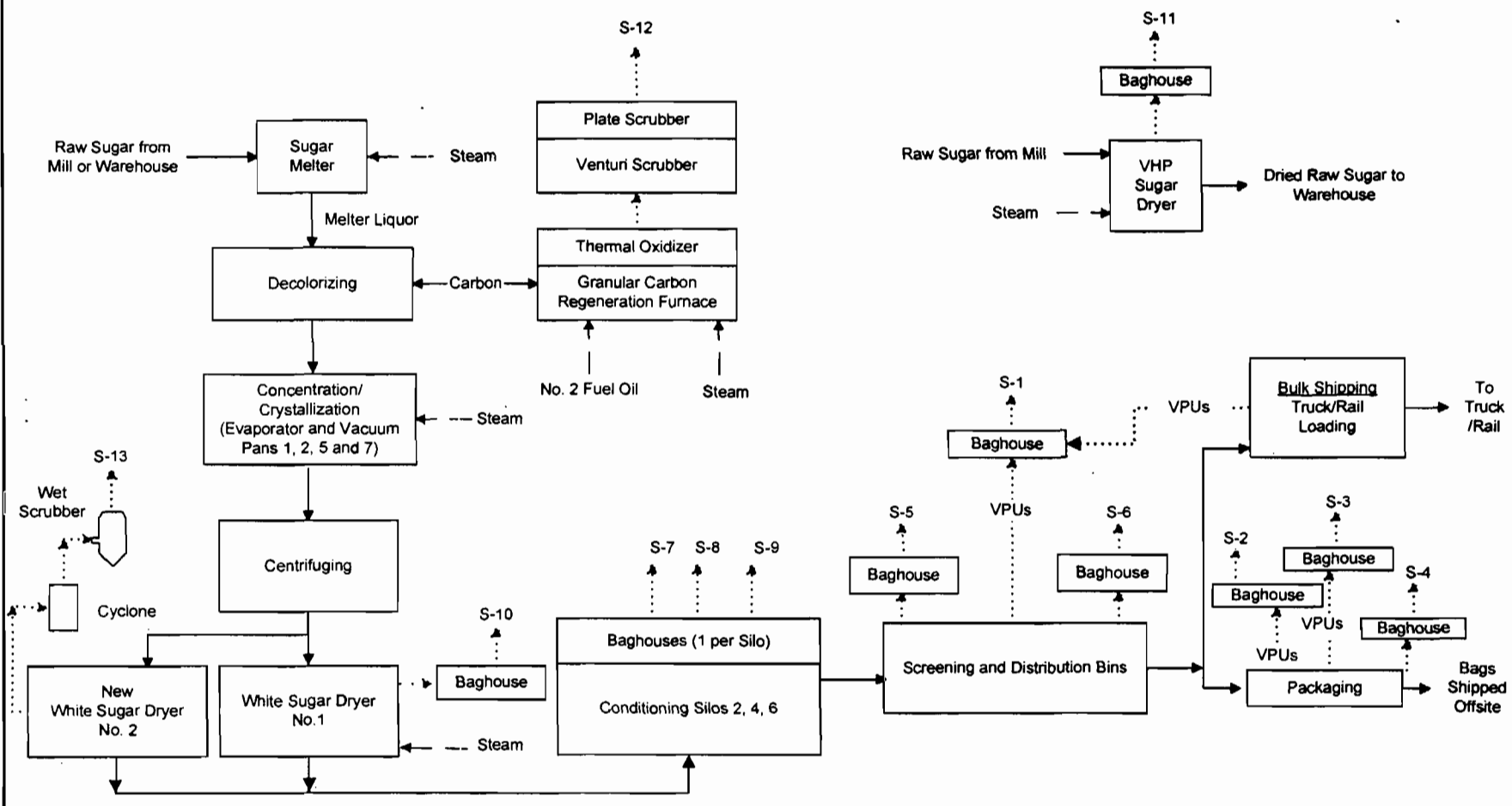
Attachment USS-EU6-F1.8d. Summary of Potential Emissions from Sugar Refinery, U. S. Sugar Corporation, Clewiston

Source	EU No.	Source ID	Potential Emissions (TPY)						
			PM	PM ₁₀	SO ₂	NO _x	CO	VOC	SAM
V.H.P. Sugar Dryer	015	S-11	7.12	7.12	0	0	0	0	0
White Sugar Dryer No. 1	016	S-10	6.28	6.28	0	0	0	0	0
Granular Carbon Furnace	017	S-12	3.07	2.76	2.80	13.14	13.14	4.38	0.172
White Sugar Dryer No. 2	029	S-13	18.38	18.38	0	0	0	0	0
<u>Vacuum Systems</u>									
Screening and Distribution Vacuum	018	S-1	0.28	0.28	0	0	0	0	0
100 lb Bagging Vacuum System	018	S-2	0.28	0.28	0	0	0	0	0
5 lb Bagging Vacuum System	018	S-3	0.28	0.28	0	0	0	0	0
<u>Conditioning Silos</u>									
Conditioning Silo No. 2	019	S-7	0.25	0.25	0	0	0	0	0
Conditioning Silo No. 4	019	S-8	0.25	0.25	0	0	0	0	0
Conditioning Silo No. 6	019	S-9	0.25	0.25	0	0	0	0	0
<u>Screening, Distribution, Packaging,</u>									
<u>Powdered Sugar/Starch</u>									
Screening and Distribution #1	020	S-5	0.25	0.25	0	0	0	0	0
Screening and Distribution #2	020	S-6	0.82	0.82	0	0	0	0	0
<u>Sugar Packaging Baghouse</u>									
Packaging Dust Collector	022	S-4	0.90	0.90	0	0	0	0	0
<u>Alcohol Usage</u>	021	--	0	0	0	0	0	15.00	0
TOTAL ALL REFINERY SOURCES			38.40	38.09	2.80	13.14	13.14	19.38	0.172

ATTACHMENT USS-EU6-I1

PROCESS FLOW DIAGRAM

PRIVILEGED AND CONFIDENTIAL - PREPARED FOR COUNSEL



Notes:
 VPUs = Vacuum Pickup Units
 S = Emission Point ID

Attachment USS-EU6-I1
 Process Flow Diagram
 U.S. Sugar Corporation - Clewiston, FL

Process Flow Legend
 Solid/Liquid →
 Air
 Steam - - -

USS-EU6-I1
 Path: 0537540/4/4.4/USS-EU6-I1.vsd
 Date: 5/26/05



ATTACHMENT USS-EU6-I2

FUEL ANALYSIS SPECIFICATION

ATTACHMENT USS-EU6-I2

**Fuel Analysis Specification for U.S. Sugar Corporation
Granular Carbon Regeneration Furnace**

Parameter	Low Sulfur No. 2 Fuel Oil ^a (0.05% max S)
Density (lb/gal)	7.2 ^a
Approximate Heating Value (Btu/lb)	18,750
Approximate Heating Value (Btu/gal)	135,000-139,000
<u>Ultimate Analysis (dry basis):</u>	
Carbon	87.3% ^b
Hydrogen	12.6% ^b
Nitrogen	0.22% ^b
Oxygen	0.04% ^b
Sulfur	0.05%
Ash/Inorganic	<0.001% ^a
Moisture	0.05%

Note: All values represent average fuel characteristics.

^a Source: Marathon Ashland Petroleum LLC; Coastal Fuels.

^b Source: Perry's Chemical Engineers' Handbook. Sixth Edition.

ATTACHMENT USS-EU6-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU6-13a

DETAILED DESCRIPTION OF CONTROL EQUIPMENT
Control Equipment Parameters for the VHP Sugar Dryer Baghouse
[EU 015 (S-11)]

Manufacturer	BMA
Outlet Gas Temp (°F)	115
Outlet Gas Flow Rate (acfm)	127,000
Exhaust Gas Moisture Content (%)	5
Outlet Gas Flow Rate (dscfm)	110,042
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media (sq. ft.)	17,250
Air to Cloth Ratio (cfm/sq. ft.)	7.4
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.0017
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	1.625

Note: Parameters are average values based on manufacturer's design specifications. Outlet loading rate is guaranteed by baghouse manufacturer.

ATTACHMENT USS-EU6-I3b

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for the White Sugar Dryer No. 1 Baghouse

[EU 016 (S-10)]

Manufacturer	BMA Model BP6.90X8.5.10
Outlet Gas Temp (°F)	115
Outlet Gas Flow Rate (acfm)	113,000
Exhaust Gas Moisture Content (%)	5
Outlet Gas Flow Rate (dscfm)	94,488
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media (sq. ft.)	15,500
Air to Cloth Ratio (cfm/sq. ft.)	7.2
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.00177
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	1.43

Note: Parameters are average values based on manufacturers design specifications.
Outlet loading rate is guaranteed by baghouse manufacturer.

ATTACHMENT USS-EU6-13c

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

**Control Equipment Parameters for
Granular Carbon Regeneration Furnace Wet Scrubber
[EU 017 (S-12)]**

Manufacturer and Model No.	Sly Manufacturing Company Model No. 5-250 High Energy Venturi Wet Scrubber With Tray Type Wet Scrubber
Outlet Gas Temp (°F)	160
Outlet Gas Flow Rate (ACFM)	4,300
Pressure Drop Across Venturi Scrubber (inches of H ₂ O) Min/Max	12 / 30
Pressure Drop Across Tray Scrubber (inches of H ₂ O) Min/Max	3 / 8
Venturi Scrubbant Flow Rate (gal/min) - Min	36
Tray Scrubbant Flow Rate (gal/min) - Min	230
Venturi Scrubbant Supply Pressure (psi) - Min	3
Tray Scrubbant Supply Pressure (psi) - Min	Free Flow
Average Scrubbant pH - Min/Max	6 / 9
Scrubbant Make-up Rate (gal/min)	4.5
Wet Scrubbing System Particulate Removal Efficiency	97%
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.7

Note: All values are based on manufacturers design information and are subject to revision.
All values represent typical operating conditions.

ATTACHMENT USS-EU6-I3d**DETAILED DESCRIPTION OF CONTROL EQUIPMENT****Control Equipment Parameters for the Off Gas Afterburner****[EU 017 (S-12)]**

Manufacturer Model No.	BSP Thermal Systems, Inc. BSP Zero Hearth Type for 10'-9" OD x 8 HTH Furnace
Outlet Gas Temp (°F) Min/Max	1,000 / 1,400
Outlet Gas Flow Rate (acfm) Min/Max	10,600 / 16,300 ^a
Gas residence time (sec) Min/Max	0.5 / 0.75
Incinerator Temp (°F) Min/Max	1,000 / 1,600
Total VOC Destruction Efficiency (%)	92.0

^a Flow Rate at 1,400 °F.

ATTACHMENT USS-EU6-I3e

DETAILED DESCRIPTION OF CONTROL EQUIPMENT
Control Equipment Parameters for the Screening and Distribution Baghouse
[EU 018 (S-1)]

Manufacturer and Model No.	Hoffman HPC-44120
Outlet Gas Temp (°F)	68
Outlet Gas Flow Rate (acfm)	1,705
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	990
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media (sq. ft.)	518
Air to Cloth Ratio (cfm/sq. ft.)	3.3
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.00754
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.064

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-I3f

DETAILED DESCRIPTION OF CONTROL EQUIPMENT
Control Equipment Parameters for the 100-lb Bagging Vacuum Baghouse
[EU 018 (S-2)]

Manufacturer and Model No.	Hoffman HPC-44120
Outlet Gas Temp (°F)	68
Outlet Gas Flow Rate (acfm)	1,705
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	872
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media (sq. ft.)	518
Air to Cloth Ratio (cfm/sq. ft.)	3.3
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.00856
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.064

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-13g

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for the 5-lb Bagging Vacuum Baghouse

[EU 018 (S-3)]

Manufacturer and Model No.	Hoffman HPC-44120
Outlet Gas Temp (°F)	68
Outlet Gas Flow Rate (acfm)	1,705
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	984
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media (sq. ft.)	518
Air to Cloth Ratio (cfm/sq. ft.)	3.3
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.00759
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.064

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-13h

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for the Conditioning Silo Nos. 2, 4, and 6 Baghouses

[EU 019 (S-7, S-8, S-9)]

	<u>Each Baghouse</u>
Manufacturer and Model No.	Hosokawa Mikropul Env. Systems Model 49S-10-20
Outlet Gas Temp (°F)	110
Outlet Gas Flow Rate (acfm)	2,939
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	2,641
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	16-oz. Polyester (Mikro-Tex)
Total Area of Filter Media of each baghouse (sq. ft.)	608
Air to Cloth Ratio (cfm/sq. ft.)	4.8
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.0025
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.057

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-13i

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for the Packaging Baghouse

[EU 020 (S-4)]

Manufacturer and Model No.	Hosokawa Mikropul Env. Systems Model 169S-10-20TR
Outlet Gas Temp (°F)	110
Outlet Gas Flow Rate (acfm)	10,672
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	9,589
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	16-oz. Polyester (Mikro-Tex)
Total Area of Filter Media of each baghouse (sq. ft.)	2,095
Air to Cloth Ratio (cfm/sq. ft.)	5.1
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.0025
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.205

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-13j

DETAILED DESCRIPTION OF CONTROL EQUIPMENT
Control Equipment Parameters for the Screening/Distribution Silo Baghouse
[EU 020 (S-5)]

Manufacturer and Model No.	Hosokawa Mikropul Env. Systems Model 49S-10-20TR
Outlet Gas Temp (°F)	110
Outlet Gas Flow Rate (acfm)	2,969
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	2,668
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	16-oz. Polyester (Mikro-Tex)
Total Area of Filter Media of each baghouse (sq. ft.)	608
Air to Cloth Ratio (cfm/sq. ft.)	4.9
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.0025
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.205

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-I3k

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for the Powdered Sugar/Starch Bins Baghouses

[EU 020 (S-6)]

Manufacturer and Model No.	Torit & Day (or similar)/ 100PJD8
Outlet Gas Temp (°F)	110
Outlet Gas Flow Rate (acfm)	9,744
Exhaust Gas Moisture Content (%)	3
Outlet Gas Flow Rate (dscfm)	8,755
Cleaning Method	Air Pulse Jet cleaning (Timer Actuated)
Bag Material	Gore-Tex Polyester (or similar)
Total Area of Filter Media of each baghouse (sq. ft.)	880
Air to Cloth Ratio (cfm/sq. ft.)	3.0
Manufacturer's Guaranteed Outlet Loading (grains/dscf)	0.0025
Pollutants	Outlet Loading (lb/hr)
Particulate Matter	0.188

Note: Parameters are average values based on manufacturers design specifications.

Sample Calculations:

Outlet loading rate (lb/hr)

$$= \text{outlet gas flow rate (dscfm)} \times \text{outlet loading rate (grains/dscf)} \div 7,000 \text{ grains/lb} \times 60 \text{ min/hr}$$

ATTACHMENT USS-EU6-I3I

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for White Sugar Dryer No. 2 Cyclone Collectors

[EU 029 (S-13)]

Manufacturer and Model No.	Entoleter, LLC – Model 6600
No. of Cyclones	4
Inlet Gas Temp (°F)	110
Inlet Gas Flow Rate (acfm)	105,000
Pressure Drop Across Cyclones (inches of H ₂ O)	6
Inlet Dust Loading	11,760 lb/hr; 14 gr/dscf
Outlet Dust Loading	0.14 gr/dscf; 118 lb/hr
Cyclone System Particulate Removal Efficiency	99%

Note: All values are based on manufacturer's design information and are subject to revision.
All values represent typical operating conditions.

ATTACHMENT USS-EU6-I3m

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for White Sugar Dryer No. 2 Wet Scrubber

[EU 029 (S-13)]

Manufacturer and Model No.	Entoleter, LLC – Centrifield Vortex Model 1500
Inlet Gas Temp (°F)	113
Inlet Gas Flow Rate	105,000 acfm; 96,000 dscfm
Pressure Drop Across Scrubber (inches of H ₂ O)	8
Scrubber Recirculation Flow Rate (gal/min)	500
Scrubber Make-up Flow Rate (gal/min)	12
Inlet Dust Loading	118 lb/hr
Outlet Dust Loading	0.0051 gr/dscf; 4.2 lb/hr*
Wet Scrubbing System Particulate Removal Efficiency	96%

Note: All values are based on manufacturer's design information and are subject to revision.
All values represent typical operating conditions.

*Manufacturer's guarantee.

ATTACHMENT USS-EU6-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU6-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Sugar Processing Operations**

- 62-210.700(1), F.A.C.: Excess Emissions
- 62-210.700(4), F.A.C.: Excess Emissions
- 62-210.700(5), F.A.C.: Excess Emissions
- 62-210.700(6), F.A.C.: Excess Emissions
- 62-212.400, F.A.C.: Preconstruction Review Requirements (PSD/BACT)
- 62-296.320(4)(a), F.A.C.: Process Weight Table
- 62-296.320(4)(b), F.A.C.: General Visible Emission Standards
- 62-296.320(4)(c), F.A.C.: Unconfined Emissions of PM
- 62-296.401(1), F.A.C.: Incinerators < 50 TPD
- 62-297-310(2)(b), F.A.C.: General Compliance Test Requirements
- 62-297-310(4)(a)2., F.A.C.: General Compliance Test Requirements
- 62-297-310(5), F.A.C.: General Compliance Test Requirements
- 62-297-310(7)(a)1., F.A.C.: General Compliance Test Requirements
- 62-297-310(7)(a)3., F.A.C.: General Compliance Test Requirements
- 62-297-310(7)(a)4.a., F.A.C.: General Compliance Test Requirements
- 62-297-310(7)(a)9., F.A.C.: General Compliance Test Requirements
- 62-297-310(7)(c)., F.A.C.: General Compliance Test Requirements
- 62-297-310(8), F.A.C.: General Compliance Test Requirements
- 62-297.620(4), F.A.C.: Exceptions and Alternate Procedures

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Clewiston Sugar Mill and Refinery
Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
New White Sugar Dryer No. 2

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Final Air Permit No. PSD-FL-346 is enclosed authorizing construction of a new white sugar dryer. The new equipment will be installed at existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

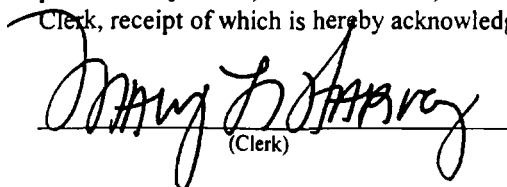
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/16/05 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
✓ Mr. David Buff, Golder Associates Inc.

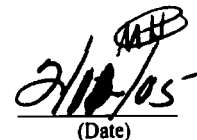
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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



(Clerk)



(Date)



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: December 31, 2005

FACILITY AND LOCATION

The United States Sugar Corporation operates the existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

STATEMENT OF BASIS

This permit authorizes the construction of a second white sugar dryer (EU-029) with a capacity of 85 tons per hour of sugar. Particulate matter emissions will be controlled with high efficiency cyclone collectors followed by a wet scrubber. The permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

Michael G. Cooke, Director
Division of Air Resource Management

Effective Date

"More Protection, Less Process"

Printed on recycled paper.

SECTION 1. GENERAL INFORMATION

PROJECT DESCRIPTION

The United States Sugar Corporation proposes to install a second white sugar dryer No. 2 (EU-029) to support the existing refinery operations. The new dryer will operate in parallel with existing white sugar dryer No. 1 (EU-016). Particulate matter emissions will be controlled by a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. The new sugar dryer will allow a slight increase in the daily sugar production from 2200 to 2250 tons of sugar per day. Therefore, this permit will also revise Condition 2 (Section III, Subsection F) in existing Permit No. PSD-FL-272A accordingly.

REGULATORY CLASSIFICATION

Title III: The existing facility is a potential major source of hazardous air pollutants (HAP).

Title IV: The existing facility has no units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Requirements

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. **Permitting Authority:** The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. **Citation Formats:** Appendix A identifies the methods used to cite rules, regulations, and permits.
4. **General Conditions:** The permittee shall comply with the general conditions specified in Appendix B.
5. **Common Requirements:** Common regulatory requirements are specified in Appendix C.
6. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
7. **Construction and Expiration:** The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid for any of the following reasons: construction is not commenced within 18 months after issuance of this permit; construction is discontinued for a period of 18 months or more; or construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.; 40 CFR 52.21(r)(2); 40 CFR 51.166(j)(4)]
8. **New or Additional Conditions:** For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
9. **Relaxations of Restrictions on Pollutant Emitting Capacity.** If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
10. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rule 62-4.030 and Chapters 62-210 and 62-212, F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

11. **Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
029	<p>The new white sugar dryer will be a fluidized bed-type dryer/cooler with a rated capacity of 85 tons per hour of refined sugar. After wet refined sugar is centrifuged, the dryer will be used to drive off remaining moisture. Sugar with a moisture content of approximately 1.5% by weight will enter the dryer between 120° - 140° F and be suspended in a fluidized bed with jets of hot, conditioned air. A maximum of 11,000 pounds per hour of low pressure steam (12 psig) from the existing mill boilers will supply heat for the process. Sugar will exit the dryer with a moisture content of approximately 0.03% by weight and a temperature between 92° F - 102° F. The refined sugar is then transferred to the conditioning silos. No fuel will be fired and no other new equipment is being added.</p> <p>Particulate matter emissions from the dryer will be controlled by a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. Exhaust at 110° F will leave a stack approximately 78 feet above ground level with a volumetric flow rate of 96,000 acfm. The rectangular stack will be 7.0 feet by 6.0 feet. The scrubber pressure drop and scrubber water recirculation flow rate will be continuously monitored.</p>

{Permitting Note: The particulate matter emissions standards for the new dryer are established pursuant to Rule 62-212.400, F.A.C (BACT).}

EQUIPMENT

1. New White Sugar Dryer No. 2: The permittee is authorized to construct a new fluidized bed white sugar dryer/cooler (BMA or equivalent) with a rated capacity of 85 tons per hour. Jets of hot conditioned air will be used in the dryer to suspend sugar in a fluidized bed to drive off excess moisture. Low pressure steam will be used to heat the conditioned air; no fuel will be fired. [Design]
2. Air Pollution Control Equipment: To comply with the standards of this permit, the permittee shall install the following air pollution control equipment.
 - a. Cyclone Collectors: In accordance with the manufacturer's recommendations, the permittee shall install, operate, and maintain a set of four high efficiency cyclone collectors (Entoleter, LLC Model 6600 or equivalent) in parallel with a design removal efficiency of at least 99% of the particulate loading from the new white sugar dryer. The design control efficiency is based on the following inlet conditions: inlet temperature of 110° F; inlet flow rate of 105,000 acfm; inlet dust loading of 14 grains per dscf of inlet gas (11,760 lb/hour); and a pressure drop across the cyclone collectors of 6 inches of water column.
 - b. Wet Scrubber: In accordance with the manufacturer's recommendations, the permittee shall install, operate, and maintain a wet scrubber (Entoleter, LLC Centrifield Vortex Model 1500 or equivalent) with a design removal efficiency of at least 96% of the particulate loading from the new cyclone collectors. The design control efficiency is based on the following inlet conditions: inlet temperature of 113° F; inlet flow rate of 105,000 acfm; inlet dust loading of 0.14 grains per dscf of inlet gas (118 lb/hour); a scrubber water recirculation flow rate of 500 gpm; a scrubber make-up water flow rate of 12 gpm; and a pressure drop of 8 inches of water column.

The combined design removal efficiency of the two particulate control devices shall be no less than 99.96% based on the above conditions.

[Design; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

PERFORMANCE REQUIREMENTS

3. **Permitted Capacity:** The maximum design capacity of the new sugar dryer is 85 tons per hour of sugar. [Design; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
4. **Wet Scrubber:** The owner or operator shall maintain 3-hour block averages of the scrubber water recirculation rate (gpm) and pressure drop across the wet scrubber (inches of water column) above the 3-hour averages established during a satisfactory compliance test for particulate matter conducted at permitted capacity. If either monitored parameter drops below the specified level, the permittee shall investigate, take corrective actions to regain the specified operating level, and record the incident in a written log. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without taking corrective action may be considered circumvention of the air pollution control equipment. *{Permitting Note: For informational purposes, the nominal operating ranges are 500 gpm and 4 to 8 inches of water column.}* [Design; Rule 62-4.070(3), F.A.C.]

EMISSIONS STANDARDS

5. **Particulate Matter:** As determined by EPA Method 5 stack test, particulate matter emissions shall not exceed 0.005 grains per dscf and 4.2 pounds per hour based on the average of three test runs. [Design; Rule 62-212.400(BACT), F.A.C.]
6. **Visible Emissions:** Excluding water vapor, visible emissions from the wet scrubber stack shall not exceed 10% opacity. [Rule 62-212.400(BACT), F.A.C.]

TESTING REQUIREMENTS

7. **Compliance Stack Tests:** The permittee shall conduct an initial stack test to demonstrate compliance with the particulate matter emissions standards within 60 days after achieving the maximum sugar processing rate, but not later than 180 days after initial startup. The permittee shall also conduct subsequent stack tests to demonstrate compliance with the particulate matter emissions standards during the 12-month period prior to the expiration date of any air operation permit. Tests shall be conducted in accordance with EPA Method 5 (particulate emissions), EPA Methods 1 – 4 (as necessary to support EPA Method 5), and EPA Method 9 (visible emissions). The EPA test methods and procedures are specified in Appendix A of 40 CFR 60 and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. In accordance with Rule 62-297.310(2), F.A.C., all tests shall be conducted at permitted capacity. The Department may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. [Rules 62-204.800, 62-212.400(BACT) and 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8; 40 CFR 60, Appendix A]

MONITORING REQUIREMENTS

8. **Cyclone Collectors:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain a manometer (or equivalent) to monitor the pressure differential across each cyclone collector. *{Permitting Note: The design pressure differential for the cyclone collectors is 6 inches of water column. Although no periodic records of the pressure differential are required, the devices shall be properly maintained and functional to provide operational data for evaluating problems.}* [Rule 62-4.070(3), F.A.C.]
9. **Wet Scrubber Parameters:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain devices to continuously monitor and record the wet scrubber water

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

recirculation rate (gpm) and the pressure differential across the wet scrubber (inches of water column). Data shall also be reduced to 3-hour block averages. Records shall be maintained on site and made available upon request. [Design; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

RECORDS AND REPORTS

- 10. Stack Test Reports:** In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: sugar processing rate through the dryer (tons per hour); the scrubber water recirculation rate (gpm); and the pressure differential across the wet scrubber (inches of water column). In addition, the permittee shall record and report the pressure differential across each cyclone collector at the beginning and end of each test run. The stack test report shall clearly indicate the 3-hour averages of the wet scrubber water recirculation rate and pressure differential and that these operating parameters will be complied with based on a 3-hour block average. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Miscellaneous Particulate Sources (EU-015, 016, 018, 019, 020, 022, and 029)

This section of the permit addresses the following emissions units.

EU No.	Emissions Unit Description
015	VHP sugar dryer with baghouse (S-11)
016	White sugar dryer No. 1 with baghouse (S-10)
018	Vacuum Systems: Screening/distribution vacuum with baghouse (S-1); 100 lb bagging vacuum with baghouse (S-2); 5 lb bagging vacuum with baghouse (S-3)
019	Six conditioning silos with baghouses (S-7, S-8, and S-9)
020	Screening/distribution and powdered sugar/starch bins with baghouses (S-5 and S-6)
022	Packaging baghouse (S-4)
029	White sugar dryer No. 2 with wet scrubber (S-13)

MODIFIED CONDITION

Condition 2 (Section III, Subsection F) in Permit No. PSD-FL-272A is changed:

From:

2. **Production Restrictions:** No more than 2000 tons of refined sugar per day nor 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2200 tons of refined sugar per day nor 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Applicant Request; Rule 62-210.200 (Definitions - PTE), F.A.C.]

To:

2. **Production Restrictions:** No more than 2000 tons of refined sugar per day and no more than 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2250 tons of refined sugar per day and no more than 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Applicant Request; Rules 62-210.200 (PTE) and 62-212.400(2)(g), F.A.C., F.A.C.; Air Permit No. PSD-FL-346]

All other conditions in Permit No. PSD-FL-272A shall remain unchanged.

Filename: PSD-FL-346 Sugar Dryer - Final Permit

SECTION 4. APPENDICES

Contents

- Appendix A. Citation Formats
- Appendix B. General Conditions
- Appendix C. Common Requirements

SECTION 4. APPENDIX A

Citation Formats

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7 or §60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B

General Conditions

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (Yes);
 - b. Determination of Prevention of Significant Deterioration (Yes); and
 - c. Compliance with New Source Performance Standards (Not Applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

Common Requirements

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at this facility.}

Definitions

1. **Excess Emissions:** Emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions which occur during startup, shutdown, soot-blowing, load changing or malfunction. [Rule 62-210.200(106), F.A.C.]
2. **Shutdown:** The cessation of the operation of an emissions unit for any purpose. [Rule 62-210.200(231), F.A.C.]
3. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions. [Rule 62-210.200(246), F.A.C.]
4. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. [Rule 62-210.200(160), F.A.C.]

Emissions and Controls

5. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
6. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
7. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
8. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
9. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
10. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
11. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
12. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as confining, containing, covering, and/or applying water to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

13. **Required Number of Test Runs:** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three

SECTION 4. APPENDIX C

Common Requirements

complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

14. **Operating Rate During Testing:** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
15. **Calculation of Emission Rate:** For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
16. **Test Procedures:** Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. ***Required Sampling Time.*** Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. ***Minimum Sample Volume.*** Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. ***Calibration of Sampling Equipment.*** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
[Rule 62-297.310(4), F.A.C.]
17. **Determination of Process Variables**
 - a. ***Required Equipment.*** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. ***Accuracy of Equipment.*** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]
18. **Sampling Facilities:** The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
19. **Test Notification:** The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]

SECTION 4. APPENDIX C

Common Requirements

20. **Special Compliance Tests:** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
21. **Test Reports:** The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.
 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.
 13. Data related to the required calibration of the test equipment.
 14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.
 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

SECTION 4. APPENDIX C

Common Requirements

RECORDS AND REPORTS

22. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. Information recorded and stored as an electronic file shall be made available within at least three days of a request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
23. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]



Department of Environmental Protection

MAY 21 2001

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 15, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

William A. Raiola, Vice President
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Minor Revisions
Air Permit No. PSD-FL-272A
Boiler No. 4/Refinery Expansion
Palm Beach County, Florida

Re: U.S. Sugar's Clewiston Sugar Mill and Refinery
Boiler No. 4 and Refinery Expansion
Minor Revisions to Air Permit No. PSD-FL-272A

Dear Mr. Raiola:

On April 26, 2001, the Department received a request from Golder Associates on behalf of U.S. Sugar to make minor revisions to Air Permit No. PSD-FL-272A for boiler No. 4 at the Clewiston sugar mill and refinery. The Department disagrees that it is burdensome and impractical to sample and analyze the fuel oil for sulfur content prior to off-season operation. This condition was not changed. In response to the request, the Department corrected a typographical error on page 10 of the permit and made minor revisions to Appendix GCP regarding the startup and shutdown procedures. These revisions are considered minor and no public notice is required. The revisions are attached and can be inserted directly into the original permit.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.)

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the

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course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

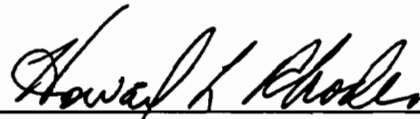
Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing

of a petition or a request for extension of time, this action will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5/18/01 to the person(s) listed:

Mr. William A. Raiola, USSC*
Mr. Dave Buff, Golder Associates ✓
Mr. Ron Blackburn, SD

Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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

Charlitta L. Hayes
(Clerk)

5/18/01
(Date)

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

A. EU 009 - Boiler No. 4

- a. **Startup and Shutdown:** The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation.
- b. **Steam Parameters:** The steam pressure (psig), steam temperature (°F), and steam production rate (pounds per hour) shall be continuously recorded with a chart recorder. *{Revised May 2001}*
- c. **Combustion Parameters:** The permittee shall record the oxygen and carbon monoxide contents of flue gas once normal operation is established after startup and at least once per hour of operation. Alternatively, the permittee may install an automated device to record these parameters.
- d. **Wet Scrubber Parameters:** The permittee shall record the following information once normal operation is established after startup and at least once every 3 hours: pressure drop across wet scrubber (inches of water column), scrubber spray nozzle pressure (psi), wet scrubber liquid flow rate (gpm). Alternatively, the permittee may install an automated device to record these parameters.
- e. **Oil Firing:** The permittee shall record the oil-firing rate (gallons) for each 3-hour block of operation. In addition, the permittee shall calculate and record the oil-firing rate (gallons) for each 24-hour block of operation. Oil firing rates may be observed and recorded by hand or automated monitoring equipment.
- f. **Oil Delivery:** For each fuel oil delivery, the permittee shall record and retain the following: the date, the gallons of fuel delivered, and a fuel oil analysis (including the heat content in mmbTU per gallon, the density in pounds per gallon, the sulfur content in percent by weight, and the name of the test method used). A certified analysis supplied by the fuel oil vendor is acceptable.
- g. **Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate, and maintain all monitoring equipment including steam flow meters, steam integrators, strip chart recorders, pressure gages, manometers, scrubber water flow meters, fuel oil flow meters, and all other monitoring devices used to demonstrate compliance with the conditions of this permit. Each device shall be calibrated at least annually. All calibrations and repairs shall be recorded as part of the Daily Operational Records.
- h. **Daily Summary:** For each day of operation, the permittee shall calculate and record the following by the end of the next workday.
 - Hours of operation for the day
 - Steam production rate: pounds per day and pounds per hour (daily average)
 - Heat input: mmBTU per day and mmBTU per hour (daily average)
 - Total oil fired for Boiler No. 4: gallons per day (as determined by data collected from the oil flow meter)

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

23. **Monthly Operations Summary:** To demonstrate compliance with the performance requirements of this permit, the permittee shall calculate and record the following within 10 calendar days of the end of the month.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

GOOD COMBUSTION PRACTICES

The following procedures are based upon U.S. Sugar's most recent submittal received by the Department in January of 2001.

Purpose of GCP Plan

The determination of Best Available Control Technology for CO, NO_x, and VOC emissions from Boiler No. 4 (EU-009) relied on "good combustion practices". The purpose of this document is to summarize the operational, maintenance, and monitoring procedures that will lead to the minimization of CO and VOC emissions and the optimization of NO_x emissions, consistent with good combustion practices.

Preparation for Operations

1. Prior to each harvest season, the boiler proper, its air ductwork, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Prior to each harvest season, all instruments for boiler operation and control (including oxygen and carbon monoxide process monitors) are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

Boiler Operation and Controls

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NO_x. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO and VOC Controls

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.
2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.

3. Process monitors will be installed to monitor the oxygen (O₂) content and the carbon monoxide (CO) content of the boiler flue gas. The instrument readouts will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the O₂ and CO flue gas process monitors for combustion control and to ensure sufficient excess air levels. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The oxygen process monitor will include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor will include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor will display both the instantaneous and the 1-hour block average. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions may include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator will summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained.

NOx Controls

NOx emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, the application of GCP to minimize CO and VOC emissions may result in increased NOx emissions. This is because factors that promote good combustion and result in lower CO and VOC emissions (such as higher excess air and higher combustion temperatures) typically result in higher NOx emissions. This is the nature of the combustion process for these boilers. Therefore, GCP to optimize NOx emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

Miscellaneous

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule: Fans, pumps, casing, ducting, and scrubber.
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)

STARTUP AND SHUTDOWN PROCEDURES (Revised May 2001)

U.S. Sugar submitted the following procedures in April of 2001 to supplement the original PSD application for this project.

During startup and shutdown of the boilers, excess CO, PM, NO_x, and VOC emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions shall be taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 4. The boiler room foreman and operating personnel shall receive proper training on emissions control procedures at least once per year.

Cold Startup

1. Turn on water valves to scrubber spray nozzles to start scrubber.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust, if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first. As the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil flow until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.
8. A cold startup is a startup after the boiler has been down for more than 4 or 5 hours. Typically, a cold startup will require 6 to 12 hours from the first fire to normal working pressure. There may be 10 cold startups per crop season (more or less) depending on excessive rain and mechanical breakdowns.

Hot Startup

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner. Continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.
7. A warm startup is a startup after the boiler has been down for less than 5 hours. Usually, the longer the boiler is down means a longer period will be needed for warm startup. Typically, a warm startup requires 1 to 5 hours depending on boiler operating conditions. There may be 5 cold startups per crop season (more or less) depending on mechanical breakdowns mill interruptions.

Shutdown

1. Stop fuel flow to the boiler. Reduce the forced draft, distributor air, overfire air, and induced forced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT**

In the Matter of an
Application for Permit by:

William A. Raiola, Vice President
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-010-AC
PSD Permit No. PSD-FL-272A
Boiler No. 4 and Refinery Expansion
Palm Beach County, Florida

Enclosed is Final Permit No. 0510003-010-AC (PSD-FL-272A). This permit authorizes U.S. Sugar Corporation to complete the installation of emissions units associated with refinery operation and finalizes the changes related to the Boiler No. 4 and refinery expansion. As noted in the Final Determination (attached), minor changes to the draft permit were made by the Department, mostly at the request of the applicant. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on

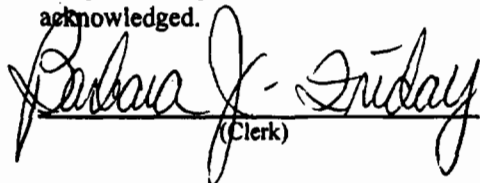
3/8/01 to the person(s) listed:

Mr. William A. Raiola, USSC*
Mr. Dave Buff, Golder Associates ✓
Mr. Phil Barbaccia, South District Office – DEP

Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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


(Clerk) 3/8/01
(Date)

MAR 12 2001

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Permit package on October 27, 2000 that modified operation of several Clewiston sugar mill boilers located at W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on December 27, 2000 and the Department received proof of publication on January 4, 2001. During the 30-day comment period, the Department received comments only from the applicant. The following summarizes the Department's response to each comment and any resulting revision.

APPLICANT'S COMMENTS AND REQUESTS

The Department received written comments from the applicant on November 15, 2000 and January 30, 2001 requesting minor changes. Responses and revisions are summarized below.

Cover Letter and Placard Page

Request: The applicant notes that Mr. Brinson has retired from U. S. Sugar and that Mr. William A. Raiola, Vice President, is now the authorized representative for the Clewiston mill. *Response:* The permit will be revised. ✓

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Request: 3. The applicant requests insertion of the word "net" after 1160 BTU in Footnote "b" of the table to clarify that this is the net BTU difference between the steam enthalpy and the feedwater enthalpy. *Response:* The clarification will be added. ✓

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Request: 6. The applicant requests changing the word "the" to "a" to clarify that a tank different than the tank currently used could be utilized in the future. *Response:* The clarification will be added. ✓

Request: 8. c. The applicant originally requested a lower scrubber flow rate based on previous compliance tests. The January 30th submittal withdrew this request. *Response:* No response required. ✓

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Request: 15. In accordance with a recent Consent Order with the South District Office, the applicant requested a permit revision that required additional VOC testing and perhaps a new VOC limit based on the testing and application of good combustion practices. *Response:* The Consent Order is a stand-alone agreement. The applicant may request revised emissions standards based on additional testing as a permit modification. It would not be sufficient to simply demonstrate that a unit can no longer comply with permitted emissions standards. A test report was received during the processing of this Final Permit indicating that the unit is capable of complying with the current VOC standards. No revision made.

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Request: 17. and 18. The applicant notes that many of the PSD permit conditions have already been met, such as testing. *Response:* The Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new "initial" tests are required as a result of this action. No revision was necessary. ok

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Request: 4. The applicant requested additional clarification to avoid burdensome record keeping and the deletion of steam production limits for Boiler Nos. 4 and 7 because they repetitive. *Response:* The Department ✓

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

added the following statement to clarify, “The steam production chart records are sufficient to demonstrate compliance with these requirements.” The limits will be retained because they specify critical parameters for the Air Quality Analysis, which was the basis of this permit modification.

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Request: 5. The applicant requested additional wording that would allow fuel oil with sulfur content of greater than 1.6%, if SO₂ testing when burning fuel oil demonstrates equivalent SO₂ emissions (due to removal of SO₂ in the boiler/scrubber system when burning fuel oil). The applicant also requests deletion of the fuel sulfur limits for Boiler Nos. 4 and 7 because they are repetitious and unnecessary. *Response:* At the appropriate time, the applicant may request changes to specific permit conditions through the modification process. The limits will be retained because they specify critical parameters for the Air Quality Analysis. No revision made.

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Request: 7.b(1). The applicant initially requested deletion of this condition. The January 30th submittal requested the wording be changed to, “Operation of Boiler No. 7 shall be operated to the greatest extent possible during the off-season, taking into account operating efficiency, steam demands, and boiler availability due to maintenance.” *Response:* Unlike the existing sugar mill boilers, Boiler No. 7 was originally permitted to provide steam to the new refinery during the off-season. U.S. Sugar performed an Air Quality Analysis to demonstrate that operation of existing mill boilers during the off-season as backup units to Boiler No. 7 would not have any adverse impacts. To satisfy modeling requirements, the applicant requested a lower sulfur limit on fuel oil for the off-season and a cap on steam production rates. For these reasons, Condition 7.b.(1) was included. To satisfy the applicant’s concerns (as agreed), the Department will clarify this condition to read, “During the off-season, Boiler No. 7 shall be operated as the primary unit to meet the steam demands of the refinery. As restricted by the conditions of this permit, other mill boilers may serve as backup units when Boiler No. 7 is down for maintenance, repair or during periods of unusually low steam demand.” ✓

Request: 10.a. The applicant expressed concern over calculating the “24-hour average” steam production rate based on actual hours rather than 24-hours. *Response:* The intent of this condition is to demonstrate compliance with Condition No. 7 of the same section. To clarify, the condition will be revised to, “For each 24-hour block of operation, the permittee shall record the total steam production rates (pounds, each) for Boiler Nos. 4 and 7 to demonstrate compliance with Condition No. 7 of this section. ~~The permittee shall calculate and record the 24-hour average steam production rate for these units based on the actual operating hours during the 24-hour period.~~” ✓

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Request: 11. The applicant requests that this condition be clarified with the following change, “From this data, the permittee shall calculate and record the ~~combined~~ oil firing rates (gallons) for each 3-hour and each 24-hour block of ~~combined~~ operation for Boiler Nos. 1 – 4.” *Response:* Clarification will be added.

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Request: 1,2. The applicant requests the condition to specifically identify that Subpart Kb applies only to EUs 024 and 026. *Response:* The Department will include the following sentence, “The following conditions apply to EUs 024 and 026:” ✓

Request: 5. The applicant requests replacement of the word “facility” with the word “tank” at the end of this condition. *Response:* Permit will be revised. ✓

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

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Request: 5. The applicant requests that the last four sentences of this condition (related to operations outside the specified range) be added to Condition No. 4 for the afterburner temperature of the GCRF. *Response:* The afterburner temperature is a “set” condition for the control equipment. The permit condition addresses short periods of operation below this level. This was not part of the modification under review. No revision made. ?

Request: 9. The applicant notes that certain conditions for the GCRF (such as testing) have already been met. *Response:* Again, the Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new “initial” tests are required as a result of this action. No revision made. ✓

Request: 11. The applicant requests rewording this condition to reflect the actual rule language, which describes production rates during compliance testing and provisions if testing is not performed within 90% of maximum. *Response:* Section III.G. of the permit does include the applicable rule language. The condition is clarifying that testing should be performed within 90% of the production capacity of the GCRF. No revision made. OK

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Request: The applicant notes that construction has been delayed for the three sugar silos (S-14, S-14, and S-15) and the powdered sugar/starch bins (S-16). All emissions units are small controlled sources of particulate matter totaling 1.33 TPY. A two-year extension is requested. *Response:* The Department specified an expiration date of December 31, 2002 to allow for the delayed construction. The project description was also revised to reflect remaining construction activities. ✓

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Request: 6. The applicant notes that certain conditions for the particulate matter sources (such as testing) have already been met. *Response:* Again, the Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new “initial” tests are required as a result of this action. No revision made. OK

OTHER CHANGES MADE BY THE DEPARTMENT

Page 1 of 25

During the processing of the Final Permit for this project, the applicant noted that vacuum pan No. 7 remained under construction. The original air construction permit issued in 1996 has an expiration date of October 25, 2001. Although vacuum pan No. 7 was purchased and received in 1997, it was not immediately installed due to a change in sugar market conditions. The applicant now intends to install this equipment and requests that this activity be clarified in the permit. Other than small amounts of isopropyl alcohol, no emissions are directly associated with this unit. The Department included installation of vacuum pan No. 7 in the project description on Page 1 with the remaining construction activities.

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During the processing of the Final Permit for this project, the applicant submitted CO and VOC test data, which was required by original Permit No. PSD-FL-272. Based on the test data and the applicant’s proposal, the Department is required to reopen the PSD permit and establish process parameters for the flue gas oxygen content and CO concentration. The Department and applicant agreed to include such parameters into this final permit. On page 7, Specific Condition No. 9 was revised to include an alarm set point of 1.5% for the flue gas

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

oxygen content and 3000 ppm for the flue gas CO concentration, both based on a 1-hour block average. Minor revisions were also made to Appendix GCP (Good Combustion Practices).

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Section III.C., Description for Emissions Unit 025: Based on the latest response by the applicant, the Department corrected the volume of the storage tank serving Boiler Nos. 1-3 from 600,000 gallons to 400,000 gallons.

CONCLUSION

The Department considers the revisions to be minor. The final action of the Department is to issue the permit with the changes described above.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:
William A. Raiola, Vice President

Permit No.	0510003-010-AC
PSD No.	PSD-FL-272A
Project:	Boiler No 4 and Refinery Expansion, Revised
SIC No.	2061, 2062
Expires:	December 31, 2002

PROJECT AND LOCATION

This permit authorizes the United States Sugar Corporation to modify operations at its existing sugar mill and refinery. Specifically, the permit allows increased operation of Boiler No. 4 and the existing refinery operation. The only new construction authorized by this permit the installation of three new sugar conditioning silos (emissions points S-14, S-14, and S-15 of EU 019), the installation of additional powdered sugar/starch silos (emissions point S-16 of EU-020), and the installation of vacuum pan No. 7. The revised permit includes new conditions that reflect the air quality analysis based on the ISC PRIME model.

This facility is located at W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The UTM coordinates are Zone 17, 506.1 km E, and 2956.9 km N.

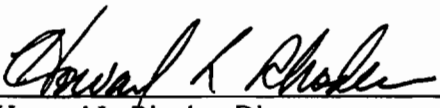
STATEMENT OF BASIS

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct and modify the emissions units in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

APPENDICES

The attached appendices are a part of this permit:

Appendix A	Terminology
Appendix BD	Summary of Previous BACT Determination
Appendix GC	General Permit Conditions
Appendix GCP	Good Combustion Practices Plan


Howard L. Rhodes, Director
Division of Air Resources Management

Date: 3/7/01

**PSD AIR CONSTRUCTION PERMIT
SECTION I. FACILITY INFORMATION**

FACILITY DESCRIPTION

This facility consists of an existing sugar mill and refinery. Sugarcane is harvested from nearby fields and transported to the mill by train or truck. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze the juice from the cane. The cane juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. The primary air pollution sources in the mill are the bagasse/oil-fired Boilers Nos. 1 through 4 with wet scrubbers for particulate matter control and the bagasse/oil-fired Boiler No. 7 with an electrostatic precipitator to control particulate matter. Air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with duct collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

PROJECT DETAILS

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	Bagasse Boiler No. 1 with wet scrubber (255,000 pounds of steam per hour)
002	Bagasse Boiler No. 2 with wet scrubber (230,000 pounds of steam per hour)
003	Bagasse Boiler No. 3 with wet scrubber (130,000 pounds of steam per hour)
004	Bagasse Boiler No. 5 (inactive, permanently shut down)
005	Bagasse Boiler No. 6 (inactive, permanently shut down)
009	Bagasse Boiler No. 4 with wet scrubber (300,000 pounds of steam per hour)
014	Bagasse Boiler No. 7 with electrostatic precipitator (385,000 pounds of steam per hour)
015	VHP sugar dryer with baghouse
016	White sugar dryer with baghouse
017	Granular carbon regenerative furnace with afterburner and wet scrubber
018	Three vacuum pickup systems, each controlled with a baghouse
019	Six conditioning silos, each controlled with a baghouse
020	Screening/distribution and sugar/starch bins each controlled with baghouses
021	Alcohol emissions
022	Packaging dust collector
* 023	Two propane-fired sock dryers
024	NSPS fuel storage tank for Boiler No. 4
025	Common fuel storage tank for Boiler Nos. 1 - 3
026	NSPS fuel storage tank for Boiler No. 7

Project No. 0510003-009-AC (Permit No. PSD-FL-272): For the original project, net emissions increases of CO, NOx, PM/PM10, SAM, SO2, and VOC were significant and the permit established emissions standards for these pollutants based on the Best Available Control Technology. Permit issuance was based on an Air Quality Analysis with ISCST3 modeling, increased stack heights for Boiler Nos. 1 – 3, and lower sulfur contents for Boiler Nos. 1 – 3. However, the permit allowed the facility to regain the higher sulfur content oil for use in Boiler Nos. 1 – 3 if a revised Air Quality Analysis demonstrated compliance with the AAQS and PSD increments.

Project No. 0510003-010-AC (Permit No. PSD-FL-272A): The permittee raised the stacks of Boiler Nos. 1-3 to 213 feet. A revised Air Quality Analysis based on the ISC PRIME model resolved potential adverse ambient

**PSD AIR CONSTRUCTION PERMIT
SECTION I. FACILITY INFORMATION**

impacts and demonstrated compliance with the AAQS and PSD increments. This model was able to evaluate ambient impact contributions resulting from downwash from each stack. EPA Region 4 approved the non-guideline model for use with this project. Although Boiler Nos. 1 - 3 regain the use of fuel oil containing no more than 2.5% sulfur by weight, additional constraints were used in the analysis, which are included as conditions in this permit.

REGULATORY CLASSIFICATION

HAPs: Based on the most recent information for bagasse-fired boilers, this facility is a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is not subject to the acid rain provisions of the Clean Air Act (Title IV).

Title V Major Source: This facility is a Title V major source of air pollution because potential emissions of at least one regulated criteria air pollutant, such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), or volatile organic compounds (VOC) exceeds 100 tons per year.

PSD Major Source: This facility is a PSD major source of air pollution because potential emissions are greater than 250 tons per year for at least one criteria pollutant, in accordance with Rule 62-212.400, Prevention of Significant Deterioration (PSD) of Air Quality. Therefore, each modification to this facility resulting in emissions increases greater than the Significant Emissions Rates specified in Table 62-212.400-2 also requires a PSD review and Best Available Control Technology (BACT) determination.

NSPS Sources: Fuel oil storage tanks (Emissions Unit Nos. 024 and 026) are subject to regulation under the New Source Performance Standards of 40 CFR 60, Subpart Kb.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit and are on file with the Department. They are specifically related to this permitting action.

- EPA Region 4's approval on November 4, 1999 of the ISC Prime model for use with this project.
- Initial permit application received June 25, 1999, associated correspondence to make complete, and final permit issued on November 22, 1999.
- Permit application for revision received January 6, 2000 and associated correspondence to make complete.

PSD AIR CONSTRUCTION PERMIT
SECTION II. ADMINISTRATIVE PERMITTING REQUIREMENTS

1. **Permitting Authorities:** All documents related to applications for permits to construct or modify emissions units requiring a PSD applicability review and determination of BACT shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number 850/488-0114. Minor modifications and Title V operating permit applications shall be submitted to the South District Office, Florida Department of Environmental Protection at 2295 Victoria Avenue, Suite 364 in Fort Myers, Florida 33902-2549 and phone number (941) 332-6975.
2. **Compliance Authorities:** All documents related to reports, tests, and notifications shall be submitted to the South District Office, Florida Department of Environmental Protection at 2295 Victoria Avenue, Suite 364 in Fort Myers, Florida 33902-2549 and phone number (941) 332-6975.
3. **Terminology:** The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. *Appendix A* lists frequently used abbreviations and explains the format used to cite rules and regulations referenced in this permit.
4. **General Conditions:** The permittee is subject to and shall operate under the attached General Conditions listed in *Appendix GC* of this permit. General conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
5. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.). The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. **New or Additional Conditions:** Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. **Expiration:** For good cause, the permittee may request that this construction permit be extended. Such a request shall be submitted at least 60 days before the expiration of the permit to the Department's Bureau of Air Regulation. [Rules 62-210.300(1), 62-4.080, and 62-4.210, F.A.C.]
8. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit must be obtained prior to the beginning of construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
9. **Operation Permit Required:** This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. In accordance with Chapter 62-213, F.A.C, the permittee shall apply for a Title V operation permit on the appropriate application form with compliance test results and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting and Compliance Authorities. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

A. EU 009 - Boiler No. 4

This portion of the permit addresses the following emissions unit.

EU No.	Emissions Unit Description
009	<p>Boiler No. 4: A traveling grate boiler manufactured by Foster Wheeler capable of producing a maximum of 300,000 pounds of steam per hour at 750° F and 600 psig. The unit has two burners with two oil guns each and the following restricted maximum heat inputs:</p> <p><i>Bagasse Firing:</i> 633 mmBTU per hour (This is equivalent to producing 300,000 pounds of steam per hour when firing 88 tons of wet bagasse per hour, assuming a heat content of 3600 BTU per pound of wet bagasse. Typically wet bagasse contains 50-55% moisture and less than 0.1% sulfur by weight.)</p> <p><i>Bagasse With Maximum Oil Firing:</i> 530 mmBTU per hour (This is 225 mmBTU per hour from firing a maximum of 1500 gallons of oil per hour and 305 mmBTU per hour from firing 42.4 tons of wet bagasse to produce 300,000 pounds of steam per hour.)</p> <p>Particulate matter emissions are controlled by a Type D, Size 200 Joy Turbulaire wet impingement scrubber. A nominal 250 to 500 gallons per minute of water is supplied to the spray nozzles at approximately 50 psig. The differential pressure drop across the wet scrubber is maintained between 8 and 11 inches of water column. Exhaust gases exit the wet scrubber at an average flow rate of 281,000 ACFM at 160° F. The stack is 150 feet high (GEP stack height is 225 feet high).</p>

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

- BACT Determinations:** Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfuric acid mist (SAM), sulfur dioxide (SO2), and volatile organic compounds (VOC). In addition, this emissions unit is subject to Rule 62-296.410, F.A.C. which regulates visible emissions and particulate matter emissions from carbonaceous fuel fired equipment.

PERFORMANCE RESTRICTIONS

- Hours of Operation:** The hours of operation for this unit are not restricted (8,760 hours per year). [Rule 62-210.200, F.A.C., Definitions - PTE]
- Permitted Capacity:** Steam production, heat input, and bagasse firing shall not exceed the following limits.

Averaging Period	Steam Pressure ^a	Steam Temperature ^a	Steam Production (lb / hour)	Heat Input ^b (mmBTU / hour)	Wet Bagasse Firing ^b (tons / hour)
1-hour	600 psig	750° F	300,000	633	88
24-hour	600 psig	750° F	285,000	600	83

^a Steam temperature and pressure are design parameters. Changes to these parameters resulting from boiler aging or modification shall be reported to the Department and may require a permit modification.

^b Based on: 55% thermal efficiency of the boiler when firing bagasse; wet bagasse containing 55% moisture and a heat content of 3600 BTU/lb; and 1160 BTU (net) per pound of steam at 600 psig and 750° F with standard feed water conditions of 900 psig and 250° F. ✓

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No more than 400,000 tons of bagasse shall be fired during any consecutive 12 months. In addition, the total heat input to this boiler shall not exceed 2,880,000 mmBTU during any consecutive 12 months. Compliance with the steam limits shall be determined by continuous monitoring of the steam temperature, steam pressure, and steam production rate. The heat input and bagasse consumption limits shall be calculated and recorded in accordance with the record keeping requirements of this permit. [Rule 62-210.200, F.A.C., Definitions - PTE]

4. **Operating Procedures:** The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all boiler operators and supervisors shall be properly trained to operate and maintain the bagasse boiler and pollution control equipment in accordance with the guidelines and procedures established by each equipment manufacturer. The training shall include all "Good Combustion Practices" including those specified in *Appendix GCP* of this permit. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400 (BACT), F.A.C.]
5. **Startup/Shutdown:** During startup and shutdown of this boiler, the operators shall take all reasonable precautions to prevent and minimize the magnitude and duration of any excess emissions. *Appendix GCP* identifies the Good Combustion Practices for this boiler including the permittee's current startup and shutdown procedure. [Rule 62-210.700(1), F.A.C.]
6. **Fuel Oil:** Any fuel oil fired in Boiler No. 4 shall be No. 6 fuel oil (or a superior grade) containing no more than 0.70% sulfur by weight from a dedicated storage tank. The sulfur content of the fuel shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. Boiler No. 4 shall fire no more than 1500 gallons in any hour and no more than 500,000 gallons in any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. Compliance with these limits shall be determined by the monitoring and record keeping requirements of this permit. [Applicant Request, Rule 62-210.200 (Definitions - PTE) and Rule 62-212.400 (BACT), F.A.C.] ✓
7. **Common Conditions:** See Section III.B., "Common Conditions for Boiler Nos. 1 - 7" for other performance restrictions.

CONTROL EQUIPMENT AND TECHNIQUES

8. **Wet Scrubber:** To control emissions of particulate matter, the permittee shall install, operate, and maintain a Type D, Size 200 Joy Turbulaire wet impingement scrubber. To ensure the annular throttling gap is being properly maintained, this system shall provide constant make-up water overflow to the scrubber as indicated by the weir box. The wet scrubber shall also be equipped with the following monitoring equipment.
 - a. A **manometer** (or equivalent) shall be installed to measure the scrubber pressure drop in inches of water column. The pressure drop across the scrubber shall be maintained between 8 and 11 inches of water column.
 - b. A **pressure gage** shall be installed to monitor the water supply pressure to the scrubber nozzles. This pressure shall be maintained between 40 and 55 psi.
 - c. A **flow meter** shall be installed to measure the water flow rate to the scrubber spray nozzles. This flow rate shall be maintained above 375 gallons per minute, based on a 3-hour block average. ✓

The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations. The permittee shall read and record each scrubber parameter once

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normal operations have been established after startup and at least once every 3 hours. Should any monitored parameter fall outside the specified operating range, the permittee shall investigate the cause and take corrective action to regain operation within the specified range. In addition, the permittee shall begin reading and recording all monitored parameters at 30-minute intervals until successive readings indicate operation within the specified range. The permittee may elect to install an automated recorder to satisfy the recording requirements. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400 (BACT), F.A.C.]

9. **Good Combustion Practices:** The boiler operator shall use the Good Combustion Practices (GCPs) defined in *Appendix GCP* to minimize emissions of CO, NO_x, PM/PM₁₀ and VOC from this boiler. As a critical part of the GCPs, the permittee shall install, calibrate, operate, and maintain process monitors to indicate the oxygen and carbon monoxide content of the exhaust flue gas in the boiler furnace. The oxygen process monitor shall include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. It shall display both the instantaneous and the 1-hour block average of the flue gas oxygen content (in percent oxygen). The CO process monitor shall include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. It shall display both the instantaneous and the 1-hour block average of the flue gas CO concentration (in ppm). Readouts of these process monitors shall be provided in the boiler control room. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. [Corrective actions include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator shall summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained. It is noted that the monitored flue gas carbon monoxide content is for the purpose of determining efficient combustion and may not be representative of the actual CO emissions from the stack. Operation outside of the specified operating range for either monitored parameter is not a violation of this permit, in and of itself. However, continued or frequent operation outside of the specified operating range for either monitored parameter without corrective action may be considered circumvention of "good combustion practices". [Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

EMISSION LIMITING STANDARDS

10. **CO Standard:** Carbon monoxide emissions shall not exceed 6.5 pounds per mmBTU of total heat input based on a 3-hour test average as determined by EPA Method 10. Emissions performance testing for CO and NO_x shall be conducted concurrently. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
11. **NO_x Standard:** Nitrogen oxide emissions shall not exceed 0.20 pounds per mmBTU of heat input from bagasse firing based on a 3-hour test average as determined by EPA Method 7 or 7E. Emissions performance testing for CO and NO_x shall be conducted concurrently. [Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
12. **PM/PM₁₀:** Particulate matter emissions shall not exceed 0.15 pounds per mmBTU of heat input from bagasse firing nor 0.10 pounds per mmBTU of heat input from oil firing based on a 3-run test average as

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determined by EPA Method 5. Compliance when firing both fuels shall be determined by prorating the emissions standards based on the heat input from each fuel. [Applicant Request; Rules 62-296.410(2)(b)2. and 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]

13. **Visible Emissions:** Visible emissions from the boiler stack shall not exceed 20% opacity except for one, 2-minute period per hour of up to 40% opacity as determined by DEP Method 9. [Applicant Request; Rules 62-296.410(2)(b)1. and 62-212.400 (BACT), F.A.C.]
14. **SO₂ Standard:** Emissions of sulfur dioxide shall not exceed 0.06 pounds per mmBTU of heat input from bagasse firing based on a 3-run test average as determined by EPA Methods 6, 6C, or 8. This standard shall also serve as a surrogate for sulfuric acid mist (SAM) emissions, which are estimated to be 0.01 pounds per mmBTU of heat input from bagasse firing as determined by EPA Method 8. Emissions of SO₂ and SAM from fuel oil firing are limited by the sulfur content restrictions specified by this permit. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
15. **VOC Standard:** Emissions of regulated volatile organic compounds shall not exceed 0.50 pounds (as propane) per mmBTU of total heat input based on a 3-run test average as determined by EPA Method 18 and EPA Method 25A, modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector. Total VOC emissions shall be determined by EPA Method 25A and reported in terms of pounds per mmBTU as propane. EPA Method 18 shall be used to determine emissions of methane and reported in terms of pounds per mmBTU as propane. Emissions of regulated VOC shall be defined as the difference between the total VOC emissions and methane emissions reported in terms of pounds per mmBTU as propane. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A; and ASP No. 96-H-01]

PERFORMANCE TESTING REQUIREMENTS

16. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - a. **EPA Method 5**, "Determination of Particulate Emissions from Stationary Sources".
 - b. **EPA Method 6 or 6C**, "Determination of Sulfur Dioxide Emissions from Stationary Sources".
 - c. **EPA Method 7 or 7E**, "Determination of Nitrogen Oxide Emissions from Stationary Sources".
 - d. **EPA Method 8**, "Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources".
 - e. **DEP Method 9**, "Visual Determination of the Opacity of Emissions from Stationary Sources".
 - f. **EPA Method 10**, "Determination of Carbon Monoxide Emissions from Stationary Sources". All CO tests shall be conducted concurrently with NO_x emissions tests.
 - g. **EPA Methods 18 and 25A**, "Determination of Volatile Organic Concentrations". This method may be modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector.
 - h. **ASME Boiler Efficiency Short Form Method**, "Boiler Thermal Efficiency Test Method". (This test shall demonstrate, in part, adherence to the maintenance provisions of the Good Combustion Practices Plan.)

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During each SO₂ performance test, the permittee shall sample and analyze the bagasse fuel for sulfur content. The sulfur content shall be used to calculate the potential uncontrolled SO₂ emissions as well as the control efficiency during the test. This information shall be submitted in the test report.

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

17. **Initial Tests Required:** Initial compliance with the allowable emission standards specified in this permit shall be determined within 90 days after issuance of this final permit. Initial tests for each emission standard shall be conducted for CO, NO_x, PM/PM₁₀, SO₂, VOC, visible emissions, and the boiler thermal efficiency. In addition, an initial test shall be conducted for SAM to validate the emissions estimate. If initial SAM testing validates the estimated emissions, compliance for SAM shall be assumed as long as the boiler remains in compliance with the SO₂ standards. If initial SAM testing indicates higher emissions than estimated, the Department shall require additional testing. [Rule 62-297.310(7)(a)1., F.A.C.]
18. **Annual Performance Tests:** During each federal fiscal year (October 1st to September 30th), the permittee shall conduct annual performance tests for CO, NO_x, PM, VOC, and visible emissions to demonstrate compliance with the emissions standards specified in this permit. If the initial SO₂ performance test indicates SO₂ emissions are greater than 0.03 lb/mmBTU of heat input, the permittee shall conduct an annual performance test to demonstrate compliance with the SO₂ emissions standard. If the initial boiler thermal efficiency test, indicates an efficiency of less than 50%, the permittee shall conduct an annual test. [Rules 62-212.400 (BACT), 62-4.070(3), and 62-297.310(7)(a)4., F.A.C.]
19. **Tests Prior to Renewal:** During the federal fiscal year (October 1st to September 30th) prior to renewal of the air operation permit, the permittee shall conduct emissions performance tests for CO, NO_x, PM, SO₂, VOC, visible emissions and boiler thermal efficiency to demonstrate compliance with the emissions standards and conditions specified in this permit. If the boiler thermal efficiency test, indicates an efficiency of less than 50%, the permittee shall conduct annual tests. If maintenance and repair result in regaining a boiler thermal efficiency of 50% or more, testing may revert back to the federal fiscal year prior to renewal. [Rules 62-212.400 (BACT), 62-4.070(3), F.A.C.]
20. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the boiler or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]
21. **Monitoring of Test Parameters:** During any required test, the permittee shall monitor and record the scrubber pressure drop, the scrubber water supply line pressure, the scrubber water flow rate, the flue gas oxygen content, and the flue gas carbon monoxide content at 15 minute intervals. The permittee shall monitor and record the steam production rate, steam temperature, steam pressure, feed water flow rate, feed water temperature, feed water pressure, and oil flow rate and calculate and record the bagasse consumption rate and the heat input for each run. [Rule 62-297.310(5), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

22. **Daily Operational Records:** To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.

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- a. **Startup and Shutdown:** The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation.
- b. **Steam Parameters:** The steam ^{pressure} ~~temperature~~ (psig), steam temperature (°F), and steam production rate (pounds per hour) shall be continuously recorded with a chart recorder.
- c. **Combustion Parameters:** The permittee shall record the oxygen and carbon monoxide contents of flue gas once normal operation is established after startup and at least once per hour of operation. Alternatively, the permittee may install an automated device to record these parameters.
- d. **Wet Scrubber Parameters:** The permittee shall record the following information once normal operation is established after startup and at least once every 3 hours: pressure drop across wet scrubber (inches of water column), scrubber spray nozzle pressure (psi), wet scrubber liquid flow rate (gpm). Alternatively, the permittee may install an automated device to record these parameters.
- e. **Oil Firing:** The permittee shall record the oil-firing rate (gallons) for each 3-hour block of operation. In addition, the permittee shall calculate and record the oil-firing rate (gallons) for each 24-hour block of operation. Oil firing rates may be observed and recorded by hand or automated monitoring equipment.
- f. **Oil Delivery:** For each fuel oil delivery, the permittee shall record and retain the following: the date, the gallons of fuel delivered, and a fuel oil analysis (including the heat content in mmBTU per gallon, the density in pounds per gallon, the sulfur content in percent by weight, and the name of the test method used). A certified analysis supplied by the fuel oil vendor is acceptable.
- g. **Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate, and maintain all monitoring equipment including steam flow meters, steam integrators, strip chart recorders, pressure gages, manometers, scrubber water flow meters, fuel oil flow meters, and all other monitoring devices used to demonstrate compliance with the conditions of this permit. Each device shall be calibrated at least annually. All calibrations and repairs shall be recorded as part of the Daily Operational Records.
- h. **Daily Summary:** For each day of operation, the permittee shall calculate and record the following by the end of the next workday.
 - Hours of operation for the day
 - Steam production rate: pounds per day and pounds per hour (daily average)
 - Heat input: mmBTU per day and mmBTU per hour (daily average)
 - Total oil fired for Boiler No. 4: gallons per day (as determined by data collected from the oil flow meter)

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

23. **Monthly Operations Summary:** To demonstrate compliance with the performance requirements of this permit, the permittee shall calculate and record the following within 10 calendar days of the end of the month.

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- Hours of operation for the month
- Steam production rate: pounds per month
- Heat input: mmbTU per month, mmbTU per consecutive 12 months
- Wet bagasse consumption rate: tons per month and tons per consecutive 12 months
- Total oil fired for Boiler No. 4: gallons per month and gallons per consecutive 12 months
- For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for the month.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. If recorded data indicates operation outside of the specified permit limits for steam production, heat input, wet bagasse consumption, or the oil firing rates, then the permittee shall submit a written notification and summary to the Compliance Authorities within ten (10) calendar days of recording the data. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
001	Bagasse Boiler No. 1 with wet scrubber (255,000 pounds of steam per hour)
002	Bagasse Boiler No. 2 with wet scrubber (230,000 pounds of steam per hour)
003	Bagasse Boiler No. 3 with wet scrubber (130,000 pounds of steam per hour)
004	Bagasse Boiler No. 5 (inactive, permanently shut down)
005	Bagasse Boiler No. 6 (inactive, permanently shut down)
009	Bagasse Boiler No. 4 with wet scrubber (300,000 pounds of steam per hour)
014	Bagasse Boiler No. 7 with electrostatic precipitator (385,000 pounds of steam per hour)

The PSD permit for Boiler No. 4 (PSD-FL-272A) was issued based on an Air Quality Analysis using the ISC PRIME model that contained several operational constraints on existing emissions units. These constraints are now enforceable conditions of the permit and are in addition to any limits imposed by other valid permits. Modification of these constraints would require modification of the PSD permit and a new Air Quality Analysis.

PERFORMANCE RESTRICTIONS

1. **Permanent Shutdown:** Boiler Nos. 5 and 6 shall remain permanently shut down and rendered incapable of operation. These units are no longer available as "standby" units. Any proposed future operation of either boiler would require a preconstruction review permit as a "new" unit. [Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
2. **Modified Stack Heights:** The stacks for Boiler Nos. 1, 2, and 3 shall be maintained at a minimum of 213 feet in height. [Design, Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
3. **Crop Season:** For this facility, the sugarcane crop season is defined as October through April and the off-season is defined as May through September. [Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
4. **Capacities:** For each boiler, the maximum 1-hour operating capacities shall not exceed:
 - a. **Boiler No. 1:** 255,000 pounds of steam per hour, 495 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - b. **Boiler No. 2:** 230,000 pounds of steam per hour, 447 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - c. **Boiler No. 3:** 130,000 pounds of steam per hour, 265 mmBTU per hour of total heat input, and 900 gallons of oil per hour
 - d. **Boiler No. 4:** 300,000 pounds of steam per hour, 633 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - e. **Boiler No. 7:** 385,000 pounds of steam per hour, 812 mmBTU per hour of total heat input, and 1839 gallons of oil per hour

← Asked for 3-hr averages

{Permitting Note: No additional record keeping requirements are imposed by these conditions. The steam production chart records are sufficient to demonstrate compliance with these requirements.} Good

[Design, Supporting Air Quality Analysis for PSD-FL-272A]

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

5. Fuel Oil Sulfur Contents

- a. **Boiler Nos. 1 - 3, Crop Season:** From October through April of each year, any fuel oil fired in Boiler Nos. 1 - 3 shall contain no more than 2.50% sulfur by weight.
- b. **Boiler Nos. 1 - 3, Off-Season:** From May through September of each year, any fuel oil fired in Boiler Nos. 1 - 3 shall contain no more than 1.60% sulfur by weight. In April of each year, a composite sample from the common tank shall be taken and analyzed for the sulfur content. Within 5 days of obtaining the results, a report of the fuel sulfur content shall be submitted to the Compliance Authority. If the sulfur content is higher than 1.60% sulfur by weight, the permittee shall purchase additional oil to blend down to the permit limit before any fuel from the common tank is authorized for firing during the off-season. An additional composite sample shall be taken from the common tank after blending and analyzed for the fuel sulfur content. Within 5 days of obtaining the results, a report of the fuel sulfur content shall be submitted to the Compliance Authority. It is a violation of this permit to fire fuel from the common tank without filing a report with the Compliance Authority that demonstrates compliance with the lower fuel sulfur limit. Thereafter, only fuel oil containing no more than 1.60% sulfur by weight shall be purchased and added to the common tank during the off-season. It is the permittee's responsibility to appropriately plan for and stage fuel purchases to comply with this condition. *problem here*
- c. **Boiler No. 4:** Any fuel oil fired in Boiler No. 4 shall contain no more than 0.70% sulfur by weight.
- d. **Boiler No. 7:** Any distillate oil fired in Boiler No. 7 shall contain no more than 0.05% sulfur by weight.

The permittee shall maintain fuel records that indicate compliance with the above conditions for each fuel oil purchase at each tank. The sulfur content shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. For each shipment, a certified analysis supplied by the fuel oil vendor is sufficient to demonstrate compliance.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

6. Fuel Oil Consumption

- a. **Boiler Nos. 1 - 4, Crop Season:** From October through April of each year, the total fuel oil consumption for Boiler Nos. 1 - 4 shall not exceed 16,200 gallons during any 3-hour period and 88,800 gallons during any 24-hour period.
- b. **Boiler Nos. 1 - 4, Off-Season:** From May through September of each year, the total fuel oil consumption for Boiler Nos. 1 - 4 shall not exceed 11,700 gallons during any 3-hour period and 54,000 gallons during any 24-hour period.

The permittee shall install, calibrate, operate, and maintain individual fuel oil flow meters with integrators.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

7. Steam Production

- a. **Crop Season and Off-Season**
(1) Boiler No. 4 shall not produce more than 6,840,000 pounds of steam during any 24-hour period.
(2) Boiler No. 7 shall not produce more than 8,400,000 pounds of steam during any 24-hour period.

285,000 lb/hr

350,000 lb/hr

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

b. Off-Season (May through September)

- (1) During the off-season, Boiler No. 7 shall be operated as the primary unit to meet the steam demands of the refinery. As restricted by the conditions of this permit, other mill boilers may serve as backup units when Boiler No. 7 is down for maintenance, repair or during periods of unusually low steam demand. ✓
- (2) For Boiler Nos. 1 - 4, no more than three of these boilers shall operate simultaneously.
- (3) For Boiler Nos. 1 - 4, the total steam production shall not exceed 1,845,000 pounds of steam during any 3-hour period.
615,000 lb/hr
- (4) For Boiler Nos. 1 - 4, the total steam production shall not exceed 10,800,000 pounds of steam during any 24-hour period.
450,000 lb/hr

The permittee shall install, calibrate, operate, and maintain equipment to continuously record the steam production rates. The permittee shall also install, calibrate, operate, and maintain a steam flow integrator to record the accumulated steam flow rate.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

8. **Modifications:** A request to modify any of these conditions shall be accompanied by a revised Air Quality Analysis that demonstrates compliance with the Ambient Air Quality Standards and PSD increments for the revised conditions.

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

PERFORMANCE TESTING

9. **SO₂ Tests:** To validate the SO₂ emission factor for Boiler Nos. 1 - 3, the permittee shall conduct emissions performance tests in accordance with EPA Method 6 or 6C for at least one of these boilers when firing only bagasse. The initial test shall be conducted between October 1, 2000 and February 1, 2001. Thereafter, at least one of these boilers shall be tested within the 12-month period prior to renewal of the air operation permit. Tests need not be conducted on the same boiler. Based on the results of the performance tests, the Compliance Authority may require additional testing or an additional Air Quality Analysis.

{Permitting Note: The expected emission factor is 0.06 pounds of SO₂ per mmBTU when firing only bagasse. This is not a permit limit for Boiler Nos. 1 - 3. Performance tests, notifications, reports, etc., are subject to the requirements listed in Section III.G. of this permit.}

[Supporting Air Quality Analysis for PSD-FL-272A]

REPORTING AND RECORD KEEPING REQUIREMENTS

10. Steam Production

- a. **Crop Season and Off-Season:** For each 24-hour block of operation, the permittee shall record the total steam production rates (pounds, each) for Boiler Nos. 4 and 7 to demonstrate compliance with Condition No. 7 of this section. *wording*

b. Off-Season

- (1) From May through September, the permittee shall record the individual and total steam production rates (pounds) for Boiler Nos. 1 - 4 for each 3-hour block when three of the boilers are in operation.

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

(2) From May through September, the permittee shall record the individual and total steam production rates (pounds) for Boiler Nos. 1 - 4 for each 24-hour block of operation.

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

11. Fuel Oil Consumption: For Boiler Nos. 1 - 4, the permittee shall record the oil-firing rates (gallons) for each 3-hour block of operation. From this data, the permittee shall calculate and record the combined oil firing rates (gallons) for each 3-hour and each 24-hour block of operation for Boiler Nos. 1 - 4. ✓

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

12. Fuel Sulfur Content: For each fuel oil delivery, the permittee shall record and retain the following: the date, identification of the tank, the gallons of fuel delivered, the fuel oil analysis including the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable. This condition applies to each tank supplying fuel to any boiler.

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

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

C. EU 024, 025, and 026 - Fuel Tanks for Boilers

This portion of the permit addresses the following regulated emissions unit.

EU No.	Emission Unit Description
024	NSPS fuel storage tank for Boiler No. 4: Tank with a storage capacity of 100,000 gallons of No. 6 fuel oil (or a superior grade) containing no more than 0.7% sulfur by weight. Constructed in 2000.
025	Common fuel storage tank for Boiler Nos. 1 – 3: Tank with a storage capacity of 400,000 gallons of No. 6 fuel oil (or a superior grade) containing no more than 2.50% sulfur by weight. Constructed prior to 1984.
026	NSPS fuel storage tank for Boiler No. 7: Tank with a storage capacity of 200,000 gallons of No. 2 distillate oil (or a superior grade) containing no more than 2.50% sulfur by weight. Constructed in 1996.

3

Note: The above description is based upon information provided in the application and is for informational purposes only.

RULE APPLICABILITY

The following two conditions apply only to EUs 024 and 026:

1. **Applicability:** NSPS Subpart Kb applies to each storage vessel with a capacity greater than or equal to 10,300 gallons (40 cubic meters) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.110b(a)]
2. **Exemption from Portions of the NSPS:** Vessels with a capacity greater than or equal to 40,000 gallons (151 cubic meters) storing a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb, *except* for the record keeping requirements specified in permit conditions 4 and 5 below. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.110b(c)]

RECORD KEEPING REQUIREMENTS

3. **Signs:** The permittee shall clearly mark each tank with the following statements:
 - a. "Tank for Boiler Nos. 1 -3: From October through April, only fuel oil containing 2.50% sulfur by weight or less may be added to and stored in this tank. From May through September, only fuel oil containing 1.60% sulfur by weight or less may be added to and stored in this tank."
 - b. "Tank for Boiler No. 4: Only fuel oil containing 0.70% sulfur by weight or less may be added to and stored in this tank."
 - c. "Tank for Boiler No. 7: Only distillate oil containing 0.05% sulfur by weight or less may be added to and stored in this tank."
4. **Records:** For EU 024 and 026, the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.116b(b)]
5. **Record Retention:** For EU 024 and 026, the permittee shall keep a copy of this record for the life of the tank. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.116b(a)]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

D. EU 017 - Granular Carbon Regenerative Furnace

This portion of the permit addresses the following regulated emissions unit.

EU No.	Emission Unit Description
017	<p>Granular carbon regenerative furnace (GRCF, S-12): Granular carbon is used to remove colorants and VOC emissions during the decolorization process. Heat from the furnace is used to drive off the colorants and VOC emissions and regenerate the carbon for reuse. VOC emissions are controlled by a direct flame afterburner and particulate matter emissions by a wet venturi/tray scrubber system:</p> <p><i>Afterburner:</i> Zero Hearth Type (10'-9" OD x 8 HTH) furnace manufactured by BSP Thermal Systems, Inc. designed for the following specifications: 1200° F to 1400° F design temperature; 10,600 to 16,300 acfm flow rate; 0.5 to 0.75 seconds exhaust gas residence time; and a 92% destruction efficiency. The furnace and afterburner will fire approximately 90 gallons per hour and a maximum of 788,400 gallons per year.</p> <p><i>Wet Scrubber System:</i> High energy venturi wet scrubber with tray type wet scrubber designed for the following specifications: 160° F and 4300 acfm outlet gas flow; 12 to 30 inches of water across venturi scrubber with a 36 gpm flow rate; 3 to 8 inches of water across the tray scrubber with 230 gpm flow rate; and a 97% particulate removal efficiency.</p>

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

- BACT Determinations:** Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM₁₀), sulfuric acid mist (SAM), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

PERFORMANCE RESTRICTIONS

- Hours of Operation:** The hours of operation for this unit are not restricted (8,760 hours per year). [Rule 62-210.200, F.A.C., Definitions - PTE]
- Allowable Fuel:** Only No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight shall be fired in the granular carbon regenerative furnace and associated afterburner. The fuel sulfur content shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rule 62-212.400(BACT), F.A.C.]

CONTROL EQUIPMENT

- GRCF Afterburner:** The permittee shall install, operate, and maintain an afterburner designed to destroy at least 92% of the VOC emissions during regeneration of the carbon bed as part of the decolorization process. The afterburner shall be designed with a control temperature of between 1200° F and 1400° F and an exhaust gas residence time of between 0.5 and 0.75 seconds. Excluding initial startup, shutdown, and malfunction, the afterburner temperature shall be maintained at 1200° F or higher except for up to 6 total minutes each hour during which the temperature shall not fall below 1000°F.[Rule 62-212.400 (BACT), F.A.C.]
- GRCF Wet Scrubber:** The permittee shall install, operate, and maintain a wet venturi / tray scrubber system designed to control at least 97% of the maximum particulate emissions during regeneration of the

**PSD AIR CONSTRUCTION PERMIT
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D. EU 017 - Granular Carbon Regenerative Furnace

carbon bed as part of the decolorization process. The venturi scrubber shall be designed for a pressure drop of between 12 to 30 inches of water column. The wet tray scrubber shall be designed for a pressure drop of between 3 to 8 inches of water column. Separate manometers (or equivalent devices) shall be installed, operated, and maintained to indicate the pressure drop across each control device. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment. [Rule 62-212.400 (BACT), F.A.C.]

EMISSION LIMITING STANDARDS

6. **PM Standards:** Emissions of particulate matter shall not exceed 0.7 pounds per hour (after control) from the granular carbon regenerative furnace as determined by EPA Method 5. In addition, visible emissions shall not exceed 10% opacity (excluding water vapor) as determined by EPA Method 9. [Rule 62-212.400 (BACT), F.A.C.]
7. **VOC Standard:** Emissions of volatile organic compounds shall not exceed 1.0 pound per hour (after control) from the granular carbon regenerative furnace as determined by EPA Method 25A reported in terms of propane. EPA Method 18 may be used to subtract methane from the total VOC measured by EPA Method 25A. [Rule 62-212.400 (BACT), F.A.C.]

PERFORMANCE TESTING REQUIREMENTS

8. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - a. **EPA Method 5**, "Determination of Particulate Emissions from Stationary Sources".
 - b. **DEP Method 9**, "Visual Determination of the Opacity of Emissions from Stationary Sources".
 - c. **EPA Method 25A**, "Determination of Volatile Organic Concentrations."

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

9. **Tests Required:** Initial compliance with the allowable emission standards specified for this emissions unit shall be determined within 90 days after issuance of this final permit. Initial tests shall be conducted for PM, VOC, and visible emissions to demonstrate compliance with the emissions standards. An annual test shall be conducted for visible emissions. After initial compliance is sufficiently demonstrated by initial PM and VOC performance testing, compliance may be assumed as long as the emissions unit remains in compliance with the visible emissions standard and monitoring requirements for the afterburner and wet scrubbing system. In addition, these tests shall be performed during the federal fiscal year (October 1st to September 30th) prior to renewing the air operation permit. [Rule 62-297.310(7)(a)1., F.A.C.]
10. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]

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D. EU 017 - Granular Carbon Regenerative Furnace

11. Monitoring of Test Parameters: During any required test, the permittee shall monitor and record the afterburner temperature and wet scrubber pressure differentials at 15-minute intervals. The tests shall be conducted at 90% of production capacity. [Rule 62-297.310(5), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

12. Operations Log: At least once per shift, the permittee shall observe and record the afterburner temperature and the wet scrubber pressure differentials. The permittee may install automated equipment to continuously record these parameters. For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for each month. [Rule 62-4.070(3), F.A.C.]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

E. EU 021 - Alcohol Emissions and EU 023 - Propane-Fired Sock Heaters

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
021	Alcohol usage
023	Two propane-fired heaters are used to dry baghouse socks from the refinery and dryer baghouses. Each 0.165 mmBTU per hour heater fires approximately 1.75 gallons of propane per hour and a maximum of 15,295 gallons of propane per year.

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

1. **BACT Determinations:** Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM₁₀), sulfuric acid mist (SAM), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

PERFORMANCE RESTRICTIONS

2. **Allowable Fuel:** Only commercially available propane shall be fired in the sock heaters. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.]
3. **Visible Emissions:** Visible emissions of 5% opacity or less from the sock heaters shall be an indicator of good combustion as determined by EPA Method 9. If visible emissions are above 5% opacity, the permittee shall investigate the cause and take the necessary corrective actions. There is no initial or periodic testing required for this condition. [Rule 62-4.070(3), F.A.C.]
4. **Alcohol Emissions:** Alcohol usage from the sugar refinery shall not exceed 30,000 pounds per consecutive 12 months. Compliance shall be determined by the purchase records and the Material Data Safety Sheets (MSDS) for these products. The permittee shall calculate and record the alcohol emissions for submittal of the Annual Operating Report and at the request of the Department. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

5. **Records:** The permittee shall keep records sufficient to document the amount of propane fired in the heaters and alcohol used for reporting in the Annual Operations Report. [Rule 62-210.370(3), F.A.C.]

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F. EU 015, 016, 018, 019, 020, AND 022 - MISCELLANEOUS PARTICULATE SOURCES

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
015	VHP sugar dryer with baghouse (S-11)
016	White sugar dryer with baghouse (S-10)
018	Vacuum Systems: Screening/distribution vacuum with baghouse (S-1); 100 lb bagging vacuum with baghouse (S-2); 5 lb bagging vacuum with baghouse (S-3)
019	Six conditioning silos with baghouses (S-7, S-8, S-9, S-13, S-14, and S-15)
020	Screening/distribution and powdered sugar/starch bins with baghouses (S-5, S-6, and S-16)
022	Packaging baghouse (S-4)

Note: The above description is based upon information provided in the application and is for informational purposes only.

CONTROL EQUIPMENT AND TECHNIQUES

1. **Baghouses:** The permittee shall install, operate, and maintain high efficiency baghouses designed to control at least 99.9% of the particulate matter emitted from each emissions unit and point. There are no limits on the hours of operation (8760 hours per year). [Applicant Request; Rule 62-212.400, F.A.C.]

PERFORMANCE RESTRICTIONS

2. **Production Restrictions:** No more than 2000 tons of refined sugar per day nor 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2200 tons of refined sugar per day nor 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Applicant Request; Rule 62-210.200 (Definitions - PTE), F.A.C.]

EMISSION LIMITING STANDARDS

3. **PM Limits:** The following table identifies the limits on particulate matter emissions from these emissions units.

EU No.	POINT ID	DSCFM	lb/hour	Ton/Year
015	S-11	110,042	1.63	7.14
016	S-10	94,488	1.44	6.30
018	S-1	990	0.06	0.28
	S-2	872	0.06	0.28
	S-3	984	0.06	0.28
019	S-7	2641	0.06	0.25
	S-8	2641	0.06	0.25
	S-9	2641	0.06	0.25
	S-13	2641	0.06	0.25
	S-14	2641	0.06	0.25
	S-15	2641	0.06	0.25
020	S-5	2668	0.06	0.25
	S-6	8735	0.19	0.82
	S-16	6128	0.13	0.58
022	S-4	9589	0.21	0.90
Totals			4.20	18.33

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F. EU 015, 016, 018, 019, 020, AND 022 - MISCELLANEOUS PARTICULATE SOURCES

4. **Visible Emissions:** As a surrogate for particulate matter, visible emissions shall not exceed 5% opacity from any of these emissions units or points. [Applicant Request; Rule 62-212.400, F.A.C.]

PERFORMANCE TESTING REQUIREMENTS

5. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.

- a. **EPA Method 5**, "Determination of Particulate Emissions from Stationary Sources".
- b. **DEP Method 9**, "Visual Determination of the Opacity of Emissions from Stationary Sources".

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

6. **Tests Required:** Initial compliance with the visible emissions standard specified for these emissions units shall be determined within 90 days after issuance of this final permit. Compliance with the particulate matter emissions standard shall be assumed as long as the emission unit remains in compliance with the visible emissions standard. In addition, the visible emissions tests shall be performed during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)1., F.A.C.]
7. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

EMISSION LIMITING AND PERFORMANCE STANDARDS

1. **General Visible Emissions Standard:** Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20% opacity. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]
2. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
3. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants that cause or contribute to an objectionable odor. An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
4. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department's district office and, if applicable, appropriate local program. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the permittee's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
5. **Circumvention:** No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
6. **Excess Emissions:**
 - (a) Excess emissions resulting from start-up, shutdown or malfunction of any emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
 - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Excess emission provisions can not be used to vary any NSPS requirement from any subpart of 40 CFR 60.

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

7. **Test Methods:** The appropriate test methods are specified in the permit, Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. The following test methods may also be required as part of these tests.
 - a. **EPA Method 1, "Sample and Velocity Traverses for Stationary Sources"**.

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

- b. **EPA Method 2**, "Determination of Stack Gas Velocity and Volumetric Flow Rate".
 - c. **EPA Method 3**, "Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight".
 - d. **EPA Method 4**, "Determination of Moisture Content in Stack Gases".
8. **Required Number of Test Runs:** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the permittee, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
9. **Operating Rate During Testing:** Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
10. **Calculation of Emission Rate:** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
11. **Test Procedures:** Test procedures and methods shall meet all applicable requirements of Rule 62-297.310(4), F.A.C. [Rule 62-297.310(4), F.A.C.]
12. **Determination of Process Variables:** [Rule 62-297.310(5), F.A.C.]
- (a) **Required Equipment:** The permittee of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - (b) **Accuracy of Equipment:** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
13. **Required Stack Sampling Facilities:** Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

CFR Part 1910, Subparts D and E. Sampling facilities shall also conform to the requirements of Rule 62-297.310(6), F.A.C. [Rule 62-297.310(6), F.A.C.]

14. **Test Notification:** The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial performance tests for NSPS sources and at least 15 days prior to any other required tests. Notification shall include the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the permittee. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8]
15. **Special Compliance Tests:** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the permittee of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

16. **Records:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
17. **Data Availability:** The minimum data availability for recorded monitoring data shall be at least 90% on a monthly basis. [Applicant Request]
18. **Test Reports:** The permittee of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but *no later than 45 days after the last sampling run of each test is completed*. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
19. **Excess Emissions Report:** If excess emissions occur, the permittee shall notify the Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rule 62-4.130, F.A.C.]
20. **Excess Emissions Report - Malfunctions:** In case of excess emissions resulting from malfunctions, each permittee shall notify the Department or the appropriate local program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report if requested by the Department. [Rule 62-210.700(6), F.A.C.]
21. **Annual Operating Report for Air Pollutant Emitting Facility:** The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Compliance Authority by March 1 of the following year. [Rule 62-210.370(3), F.A.C.]

SECTION IV.

APPENDIX A - TERMINOLOGY

ABBREVIATIONS AND ACRONYMS

BACT	-	Best Available Control Technology
DARM	-	Division of Air Resource Management
EPA	-	United States Environmental Protection Agency
DEP	-	State of Florida, Department of Environmental Protection
°F	-	Degrees Fahrenheit
F.A.C.	-	Florida Administrative Code
F.S.	-	Florida Statute
SOA	-	Specific Operating Agreement
UTM	-	Universal Transverse Mercator

RULE CITATIONS

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

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

Example: [Rule 62-213.205, F.A.C.]

Where: 62 - refers to Title 62 of the Florida Administrative Code (F.A.C.)
62-213 - refers to Chapter 62-213, F.A.C.
62-213.205 - refers to Rule 62-213.205, F.A.C.

Facility Identification (ID) Number:

Example: Facility ID No. 099-0001

Where: 099 - 3 digit number indicates that the facility is located in Palm Beach County
0221 - 4 digit number assigned by state database identifies specific facility

New Permit Numbers:

Example: Permit No. 099-2222-001-AC or 099-2222-001-AV

Where: AC - identifies permit as an Air Construction Permit
AV - identifies permit as a Title V Major Source Air Operation Permit
099 - 3 digit number indicates that the facility is located in Palm Beach County
2222 - 4 digit number identifies a specific facility
001 - 3 digit sequential number identifies a specific permit project

Old Permit Numbers:

Example: Permit No. AC50-123456 or AO50-123456

Where: AC - identifies permit as an Air Construction Permit
AO - identifies permit as an Air Operation Permit
123456 - 6 digit sequential number identifies a specific permit project

SECTION IV.

APPENDIX BD - SUMMARY OF DEPARTMENT'S BACT DETERMINATIONS

The following table summarizes the BACT emissions standards and control technology established in initial Permit No. PSD-FL-272.

Pollutant	Controls	Emission Standard
<i>EU 009 - Bagasse Boiler No. 4</i>		
CO	Good Combustion Practices	6.5 lb/mmBTU
NOx	Bagasse Firing, Good Combustion Practices	0.20 lb/mmBTU
PM/PM10	Bagasse Firing, Good Combustion Practices	0.15 lb/mmBTU
	Oil Firing, Good Combustion Practices	0.10 lb/mmBTU
	Visible Emissions	VE < 20% opacity, except 40% for 2 min./hour
SO2 (SAM)	Fuel Oil Sulfur Limit	0.7% sulfur by weight
	Bagasse Firing	0.06 lb/mmBTU
VOC	Good Combustion Practices	0.50 lb/mmBTU, as propane
<i>EU 024 - NSPS Fuel Storage Tank for Boiler No. 4 (Record Keeping Requirements Only)</i>		
<i>EU 017 - Granular Carbon Regenerative Furnace with Afterburner and Wet Scrubber</i>		
PM/PM10	Controlled by Afterburner and Wet Scrubbing System	0.7 lb/hr
	Surrogate PM Standard	Visible emissions < 10% opacity
SO2	Fuel Oil Sulfur Limit	0.05% sulfur by weight
VOC	Controlled by Afterburner	1.0 lb/hr, as propane
<i>EU 023 - Two propane-fired sock dryers</i>		
All	Fuel Specification	Commercially Available Propane
	Work Practice Standard for Good Combustion	Visible Emissions < 5% opacity
<i>EU 021 - Alcohol Usage</i>		
VOC	Alcohol Usage Limit	< 30,000 pounds per 12 months
<i>EUs 015, 016, 018, 019, 020, and 022 - Miscellaneous Particulate Sources</i>		
PM	Surrogate Standard	Visible Emissions < 5% opacity

SECTION IV.

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

- G.1** The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3** As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6** The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7** The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8** If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- (a) A description of and cause of non-compliance; and
 - (b) The period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

SECTION IV.

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit incorporates the following previously issued determinations:
- (a) Determination of Best Available Control Technology (X);
 - (b) Determination of Prevention of Significant Deterioration (X); and
 - (c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

GOOD COMBUSTION PRACTICES

The following procedures are based upon U.S. Sugar's most recent submittal received by the Department in January of 2001.

Purpose of GCP Plan

The determination of Best Available Control Technology for CO, NO_x, and VOC emissions from Boiler No. 4 (EU-009) relied on "good combustion practices". The purpose of this document is to summarize the operational, maintenance, and monitoring procedures that will lead to the minimization of CO and VOC emissions and the optimization of NO_x emissions, consistent with good combustion practices.

Preparation for Operations

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Prior to each harvest season, all instruments for boiler operation and control (including oxygen and carbon monoxide process monitors) are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

Boiler Operation and Controls

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NO_x. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO and VOC Controls

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
3. Process monitors will be installed to monitor the oxygen (O₂) content and the carbon monoxide (CO) content of the boiler flue gas. The instrument readouts will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the O₂ and CO flue gas process monitors for combustion control and to ensure sufficient excess air levels. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The oxygen process monitor will include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor will include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor will display both the instantaneous and the 1-hour block average. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions may include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator will summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained.

NOx Controls

NOx emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, the application of GCP to minimize CO and VOC emissions may result in increased NOx emissions. This is because factors that promote good combustion and result in lower CO and VOC emissions (such as higher excess air and higher combustion temperatures) typically result in higher NOx emissions. This is the nature of the combustion process for these boilers. Therefore, GCP to optimize NOx emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

Miscellaneous

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule: Fans, pumps, casing, ducting, and scrubber.
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)

STARTUP AND SHUTDOWN PROCEDURE

The following procedure was submitted by U.S. Sugar as a supplement to the PSD application received on June 25, 1999.

During startup and shutdown of the boilers, excess CO, PM, NOx, and VOC emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions shall be taken to minimize the magnitude and duration of excess emissions during startup and

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

shutdown of Boiler No. 4. The boiler room foreman and operating personnel shall receive proper training on emissions control procedures at least once per year.

Cold Startup (approximately 4 to 5 hours)

1. Feed solid fuel into boiler construction chamber.
2. Start fire in combustion chamber using a propane torch designed for that purpose.
3. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
4. Light a burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
5. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil flow until burners can be turned off.
6. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.

Hot Startup (approximately 1 hour)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
3. Light a burner, continue to observe the stack plume, water levels, and burners.
4. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
5. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce the forced draft, distributor air, overfire air, and induced forced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

**Section [7]
Bryant Boiler No. 1**

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
 - The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
 - This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
 - This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Bryant Boiler No. 1

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:
Vibrating grate boiler fired by carbonaceous fuel (bagasse) and both new/virgin No. 6 residual fuel oil and on-spec used oil. Boiler may also burn up to 500 cubic yards per season of soil contaminated with No. 2 and No. 6 oils and on-spec used oil.

EMISSIONS UNIT INFORMATION

**Section [7]
Bryant Boiler No. 1**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 125, Type D

2. Control Device or Method Code(s): **002**

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

**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: BLR-1		2. Emission Point Type Code: 1			
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:					
5. Discharge Type Code: V		6. Stack Height: 65 feet		7. Exit Diameter: 5.40 feet	
8. Exit Temperature: 160 °F		9. Actual Volumetric Flow Rate: 156,000 acfm		10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm			12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates... Zone: East (km): North (km):			14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Emission Point Comment: Stack parameters based on stack test data.					

EMISSIONS UNIT INFORMATION

**Section [7]
Bryant Boiler No. 1**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Bagasse, All Boiler Sizes		
2. Source Classification Code (SCC): 1-02-011-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 53.47	5. Maximum Annual Rate: 329,817	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.4 (dry)	8. Maximum % Ash: 8.6 (dry)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Maximum hourly rate based on maximum heat input rate of 385 MMBtu/hr (24-hour average) and wet bagasse heating value of 3,600 Btu/lb. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. Boiler is permitted to burn soil contaminated with No. 2 and No. 6 oils, and on-specification oil up to 10 percent of bagasse feed rate and maximum 500 cubic yards per season.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Residual Oil, Grade 6 Oil		
2. Source Classification Code (SCC): 1-02-004-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 1.295	5. Maximum Annual Rate: 7,985	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 146
10. Segment Comment: Maximum hourly rate based on maximum fuel oil heat input of 189.0 MMBtu/hr. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. No. 6 fuel oil includes both virgin and on-spec used oil.		

EMISSIONS UNIT INFORMATION

Section [7]
 Bryant Boiler No. 1

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	002		EL
PM ₁₀	002		NS
NO _x			EL
VOC			EL
SO ₂			EL
CO			NS
Acrolein (H006)			NS
Benzene (H017)			NS
P-Cresol (H052)			NS
Formaldehyde (H095)			NS
Naphthalene (H132)			NS
Phenol (H144)			NS
POM (H151)			NS
Toluene (H169)			NS
Dibenzofurans (H058)			NS
Total HAPs			NS
Hydrogen Chloride (H106)			NS

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 115.5 lb/hour 356.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.3 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.3 lb/MMBtu = 115.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.3 lb/MMBtu x 1 ton/2,000 lb = 356.2 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

Section [7]
Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
Particulate Matter Total - PM

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/MMBtu	4. Equivalent Allowable Emissions: 115.5 lb/hour 356.2 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 18.9 lb/hour 58.3 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of No. 6 fuel oil only. 189 MMBtu/hr x 0.1 lb/MMBtu = 18.9 lb/hr 18.9 lb/hr x 6,168 hr/yr = 58.3 TPY	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [7]
Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [2] of [4]
Nitrogen Oxides - NO_x

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 173.3 lb/hour 534.3 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.45 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.45 lb/MMBtu = 173.3 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.45 lb/MMBtu x 1 ton/2,000 lb = 534.3 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

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Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [2] of [4]
Nitrogen Oxides - NO_x

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 173.3 lb/hour 534.3 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 85.1 lb/hour 262.4 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 0.45 lb/MMBtu = 85.1 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [7]
Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [3] of [4]
Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 577.5 lb/hour 1,781 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 1.5 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 1.5 lb/MMBtu = 577.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 1.5 lb/MMBtu x 1 ton/2,000 lb = 1,781 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

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Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [3] of [4]
Volatile Organic Compounds - VOC

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 577.5 lb/hour 1,781 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 283.5 lb/hour 874.3 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 1.5 lb/MMBtu = 283.5 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [7]
Bryant Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [4] of [4]
Sulfur Dioxide - SO₂

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control:
3. Potential Emissions: 151.3 lb/hour 466.6 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.7% S fuel oil Reference: See Comment	7. Emissions Method Code: 0
8. Calculation of Emissions: (196 MMBtu/hr x 0.06 lb/MMBtu) + (189 MMBtu/hr x 0.738 lb/MMBtu) = 11.8 lb/hr + 139.5 = 151.3 lb/hr 151.3 lb/hr x 6,168 hr/yr ÷ 2,000 lb/ton = 466.6 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions based on combined carbonaceous fuel and oil firing. Factors for bagasse and oil are 0.06 lb/MMBtu and 0.738 lb/MMBtu (0.7% S), respectively.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [7]
Bryant Boiler No. 1

Page [4] of [4]
Sulfur Dioxide - SO₂

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7% S fuel oil	4. Equivalent Allowable Emissions: 139.5 lb/hour 430.2 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Applies to combustion of No. 6 residual fuel oil. Based on a maximum heat input of 189 MMBtu/hr and 0.7-percent sulfur fuel oil.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [7]
Bryant Boiler No. 1

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE30	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 30 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit No. 0990061-006-AV and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of scrubber pressure drop.	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring scrubber inlet water pressure.	

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Bailey, or equivalent Model Number: B-1 Serial Number: See Comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of oil flow. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of boiler steam flow rate. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU7-11</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU7-12</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU7-13</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU7-14</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [7]

Bryant Boiler No. 1

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU7-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU7-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

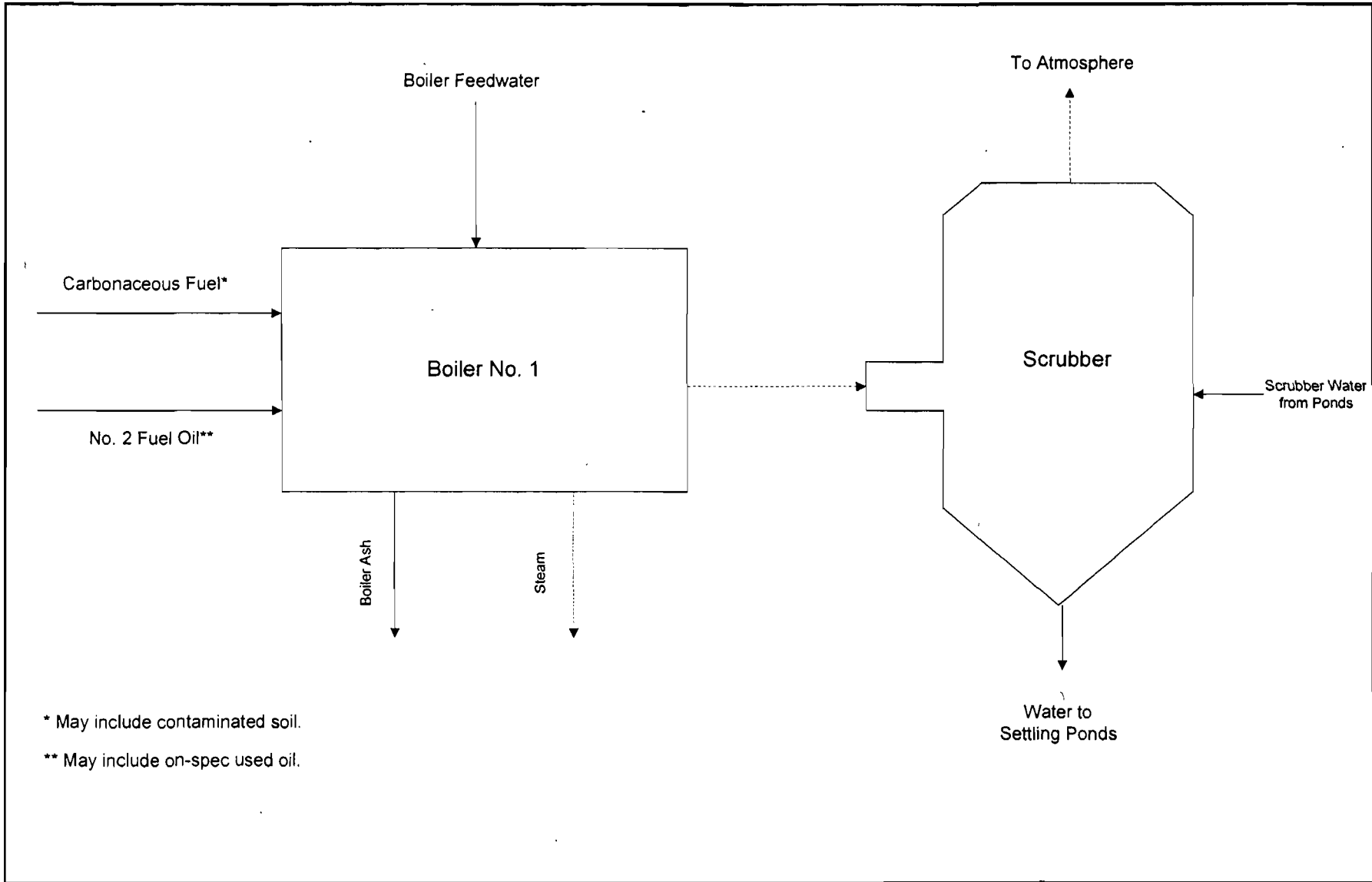
Section [7]

Bryant Boiler No. 1

Additional Requirements Comment

ATTACHMENT USS-EU7-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU7-11
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 1

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	- · - · -▶

0537540/4/4.4/USS-EU7-11.VSD
 Date: 05/23/05



ATTACHMENT USS-EU7-I2

FUEL ANALYSIS

ATTACHMENT USS-EU7-I2

BOILER NOS. 1-5 FUEL ANALYSIS

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.7% S max)
Density (lb/gal)	--	7.7
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	49.4%	87.3%
Hydrogen	6.0%	10.5%
Nitrogen	0.39%	0.28%
Oxygen	43.7%	0.64%
Sulfur	0.06% - 0.11%	0.7%
Ash/Inorganic	2.1% - 3.5%	0.04%
Moisture	50% - 55%	--

Footnotes:

^a Source: Bryant Mill fuel analysis averages.

^b Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984. Represents average fuel characteristics.

^c Wet basis for bagasse. Represents normal minimum.

ATTACHMENT USS-EU7-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU7-I3

Control Equipment Parameters for Boiler No. 1 Wet Scrubber

Boiler No. 1		1 Joy Turbulaire Wet Impingement Scrubber Type D, Size 125	
Manufacturer and Model No.			
Outlet Gas Temp (°F)		160	^a
Outlet Gas Flow Rate (ACFM)		156,000	^a
Pressure Drop Across Device (inches of H ₂ O) - Avg.		8.8	^b
Scrubbant Flow Rate (gal/min) - Normal		240	^b
Scrubbant Supply Pressure (psi) - Normal		50 - 60	^b
Max. Permitted Heat Inputs (MMBtu/hr): Carbonaceous Fuel		385.0	
Max. Carbonaceous Fule Consumption (lb carbonaceous fuel/hr)		106,944	^c
Uncontrolled Particulate Emission Rate (lb particulates/MMBtu)		15.6	^d
Permitted Particulate Emission Rate (lb particulates/MMBtu)		0.30	^e
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	834.2	116	86

Note: Scrubber paramters represent typical values.

^a Average values obtained from stack test data.

^b Represent average values from daily records.

^c Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^d AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^e From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max. carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton.}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate}) \times (\text{max permitted heat input rate}).$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100.$$

ATTACHMENT USS-EU7-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU7-I4**BRYANT BOILER NOS. 1, 2, 3, AND 5****PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler Nos. 1, 2, 3, and 5. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (Approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (Approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU7-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU7-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Bryant Boiler No. 1**

62-296.410(1)(b), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.500(1)(b), F.A.C: RACT for VOC and NO_x
62-296.500(2)(a), F.A.C: RACT for VOC and NO_x
62-296.500(2)(c), F.A.C: RACT for VOC and NO_x
62-296.500(6), F.A.C: RACT for VOC and NO_x
62-296.570(1), F.A.C: RACT for VOC and NO_x
62-296.570(2), F.A.C: RACT for VOC and NO_x
62-296.570(3), F.A.C: RACT for VOC and NO_x
62-296.570(4)(a), F.A.C: RACT for VOC and NO_x
62-296.570(4)(b)6., F.A.C: RACT for VOC and NO_x
62-297.310(1), F.A.C: General Compliance Test Requirements
62-297.310(2)(b), F.A.C: General Compliance Test Requirements
62-297.310(3), F.A.C: General Compliance Test Requirements
62-297.310(4), F.A.C: General Compliance Test Requirements
62-297.310(5), F.A.C: General Compliance Test Requirements
62-297.310(6), F.A.C: General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)4., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)5., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C: General Compliance Test Requirements
62-297.310(8), F.A.C: General Compliance Test Requirements
62-297.401(5), F.A.C: EPA Test Method 5
62-297.401(7)(e), F.A.C: EPA Test Method 7E
62-297.401(9), F.A.C: EPA Test Method 9
62-297.401(18), F.A.C: EPA Test Method 18
62-297.401(25)(a), F.A.C: EPA Test Method 25A

62-297.440(1)(b), F.A.C: Supplemental Test Procedures

40 CFR 63.1-63.16, Subpart A – General Provisions

40 CFR 63.1-63.7485, Subpart DDDDD – Applicability

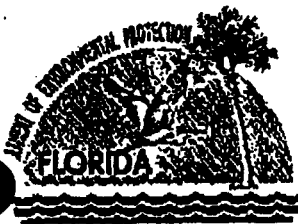
40 CFR 63.1-63.7490, Subpart DDDDD – Applicability

40 CFR 63.1-63.7495, Subpart DDDDD – Compliance Dates

40 CFR 63.1-63.7499, Subpart DDDDD – Subcategories

40 CFR 63.1-63.7506, Subpart DDDDD – Limited Requirements

40 CFR 63.1-63.7545, Subpart DDDDD – Notifications



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

June 4, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

William R. Raiola, Vice President
U.S. Sugar Corporation
1731 South W.C. Owen Avenue
Clewiston, FL 33440

Permit No.: 0990061-007-AC
PSD-FL-009
Facility ID No.: 0990061
SIC Nos.: 20, 2061, 4911

RE: U.S. Sugar Corporation - Bryant Mill Boilers No. 1, 2 and 3
Permit Modification of PSD-FL-009

Dear Mr. Raiola:

This is in response to the letter received by the Department in September 2002 from Golder Associates on behalf of U.S. Sugar Corporation. The request was for a reduction in the permitted (maximum) sulfur content of the residual fuel oil fired in Boilers 1, 2 and 3 from 2.5% to 0.7% sulfur by weight; and to allow a maximum of 80,000 gallons of residual fuel oil firing between the three units on a calendar-day basis. This request was filed in conjunction with a PSD permit application for the construction and start-up of two new cogeneration boilers at the nearby Osceola Cogeneration Facility. The Department has reviewed this request and grants this modification based on the information provided by Golder Associates. The permit modifications are for the operation of Boilers No. 1, 2 and 3 at the U.S. Sugar Corporation's Bryant Mill located at Bryant Mill Road off U.S. Highway 98 in Palm Beach County, Florida. The UTM Coordinates are Zone 17, 537.8 km East, 2969.1 km North and the map coordinates are Latitude: 26° 50' 41" North and Longitude: 80° 37' 09" West. The permit is modified as specified below.

MODIFICATION OF PERMIT NO. PSD-FL-009

Add the following new specific condition:

Effective 3/1/2003, the maximum allowable quantity of fuel oil fired on each calendar day shall be less than 80,000 gallons combined, for Boilers 1, 2 and 3.

Effective 3/1/2003, all residual fuel oil purchased and placed in the common fuel oil storage tank for firing in Boiler Nos. 1, 2 and 3 shall contain a maximum sulfur content of no greater than 0.7% by weight. Compliance with the fuel oil sulfur limit may be determined based on a certification from the fuel supplier. The fuel supplier certification shall include the following information:

- (i) The name of the oil supplier; and
- (ii) A statement from the oil supplier listing the actual sulfur content of the oil and the place where the sample was collected.

[Rule 62-297.310(7)(c), F.A.C. and 40 CFR 60.42c(h)]

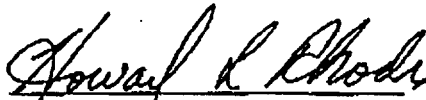
"More Protection, Less Process"

Printed on recycled paper.

U.S. Sugar Corporation, Bryant Mill
Reduction of Maximum Sulfur Content in Fuel Oil
June 4, 2003
Page 2

This permit modification is issued pursuant to Chapter 403, Florida Statutes. A copy of this letter shall be filed with the referenced permit and shall become part of each permit. Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/6/03 to the person(s) listed:

- Mr. William R. Raiola, U.S. Sugar*
- Mr. James Stormer, Palm Beach County Health Department
- Mr. Ron Blackburn, SD - DEP
- Mr. Gregg Worley, EPA

Clerk Stamp

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

Victoria Gibson June 6, 2003
(Clerk) Date

ATTACHMENT USS-EU7-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU7-IV3**ALTERNATIVE METHODS OF OPERATION FOR
BRYANT BOILER NO. 1**

Boiler No. 1 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 385 MMBtu/hr (maximum 24-hour average), No. 6 fuel oil alone at a maximum fuel oil heat input rate of 189 MMBtu/hr (maximum 24-hour average), or a combination of carbonaceous fuel and No. 6 fuel oil at a combined maximum heat input of 385 MMBtu/hr (maximum 24-hour average). The maximum sulfur content in the fuel oil is limited to 0.7 percent by weight. This unit is expected to operate for up to 6,168 hours during October 1 to June 14. Up to 500 cubic yards of soil contaminated with "virgin fuels" (No. 2 and No 6 oil) and on-spec oil (lubricants) can be burned in Boiler No. 1 during the season.

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Bryant Boiler No. 2

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--------------------------------	--------------------------	--	--

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

10. Generator Nameplate Rating: _____ MW

11. Emissions Unit Comment:
Vibrating grate boiler fired by carbonaceous fuel (bagasse) and both new/virgin No. 6 residual fuel oil and on-spec used oil. Boiler may also burn up to 500 cubic yards per season of soil contaminated with No. 2 and No. 6 oils and on-spec used oil.

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 40, Type D (2)

2. Control Device or Method Code(s): **002**

EMISSIONS UNIT INFORMATION

Section [8]

Bryant Boiler No. 2

**C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: BLR-2		2. Emission Point Type Code: 1			
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:					
5. Discharge Type Code: V		6. Stack Height: 65 feet		7. Exit Diameter: 5.40 feet	
8. Exit Temperature: 160 °F		9. Actual Volumetric Flow Rate: 156,000 acfm		10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm			12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates... Zone: East (km): North (km):			14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Emission Point Comment: Stack parameters based on stack test data.					

EMISSIONS UNIT INFORMATION

Section [8]
 Bryant Boiler No. 2

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

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Bagasse, All Boiler Sizes		
2. Source Classification Code (SCC): 1-02-011-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 53.47	5. Maximum Annual Rate: 329,817	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.4 (dry)	8. Maximum % Ash: 8.6 (dry)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Maximum hourly rate based on maximum heat input rate of 385 MMBtu/hr (24-hour average) and wet bagasse heating value of 3,600 Btu/lb. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. Boiler is permitted to burn soil contaminated with No. 2 and No. 6 oils, and on-specification oil up to 10 percent of bagasse feed rate and maximum 500 cubic yards per season.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Residual Oil, Grade 6 Oil		
2. Source Classification Code (SCC): 1-02-004-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 1.295	5. Maximum Annual Rate: 7,985	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 146
10. Segment Comment: Maximum hourly rate based on maximum fuel oil heat input of 189.0 MMBtu/hr. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. No. 6 fuel oil includes both virgin and on-spec used oil.		

EMISSIONS UNIT INFORMATION

**Section [8]
Bryant Boiler No. 2**

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	002		EL
PM ₁₀	002		NS
NO _x			EL
VOC			EL
SO ₂			EL
CO			NS
Acrolein (H006)			NS
Benzene (H017)			NS
P-Cresol (H052)			NS
Formaldehyde (H095)			NS
Naphthalene (H132)			NS
Phenol (H144)			NS
POM (H151)			NS
Toluene (H169)			NS
Dibenzofurans (H058)			NS
Total HAPs			NS
Hydrogen Chloride (H106)			NS

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
Particulate Matter Total - PM

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 115.5 lb/hour 356.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.3 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.3 lb/MMBtu = 115.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.3 lb/MMBtu x 1 ton/2,000 lb = 356.2 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.			

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/MMBtu	4. Equivalent Allowable Emissions: 115.5 lb/hour 356.2 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 18.9 lb/hour 58.3 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of No. 6 fuel oil only. 189 MMBtu/hr x 0.1 lb/MMBtu = 18.9 lb/hr 18.9 lb/hr x 6,168 hr/yr = 58.3 TPY	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 173.3 lb/hour 534.3 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.45 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.45 lb/MMBtu = 173.3 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.45 lb/MMBtu x 1 ton/2,000 lb = 534.3 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [2] of [4]
Nitrogen Oxides - NO_x

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 173.3 lb/hour 534.3 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 85.1 lb/hour 262.4 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 0.45 lb/MMBtu = 85.1 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [3] of [4]
Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 577.5 lb/hour 1,781 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.5 lb/MMBtu Reference: Permit No. 0990061-006-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 1.5 lb/MMBtu = 577.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 1.5 lb/MMBtu x 1 ton/2,000 lb = 1,781 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 577.5 lb/hour 1,781 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 283.5 lb/hour 874.3 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 1.5 lb/MMBtu = 283.5 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [4] of [4]
Sulfur Dioxide - SO₂

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 151.3 lb/hour 466.6 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.7% S fuel oil Reference: See Comment		7. Emissions Method Code: 0	
8. Calculation of Emissions: (196 MMBtu/hr x 0.06 lb/MMBtu) + (189 MMBtu/hr x 0.738 lb/MMBtu) = 11.8 lb/hr + 139.5 = 151.3 lb/hr 151.3 lb/hr x 6,168 hr/yr ÷ 2,000 lb/ton = 466.6 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions based on combined carbonaceous fuel and oil firing. Factors for bagasse and oil are 0.06 lb/MMBtu and 0.738 lb/MMBtu (0.7% S), respectively.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [8]
Bryant Boiler No. 2

Page [4] of [4]
Sulfur Dioxide - SO₂

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7% S fuel oil	4. Equivalent Allowable Emissions: 139.5 lb/hour 430.2 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Applies to combustion of No. 6 residual fuel oil. Based on a maximum heat input of 189 MMBtu/hr and 0.7-percent sulfur fuel oil.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE30	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 30 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit No. 0990061-006-AV and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [8]

Bryant Boiler No. 2

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of scrubber pressure drop.	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring scrubber inlet water pressure.	

EMISSIONS UNIT INFORMATIONSection [8]
Bryant Boiler No. 2**H. CONTINUOUS MONITOR INFORMATION**

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

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Bailey, or equivalent Model Number: B-1 Serial Number: See Comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of oil flow. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of boiler steam flow rate. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU8-11</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU8-12</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU8-13</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU8-14</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 2

Additional Requirements for Air Construction Permit Applications

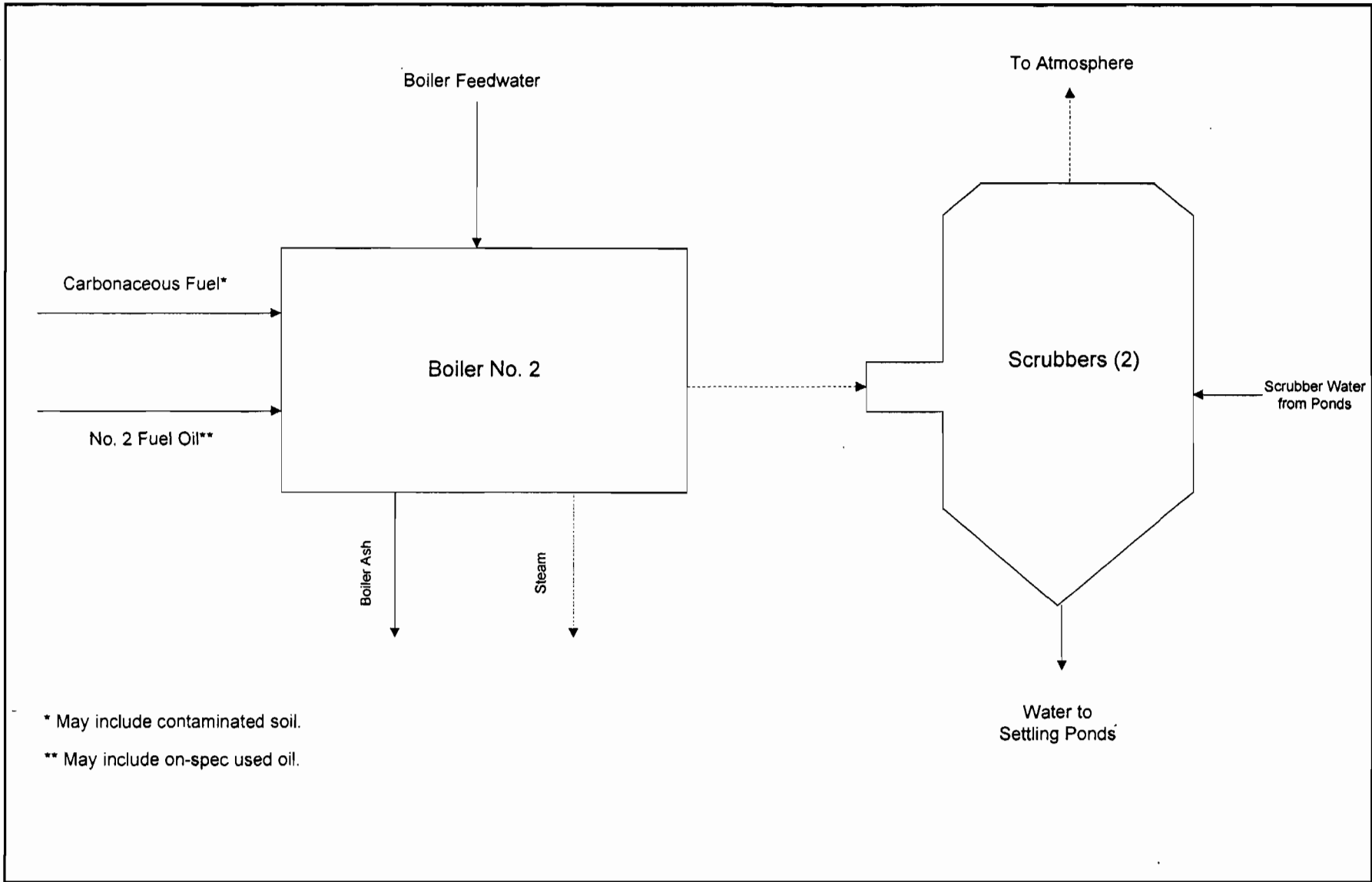
1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU8-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU8-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

ATTACHMENT USS-EU8-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU8-11
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 2

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	· · · · ·▶

0537540/4/4.4/USS-EU8-11.VSD
 Date: 05/25/05



ATTACHMENT USS-EU8-12

FUEL ANALYSIS

ATTACHMENT USS-EU8-I2

BRYANT BOILER NOS. 1-5 FUEL ANALYSIS

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.7% S max)
Density (lb/gal)	--	7.7
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	49.4%	87.3%
Hydrogen	6.0%	10.5%
Nitrogen	0.39%	0.28%
Oxygen	43.7%	0.64%
Sulfur	0.06% - 0.11%	0.7%
Ash/Inorganic	2.1% - 3.5%	0.04%
Moisture	50% - 55%	--

Footnotes:

^a Source: Bryant Mill fuel analysis averages.

^b Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984. Represents average fuel characteristics.

^c Wet basis for bagasse. Represents normal minimum.

ATTACHMENT USS-EU8-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU8-I3

Control Equipment Parameters for Boiler No. 2 Wet Scrubbers

Boiler No. 2		2 Joy Turbulaire Wet	
Manufacturer and Model No.		Impingement Scrubbers Type D, Size 40	
		Each Scrubber	
Outlet Gas Temp (°F)		160 ^a	
Outlet Gas Flow Rate (acfm)		78,000 ^a	
Pressure Drop Across Device (inches of H ₂ O) - Avg.		4.8 ^b	
Scrubbant Flow Rate (gal/min) - Normal		170 - 180 ^b	
Scrubbant Supply Pressure (psi) - Normal		50 - 60 ^b	
Max. Permitted Heat Inputs (MMBtu/hr): Carbonaceous Fuel		385	
Max. Carbonaceous Fuel Consumption (lb carbonaceous fuel/hr)		106,944 ^c	
Uncontrolled Particulate Emission Rate (lb particulates/MMBtu)		15.6 ^d	
Permitted Particulate Emission Rate (lb particulates/MMBtu)		0.30 ^e	
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	834.2	116	86

Note: Scrubber parameters represent typical values.

^a Average values obtained from stack test data.

^b Represent average values from daily records.

^c Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^d AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^e From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max. carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton.}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate}) \times (\text{max permitted heat input rate}).$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100.$$

ATTACHMENT USS-EU8-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU8-14**BRYANT BOILER NOS. 1, 2, 3, AND 5****PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler Nos. 1, 2, 3 and 5. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (Approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (Approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU8-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU8-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Bryant Boiler No. 2**

62-296.410(1)(b), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.500(1)(b), F.A.C: RACT for VOC and NO_x
62-296.500(2)(a), F.A.C: RACT for VOC and NO_x
62-296.500(2)(c), F.A.C: RACT for VOC and NO_x
62-296.500(6), F.A.C: RACT for VOC and NO_x
62-296.570(1), F.A.C: RACT for VOC and NO_x
62-296.570(2), F.A.C: RACT for VOC and NO_x
62-296.570(3), F.A.C: RACT for VOC and NO_x
62-296.570(4)(a), F.A.C: RACT for VOC and NO_x
62-296.570(4)(b)6., F.A.C: RACT for VOC and NO_x
62-297.310(1), F.A.C: General Compliance Test Requirements
62-297.310(2)(b), F.A.C: General Compliance Test Requirements
62-297.310(3), F.A.C: General Compliance Test Requirements
62-297.310(4), F.A.C: General Compliance Test Requirements
62-297.310(5), F.A.C: General Compliance Test Requirements
62-297.310(6), F.A.C: General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)4., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)5., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C: General Compliance Test Requirements
62-297.310(8), F.A.C: General Compliance Test Requirements
62-297.401(5), F.A.C: EPA Test Method 5
62-297.401(7)(e), F.A.C: EPA Test Method 7E
62-297.401(9), F.A.C: EPA Test Method 9
62-297.401(18), F.A.C: EPA Test Method 18
62-297.401(25)(a), F.A.C: EPA Test Method 25A

62-297.440(1)(b), F.A.C: Supplemental Test Procedures

40 CFR 63.1-63.16, Subpart A – General Provisions

40 CFR 63.1-63.7485, Subpart DDDDD – Applicability

40 CFR 63.1-63.7490, Subpart DDDDD -- Applicability

40 CFR 63.1-63.7495, Subpart DDDDD – Compliance Dates

40 CFR 63.1-63.7499, Subpart DDDDD – Subcategories

40 CFR 63.1-63.7506, Subpart DDDDD – Limited Requirements

40 CFR 63.1-63.7545, Subpart DDDDD -- Notifications



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

June 4, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

William R. Raiola, Vice President
U.S. Sugar Corporation
1731 South W.C. Owen Avenue
Clewiston, FL 33440

Permit No.: 0990061-007-AC
PSD-FL-009
Facility ID No.: 0990061
SIC Nos.: 20, 2061, 4911

RE: U.S. Sugar Corporation - Bryant Mill Boilers No. 1, 2 and 3
Permit Modification of PSD-FL-009

Dear Mr. Raiola:

This is in response to the letter received by the Department in September 2002 from Golder Associates on behalf of U.S. Sugar Corporation. The request was for a reduction in the permitted (maximum) sulfur content of the residual fuel oil fired in Boilers 1, 2 and 3 from 2.5% to 0.7% sulfur by weight; and to allow a maximum of 80,000 gallons of residual fuel oil firing between the three units on a calendar-day basis. This request was filed in conjunction with a PSD permit application for the construction and start-up of two new cogeneration boilers at the nearby Osceola Cogeneration Facility. The Department has reviewed this request and grants this modification based on the information provided by Golder Associates. The permit modifications are for the operation of Boilers No. 1, 2 and 3 at the U.S. Sugar Corporation's Bryant Mill located at Bryant Mill Road off U.S. Highway 98 in Palm Beach County, Florida. The UTM Coordinates are Zone 17, 537.8 km East, 2969.1 km North and the map coordinates are Latitude: 26° 50' 41" North and Longitude: 80° 37' 09" West. The permit is modified as specified below.

MODIFICATION OF PERMIT NO. PSD-FL-009

Add the following new specific condition:

Effective 3/1/2003, the maximum allowable quantity of fuel oil fired on each calendar day shall be less than 80,000 gallons combined, for Boilers 1, 2 and 3.

Effective 3/1/2003, all residual fuel oil purchased and placed in the common fuel oil storage tank for firing in Boiler Nos. 1, 2 and 3 shall contain a maximum sulfur content of no greater than 0.7% by weight. Compliance with the fuel oil sulfur limit may be determined based on a certification from the fuel supplier. The fuel supplier certification shall include the following information:

- (i) The name of the oil supplier; and
- (ii) A statement from the oil supplier listing the actual sulfur content of the oil and the place where the sample was collected.

[Rule 62-297.310(7)(c), F.A.C. and 40 CFR 60.42c(h)]


"More Protection, Less Process"

Printed on recycled paper.

U.S. Sugar Corporation, Bryant Mill
Reduction of Maximum Sulfur Content in Fuel Oil
June 4, 2003
Page 2

This permit modification is issued pursuant to Chapter 403, Florida Statutes. A copy of this letter shall be filed with the referenced permit and shall become part of each permit. Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

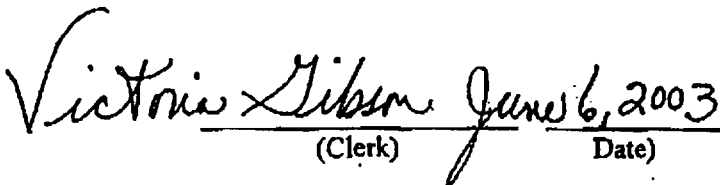
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/6/03 to the person(s) listed:

Mr. William R. Raiola, U.S. Sugar*
Mr. James Stormer, Palm Beach County Health Department
Mr. Ron Blackburn, SD - DEP
Mr. Gregg Worley, EPA

Clerk Stamp

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


(Clerk) June 6, 2003
Date)

ATTACHMENT USS-EU8-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU8-IV3**ALTERNATIVE METHODS OF OPERATION FOR
BRYANT BOILER NO. 2**

Boiler No. 2 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 385 MMBtu/hr (maximum 24-hour average), No. 6 fuel oil alone at a maximum fuel oil heat input rate of 189 MMBtu/hr (maximum 24-hour average), or a combination of carbonaceous fuel and No. 6 fuel oil at a combined maximum heat input of 385 MMBtu/hr (maximum 24-hour average). The maximum sulfur content in the fuel oil is limited to 0.7 percent by weight. This unit is expected to operate for up to 6,168 hours during October 1 to June 14. Up to 500 cubic yards of soil contaminated with "virgin fuels" (No. 2 and No 6 oil) and on-spec oil (lubricants) can be burned in Boiler No. 2 during the season.

EMISSIONS UNIT INFORMATION

Section [9]

Bryant Boiler No. 3

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

**Section [9]
Bryant Boiler No. 3**

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Bryant Boiler No. 3

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--------------------------------	--------------------------	--	--

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

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:
Vibrating grate boiler fired by carbonaceous fuel (bagasse) and both new/virgin No. 6 residual fuel oil and on-spec used oil. Boiler may also burn up to 500 cubic yards per season of soil contaminated with No. 2 and No. 6 oils and on-spec used oil.

EMISSIONS UNIT INFORMATION

**Section [9]
Bryant Boiler No. 3**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 40, Type D

2. Control Device or Method Code(s): **002**

EMISSIONS UNIT INFORMATION

**Section [9]
Bryant Boiler No. 3**

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:	194,600 lb/hr of steam	
3. Maximum Heat Input Rate:	385 million Btu/hr	
4. Maximum Incineration Rate:	pounds/hr	
	tons/day	
5. Requested Maximum Operating Schedule:	24 hours/day	7 days/week
	37 weeks/year	6,168 hours/year
6. Operating Capacity/Schedule Comment:	<p>Maximum heat input and steam rate is based on 24-hour average firing carbonaceous fuel. Maximum fuel oil firing rate is 189 MMBtu/hr. Maximum expected operating hours based on Oct 1 – June 14 operation.</p>	

EMISSIONS UNIT INFORMATION**Section [9]
Bryant Boiler No. 3****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: BLR-3		2. Emission Point Type Code: 1			
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:					
5. Discharge Type Code: V		6. Stack Height: 65 feet		7. Exit Diameter: 5.40 feet	
8. Exit Temperature: 160 °F		9. Actual Volumetric Flow Rate: 156,000 acfm		10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm			12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates... Zone: East (km): North (km):			14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Emission Point Comment: Stack parameters based on stack test data.					

EMISSIONS UNIT INFORMATION

**Section [9]
Bryant Boiler No. 3**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Bagasse, All Boiler Sizes		
2. Source Classification Code (SCC): 1-02-011-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 53.47	5. Maximum Annual Rate: 329,817	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.4 (dry)	8. Maximum % Ash: 8.6 (dry)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Maximum hourly rate based on maximum heat input rate of 385 MMBtu/hr (24-hour average) and wet bagasse heating value of 3,600 Btu/lb. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. Boiler is permitted to burn soil contaminated with No. 2 and No. 6 oils, and on-specification oil up to 10 percent of bagasse feed rate and maximum 500 cubic yards per season.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Residual Oil, Grade 6 Oil		
2. Source Classification Code (SCC): 1-02-004-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 1.295	5. Maximum Annual Rate: 7,985	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 146
10. Segment Comment: Maximum hourly rate based on maximum fuel oil heat input of 189.0 MMBtu/hr. Maximum annual rate based on current maximum crop season operation of 6,168 hr/yr. No. 6 fuel oil includes both virgin and on-spec used oil.		

EMISSIONS UNIT INFORMATIONSection [9]
Bryant Boiler No. 3**E. EMISSIONS UNIT POLLUTANTS****List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	002		EL
PM ₁₀	002		NS
NO _x			EL
VOC			EL
SO ₂			EL
CO			NS
Acrolein (H006)			NS
Benzene (H017)			NS
P-Cresol (H052)			NS
Formaldehyde (H095)			NS
Naphthalene (H132)			NS
Phenol (H144)			NS
POM (H151)			NS
Toluene (H169)			NS
Dibenzofurans (H058)			NS
Total HAPs			NS
Hydrogen Chloride (H106)			NS

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
Particulate Matter Total - PM

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 115.5 lb/hour 356.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.3 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.3 lb/MMBtu = 115.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.3 lb/MMBtu x 1 ton/2,000 lb = 356.2 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
Particulate Matter Total - PM

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/MMBtu	4. Equivalent Allowable Emissions: 115.5 lb/hour 356.2 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 18.9 lb/hour 58.3 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2. and Permit No. 0990061-006-AV. Emissions representative of No. 6 fuel oil only. 189 MMBtu/hr x 0.1 lb/MMBtu = 18.9 lb/hr 18.9 lb/hr x 6,168 hr/yr = 58.3 TPY	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 173.3 lb/hour 534.3 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.45 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 0.45 lb/MMBtu = 173.3 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 0.45 lb/MMBtu x 1 ton/2,000 lb = 534.3 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [9]
Bryant Boiler No. 3

Page [2] of [4]
Nitrogen Oxides - NO_x

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 173.3 lb/hour 534.3 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.45 lb/MMBtu	4. Equivalent Allowable Emissions: 85.1 lb/hour 262.4 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 0.45 lb/MMBtu = 85.1 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [3] of [4]
Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 577.5 lb/hour 1,781 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 1.5 lb/MMBtu Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 385 MMBtu/hr x 1.5 lb/MMBtu = 577.5 lb/hr Annual: 385 MMBtu/hr x 6,168 hr/yr x 1.5 lb/MMBtu x 1 ton/2,000 lb = 1,781 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

Section [8]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [3] of [4]
Volatile Organic Compounds - VOC

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 577.5 lb/hour 1,781 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on carbonaceous fuel firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 lb/MMBtu	4. Equivalent Allowable Emissions: 283.5 lb/hour 874.3 tons/year
5. Method of Compliance: EPA Method 25, or EPA Method 25A in conjunction with EPA Method 18.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.570 and Permit No. 0990061-006-AV. Based on No. 6 fuel firing only. 189 MMBtu/hr x 1.5 lb/MMBtu = 283.5 lb/hr	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [4] of [4]
Sulfur Dioxide - SO₂

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 151.3 lb/hour 466.6 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.7% S fuel oil Reference: See Comment		7. Emissions Method Code: 0	
8. Calculation of Emissions: $(196 \text{ MMBtu/hr} \times 0.06 \text{ lb/MMBtu}) + (189 \text{ MMBtu/hr} \times 0.738 \text{ lb/MMBtu}) =$ $11.8 \text{ lb/hr} + 139.5 = 151.3 \text{ lb/hr}$ $151.3 \text{ lb/hr} \times 6,168 \text{ hr/yr} \div 2,000 \text{ lb/ton} = 466.6 \text{ TPY}$			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions based on combined carbonaceous fuel and oil firing. Factors for bagasse and oil are 0.06 lb/MMBtu and 0.738 lb/MMBtu (0.7% S), respectively.			

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

POLLUTANT DETAIL INFORMATION

Page [4] of [4]
Sulfur Dioxide - SO₂

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7% S fuel oil	4. Equivalent Allowable Emissions: 139.5 lb/hour 430.2 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Applies to combustion of No. 6 residual fuel oil. Based on a maximum heat input of 189 MMBtu/hr and 0.7-percent sulfur fuel oil.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE30	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 30 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit No. 0990061-006-AV and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of scrubber pressure drop.	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring scrubber inlet water pressure.	

EMISSIONS UNIT INFORMATION

Section [9]
 Bryant Boiler No. 3

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Bailey, or equivalent Model Number: B-1 Serial Number: See Comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of oil flow. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of boiler steam flow rate. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [9]
Bryant Boiler No. 3

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU9-11</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU9-12</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU9-13</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU9-14</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

**Section [9]
Bryant Boiler No. 3**

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU9-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU9-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

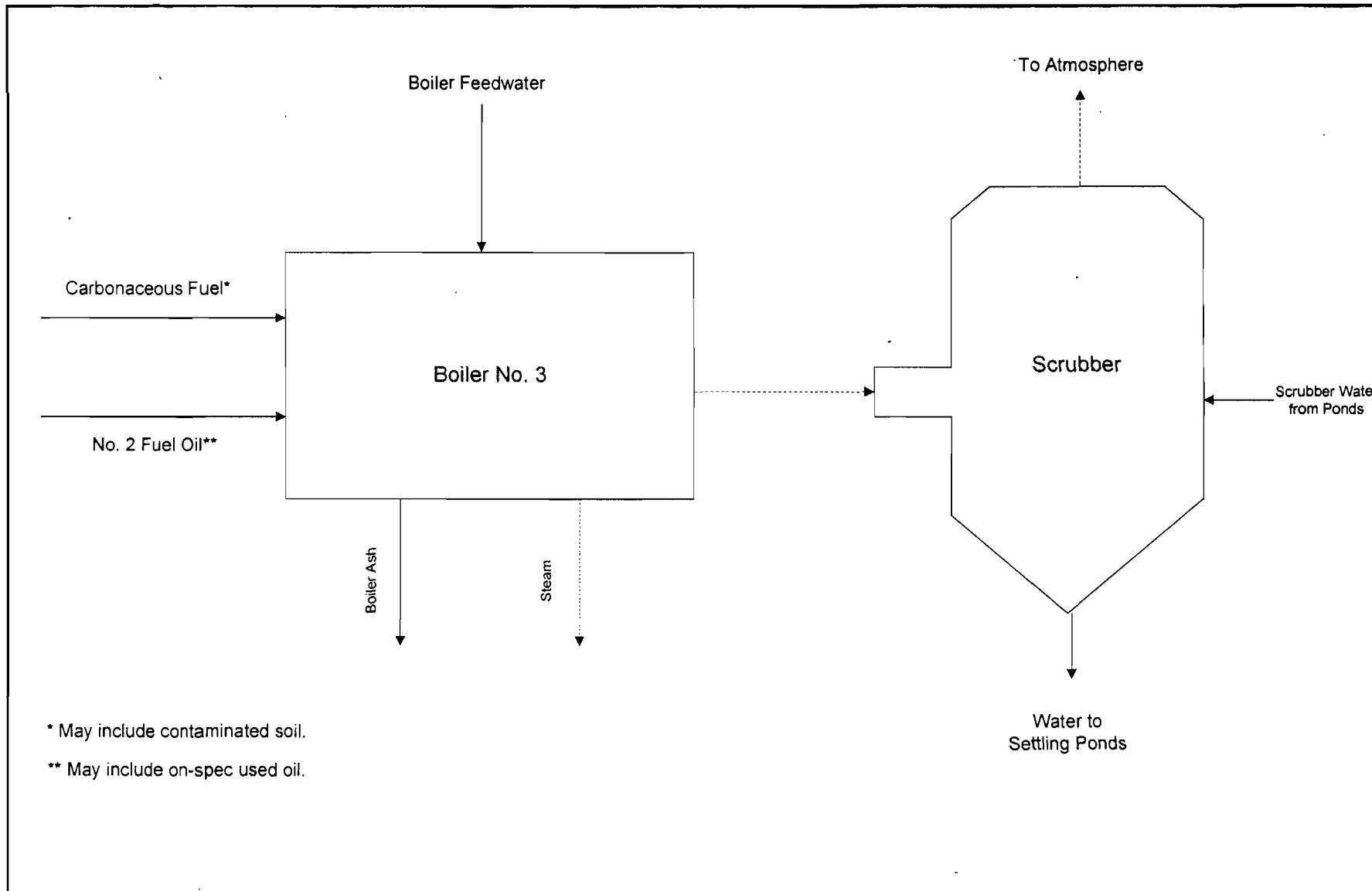
Section [9]

Bryant Boiler No. 3

Additional Requirements Comment

ATTACHMENT USS-EU9-11

PROCESS FLOW DIAGRAM



Attachment USS-EU9-I1
 Process Flow Diagram
 U. S. Sugar Corporation
 Boiler No. 3

Process Flow Legend	
Solid/Liquid	—————>
Gas	- - - - ->
Steam	· · · · ·>

0537540/4/4.4/USS-EU9-I1.VSD

Date: 05/23/05



ATTACHMENT USS-EU9-I2

FUEL ANALYSIS

ATTACHMENT USS-EU9-I2

BRYANT BOILER NOS. 1-5 FUEL ANALYSIS

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 6 Fuel Oil (0.7% S max)
Density (lb/gal)	--	7.7
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	49.4%	87.3%
Hydrogen	6.0%	10.5%
Nitrogen	0.39%	0.28%
Oxygen	43.7%	0.64%
Sulfur	0.06% - 0.11%	0.7%
Ash/Inorganic	2.1% - 3.5%	0.04%
Moisture	50% - 55%	--

Note: All values represent average fuel characteristics. No. 6 fuel oil can include on-specification used oil.

Footnotes:

^a Source: Bryant Mill fuel analysis averages.

^b Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984. Represents average fuel characteristics.

^c Wet basis for bagasse. Represents normal minimum.

ATTACHMENT USS-EU9-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU9-I3

Control Equipment Parameters for Boiler No. 3 Wet Scrubber

Boiler No. 3		1 Joy Turbulaire Wet Impingement Scrubber Type D, Size 125	
Manufacturer and Model No.			
Outlet Gas Temp (°F)		160	^a
Outlet Gas Flow Rate (ACFM)		156,000	^a
Pressure Drop Across Device (inches of H ₂ O) - Avg.		7.2	^b
Scrubbant Flow Rate (gal/min) - Normal		240	^b
Scrubbant Supply Pressure (psi) - Normal		50 - 60	^b
Max. Permitted Heat Inputs (MMBtu/hr): Carbonaceous Fuel		385.0	
Max. Carbonaceous Fule Consumption (lb carbonaceous fuel/hr)		106,944	^c
Uncontrolled Particulate Emission Rate (lb particulates/MMBtu)		15.6	^d
Permitted Particulate Emission Rate (lb particulates/MMBtu)		0.30	^e
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	834.2	116	86

Note: Scrubber paramters represent typical values.

^a Average values obtained from stack test data.

^b Represent average values from daily records.

^c Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^d AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^e From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max. carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton.}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate}) \times (\text{max permitted heat input rate}).$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100.$$

ATTACHMENT USS-EU9-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU9-I4**BRYANT BOILER NOS. 1, 2, 3, AND 5****PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler Nos. 1, 2, 3, and 5. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (Approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (Approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU9-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU9-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Bryant Boiler No. 3**

62-296.410(1)(b), F.A.C: Carbonaceous Fuel Burning Equipment

62-296.410(3), F.A.C: Carbonaceous Fuel Burning Equipment

62-296.500(1)(b), F.A.C: RACT for VOC and NO_x

62-296.500(2)(a), F.A.C: RACT for VOC and NO_x

62-296.500(2)(c), F.A.C: RACT for VOC and NO_x

62-296.500(6), F.A.C: RACT for VOC and NO_x

62-296.570(1), F.A.C: RACT for VOC and NO_x

62-296.570(2), F.A.C: RACT for VOC and NO_x

62-296.570(3), F.A.C: RACT for VOC and NO_x

62-296.570(4)(a), F.A.C: RACT for VOC and NO_x

62-296.570(4)(b)6., F.A.C: RACT for VOC and NO_x

62-297.310(1), F.A.C: General Compliance Test Requirements

62-297.310(2)(b), F.A.C: General Compliance Test Requirements

62-297.310(3), F.A.C: General Compliance Test Requirements

62-297.310(4), F.A.C: General Compliance Test Requirements

62-297.310(5), F.A.C: General Compliance Test Requirements

62-297.310(6), F.A.C: General Compliance Test Requirements

62-297.310(7)(a)3., F.A.C: General Compliance Test Requirements

62-297.310(7)(a)4., F.A.C: General Compliance Test Requirements

62-297.310(7)(a)5., F.A.C: General Compliance Test Requirements

62-297.310(7)(a)9., F.A.C: General Compliance Test Requirements

62-297.310(8), F.A.C: General Compliance Test Requirements

62-297.401(5), F.A.C: EPA Test Method 5

62-297.401(7)(e), F.A.C: EPA Test Method 7E

62-297.401(9), F.A.C: EPA Test Method 9

62-297.401(18), F.A.C: EPA Test Method 18

62-297.401(25)(a), F.A.C: EPA Test Method 25A

62-297.440(1)(b), F.A.C: Supplemental Test Procedures

40 CFR 63.1-63.16, Subpart A – General Provisions

40 CFR 63.1-63.7485, Subpart DDDDD – Applicability

40 CFR 63.1-63.7490, Subpart DDDDD -- Applicability

40 CFR 63.1-63.7495, Subpart DDDDD – Compliance Dates

40 CFR 63.1-63.7499, Subpart DDDDD – Subcategories

40 CFR 63.1-63.7506, Subpart DDDDD – Limited Requirements

40 CFR 63.1-63.7545, Subpart DDDDD -- Notifications



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

June 4, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

William R. Raiola, Vice President
U.S. Sugar Corporation
1731 South W.C. Owen Avenue
Clewiston, FL 33440

Permit No.: 0990061-007-AC
PSD-FL-009
Facility ID No.: 0990061
SIC Nos.: 20, 2061, 4911

RE: U.S. Sugar Corporation - Bryant Mill Boilers No. 1, 2 and 3
Permit Modification of PSD-FL-009

Dear Mr. Raiola:

This is in response to the letter received by the Department in September 2002 from Golder Associates on behalf of U.S. Sugar Corporation. The request was for a reduction in the permitted (maximum) sulfur content of the residual fuel oil fired in Boilers 1, 2 and 3 from 2.5% to 0.7% sulfur by weight; and to allow a maximum of 80,000 gallons of residual fuel oil firing between the three units on a calendar-day basis. This request was filed in conjunction with a PSD permit application for the construction and start-up of two new cogeneration boilers at the nearby Osceola Cogeneration Facility. The Department has reviewed this request and grants this modification based on the information provided by Golder Associates. The permit modifications are for the operation of Boilers No. 1, 2 and 3 at the U.S. Sugar Corporation's Bryant Mill located at Bryant Mill Road off U.S. Highway 98 in Palm Beach County, Florida. The UTM Coordinates are Zone 17, 537.8 km East, 2969.1 km North and the map coordinates are Latitude: 26° 50' 41" North and Longitude: 80° 37' 09" West. The permit is modified as specified below.

MODIFICATION OF PERMIT NO. PSD-FL-009

Add the following new specific condition:

Effective 3/1/2003, the maximum allowable quantity of fuel oil fired on each calendar day shall be less than 80,000 gallons combined, for Boilers 1, 2 and 3.

Effective 3/1/2003, all residual fuel oil purchased and placed in the common fuel oil storage tank for firing in Boiler Nos. 1, 2 and 3 shall contain a maximum sulfur content of no greater than 0.7% by weight. Compliance with the fuel oil sulfur limit may be determined based on a certification from the fuel supplier. The fuel supplier certification shall include the following information:

- (i) The name of the oil supplier; and
- (ii) A statement from the oil supplier listing the actual sulfur content of the oil and the place where the sample was collected.

[Rule 62-297.310(7)(c), F.A.C. and 40 CFR 60.42c(h)]

"More Protection, Less Process"

Printed on recycled paper.

U.S. Sugar Corporation, Bryant Mill
Reduction of Maximum Sulfur Content in Fuel Oil
June 4, 2003
Page 2

This permit modification is issued pursuant to Chapter 403, Florida Statutes. A copy of this letter shall be filed with the referenced permit and shall become part of each permit. Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

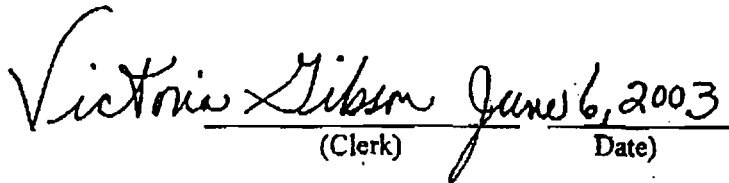
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/6/03 to the person(s) listed:

Mr. William R. Raiola, U.S. Sugar*
Mr. James Stormer, Palm Beach County Health Department
Mr. Ron Blackburn, SD - DEP
Mr. Gregg Worley, EPA

Clerk Stamp

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


(Clerk) June 6, 2003
Date

ATTACHMENT USS-EU9-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU9-IV3**ALTERNATIVE METHODS OF OPERATION FOR
BRYANT BOILER NO. 3**

Boiler No. 3 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 385 MMBtu/hr (maximum 24-hour average), No. 6 fuel oil alone at a maximum fuel oil heat input rate of 189 MMBtu/hr (maximum 24-hour average), or a combination of carbonaceous fuel and No. 6 fuel oil at a combined maximum heat input of 385 MMBtu/hr (maximum 24-hour average). The maximum sulfur content in the fuel oil is limited to 0.7 percent by weight. This unit is expected to operate for up to 6,168 hours during October 1 to June 14. Up to 500 cubic yards of soil contaminated with "virgin fuels" (No. 2 and No 6 oil) and on-spec oil (lubricants) can be burned in Boiler No. 3 during the season.

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

**Section [10]
Bryant Boiler No. 5**

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
 - The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
 - This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
 - This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Bryant Boiler No. 5

3. Emissions Unit Identification Number: **005**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--------------------------------	--------------------------	--	--

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

10. Generator Nameplate Rating: _____ MW

11. Emissions Unit Comment:
Vibrating grate boiler fired by carbonaceous fuel (bagasse) and both new/virgin No. 6 residual fuel oil and on-spec used oil. Boiler may also burn up to 500 cubic yards per season of soil contaminated with No. 2 and No. 6 oils and on-spec used oil.

EMISSIONS UNIT INFORMATION

**Section [10]
Bryant Boiler No. 5**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 100, Type D (2)

2. Control Device or Method Code(s): **002**

EMISSIONS UNIT INFORMATION

Section [10]

Bryant Boiler No. 5

**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: BLR-5		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 150 feet	7. Exit Diameter: 9.50 feet	
8. Exit Temperature: 142 °F	9. Actual Volumetric Flow Rate: 215,000 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Stack parameters based on stack test data.			

EMISSIONS UNIT INFORMATION

**Section [10]
Bryant Boiler No. 5**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Bagasse, All Boiler Sizes		
2. Source Classification Code (SCC): 1-02-011-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 93.2	5. Maximum Annual Rate: 307,434	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.4 (dry)	8. Maximum % Ash: 8.6 (dry)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Maximum hourly rate based on maximum heat input rate of 671 MMBtu/hr and wet bagasse heating value of 3,600 Btu/lb. Maximum annual rate based on annual heat input rate of 2,213,522 MMBtu/yr (1,049,514,873 lb/yr of steam). Boiler is permitted to burn soil contaminated with No. 2 and No. 6 oils, and on-specification oil up to 10 percent of bagasse feed rate and maximum 500 cubic yards per season.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External Combustion Boilers - Industrial, Residual Oil, Grade 6 Oil		
2. Source Classification Code (SCC): 1-02-004-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 1.477	5. Maximum Annual Rate: 400	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 146
10. Segment Comment: Permit No. 0990061-006-AV. No. 6 fuel oil includes both virgin and on-specification used oil.		

EMISSIONS UNIT INFORMATION

Section [10]
 Bryant Boiler No. 5

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	002		EL
PM ₁₀	002		NS
NO _x			EL
VOC			NS
SO ₂			EL
CO			NS
Acetaldehyde (H001)			NS
Acrolein (H006)			NS
Benzene (H017)			NS
Formaldehyde (H095)			NS
Naphthalene (H132)			NS
Phenol (H144)			NS
POM (H151)			NS
Toluene (H169)			NS
Styrene (H163)			NS
Dibenzofurans (H058)			NS
Total HAPs			NS
Hydrogen Chloride (H106)			NS

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

POLLUTANT DETAIL INFORMATION

Page [1] of [3]
Particulate Matter Total - PM

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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	2. Total Percent Efficiency of Control:
3. Potential Emissions: 100.7 lb/hour 154.3 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.15 lb/MMBtu Reference: Permit No. 0990061-006-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse Hourly: 671 MMBtu/hr x 0.15 lb/MMBtu = 100.7 lb/hr Annual Heat Input: 990,676,512 lb/yr steam @ 850 psig, 900°F Net enthalpy = 1,142 Btu/lb steam 990,676,512 lb/yr steam x 2,076.2 Btu/lb steam = 2,056,843 MMBtu/yr Bagasse Annual: 2,056,843 MMBtu/yr x 0.15 lb/MMBtu x 1 ton/2,000 lb = 154.3 TPY No. 6 Fuel Hourly: 215.6 MMBtu/hr x 0.1 lb/MMBtu = 21.6 lb/hr No. 6 Fuel Annual: 400,000 gal/yr x 0.146 MMBtu/gal x 0.1 lb/MMBtu x 1 ton/2,000 lb = 2.9 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.	

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/MMBtu	4. Equivalent Allowable Emissions: 100.7 lb/hour 154.3 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0990061-006-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 21.6 lb/hour 2.9 tons/year
5. Method of Compliance: EPA Method 5	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0990061-006-AV. Emissions representative of No. 6 fuel oil only. Annual emissions based on 400,000 gallons of No. 6 fuel oil per year.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

POLLUTANT DETAIL INFORMATION

Page [2] of [3]
Nitrogen Oxides - NO_x

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 161.7 lb/hour 369.6 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 161.7 lb/hr Reference: Permit No. 0990061-006-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly (24-hour average): 161.7 lb/hr (Permit Limit) Annual: 161.7 lb/hr x 4,572 hr/yr x 1 ton/2,000 lb = 369.6 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse or No. 6 fuel oil firing.			

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

POLLUTANT DETAIL INFORMATION

Page [2] of [3]
Nitrogen Oxides - NO_x

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 161.7 lb/hr	4. Equivalent Allowable Emissions: 161.7 lb/hour 369.6 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0990061-006-AV. Based on carbonaceous or No. 6 fuel oil firing.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control:
3. Potential Emissions: 186.4 lb/hour 81.5 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.7% S fuel oil Reference: See Comment	7. Emissions Method Code: 5
8. Calculation of Emissions: $(455.4 \text{ MMBtu/hr} \times 0.06 \text{ lb/MMBtu}) + (215.6 \text{ MMBtu/hr} \times 0.738 \text{ lb/MMBtu}) =$ $27.3 \text{ lb/hr} + 159.1 = 186.4 \text{ lb/hr}$ $[(2,056,843 \text{ MMBtu/yr} - 58,400 \text{ MMBtu/yr}) \times 0.06 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb}] +$ $[58,400 \text{ MMBtu/yr} \times 0.738 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb}] = 60.0 \text{ TPY} + 21.5 \text{ TPY} = 81.5 \text{ TPY}$	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions based on combined carbonaceous fuel and oil firing. Factors for bagasse and oil are 0.06 lb/MMBtu and 0.738 lb/MMBtu (0.7% S), respectively.	

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7% S fuel oil	4. Equivalent Allowable Emissions: 159.1 lb/hour 21.5 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Applies to combustion of No. 6 residual fuel oil. Based on a maximum heat input of 215.6 MMBtu/hr, 400,000 gal/yr, and 0.7-percent sulfur fuel oil.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit No. 0990061-006-AV and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [10]

Bryant Boiler No. 5

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: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of scrubber pressure drop.	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring scrubber inlet water pressure.	

EMISSIONS UNIT INFORMATION

Section [10]
 Bryant Boiler No. 5

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Bailey, or equivalent Model Number: B-1 Serial Number: See Comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of oil flow. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Monitoring of boiler steam flow rate. No serial number or installation date provided because meters are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [10]

Bryant Boiler No. 5

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0990061-006-AV. Existing permit condition requires monitoring of scrubber water supply flow rate.	

Continuous Monitoring System: Continuous Monitor ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

<p>1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU10-I1</u> <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU10-I2</u> <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU10-I3</u> <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU10-I4</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.</p>
<p>7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

EMISSIONS UNIT INFORMATION

Section [10]
Bryant Boiler No. 5

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU10-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU10-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [10]

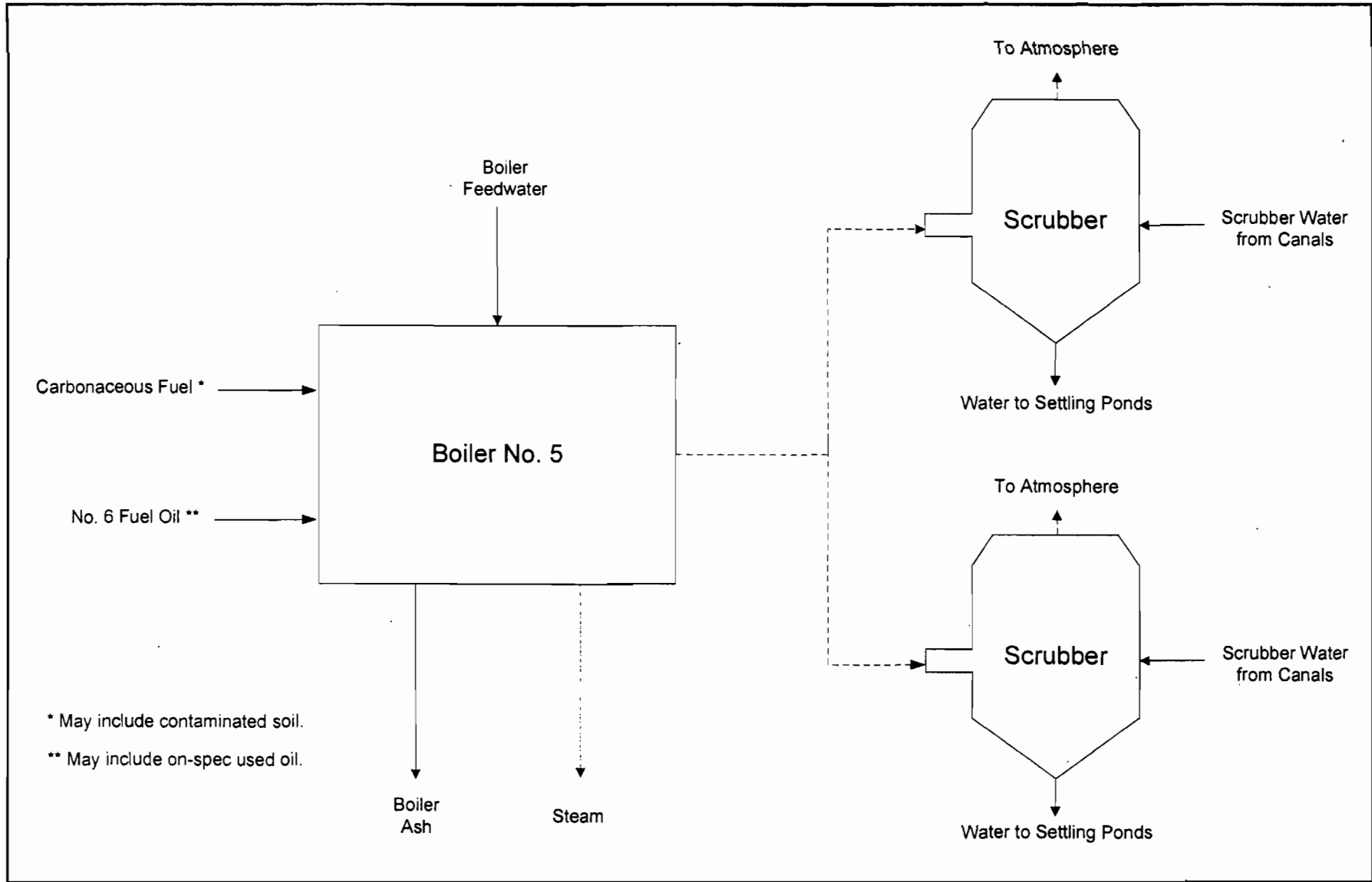
Bryant Boiler No. 5

Additional Requirements Comment

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ATTACHMENT USS-EU10-11

PROCESS FLOW DIAGRAM



Attachment USS-EU10-11
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 5

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	· · · · ·▶

0537540/4/4.4/USS-EU10-11.VSD
 Date: 05/24/05



ATTACHMENT USS-EU10-I2

FUEL ANALYSIS

ATTACHMENT USS-EU10-I2

BRYANT BOILER NOS. 1-5 FUEL ANALYSIS

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.7% S max)
Density (lb/gal)	--	7.7
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	49.4%	87.3%
Hydrogen	6.0%	10.5%
Nitrogen	0.39%	0.28%
Oxygen	43.7%	0.64%
Sulfur	0.06% - 0.11%	0.7%
Ash/Inorganic	2.1% - 3.5%	0.04%
Moisture	50% - 55%	--

Footnotes:

^a Source: Bryant Mill fuel analysis averages.

^b Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984. Represents average fuel characteristics.

^c Wet basis for bagasse. Represents normal minimum.

ATTACHMENT USS-EU10-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU10-I3

Control Equipment Parameters for Boiler No. 5 Wet Scrubbers

Boiler No. 5		2 Joy Turbulaire Wet	
Manufacturer and Model No.		Impingement Scrubbers Type D, Size 100	
			Each Scrubber
Outlet Gas Temp (°F)		142 ^a	
Outlet Gas Flow Rate (ACFM)		110,000 ^a	
Pressure Drop Across Device (inches of H ₂ O) - Avg.		11.5 ^b	
Scrubbant Flow Rate (gal/min) - Normal		400 - 500 ^b	
Scrubbant Supply Pressure (psi) - Normal		50 - 60 ^b	
Max. Permitted Heat Inputs (MMBtu/hr): Carbonaceous Fuel		671	
Max. Carbonaceous Fule Consumption (lb carbonaceous fuel/hr)		186,389 ^c	
Uncontrolled Particulate Emission Rate (lb particulates/MMBtu)		15.6 ^d	
Permitted Particulate Emission Rate (lb particulates/MMBtu)		0.15 ^e	
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	1,453.8	101	93

Note: Scrubber parameters represent typical values.

^a Average values obtained from stack test data.

^b Represent average values from daily records.

^c Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^d AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^e From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max. carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton.}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate}) \times (\text{max permitted heat input rate}).$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100.$$

ATTACHMENT USS-EU10-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU10-I4
BRYANT BOILER NOS. 1, 2, 3 AND 5
PROCEDURES FOR STARTUP AND SHUTDOWN

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler Nos. 1, 2, 3, and 5. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (Approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (Approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU10-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU10-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Bryant Boiler No. 5**

62-296.410(1)(b), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C: Carbonaceous Fuel Burning Equipment
62-296.500(1)(b), F.A.C: RACT for VOC and NO_x
62-296.500(2)(a), F.A.C: RACT for VOC and NO_x
62-296.500(2)(c), F.A.C: RACT for VOC and NO_x
62-296.500(6), F.A.C: RACT for VOC and NO_x
62-296.570(1), F.A.C: RACT for VOC and NO_x
62-296.570(2), F.A.C: RACT for VOC and NO_x
62-296.570(3), F.A.C: RACT for VOC and NO_x
62-296.570(4)(a), F.A.C: RACT for VOC and NO_x
62-296.570(4)(b)6., F.A.C: RACT for VOC and NO_x
62-297.310(1), F.A.C: General Compliance Test Requirements
62-297.310(2)(b), F.A.C: General Compliance Test Requirements
62-297.310(3), F.A.C: General Compliance Test Requirements
62-297.310(4), F.A.C: General Compliance Test Requirements
62-297.310(5), F.A.C: General Compliance Test Requirements
62-297.310(6), F.A.C: General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)4., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)5., F.A.C: General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C: General Compliance Test Requirements
62-297.310(8), F.A.C: General Compliance Test Requirements
62-297.401(5), F.A.C: EPA Test Method 5
62-297.401(7)(e), F.A.C: EPA Test Method 7E
62-297.401(9), F.A.C: EPA Test Method 9
62-297.401(18), F.A.C: EPA Test Method 18
62-297.401(25)(a), F.A.C: EPA Test Method 25A

62-297.440(1)(b), F.A.C: Supplemental Test Procedures

40 CFR 63.1-63.16, Subpart A – General Provisions

40 CFR 63.1-63.7485, Subpart DDDDD – Applicability

40 CFR 63.1-63.7490, Subpart DDDDD -- Applicability

40 CFR 63.1-63.7495, Subpart DDDDD – Compliance Dates

40 CFR 63.1-63.7499, Subpart DDDDD – Subcategories

40 CFR 63.1-63.7506, Subpart DDDDD – Limited Requirements

40 CFR 63.1-63.7545, Subpart DDDDD -- Notifications



Lawton Chiles
Governor

Florida Department of Environmental Protection

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT RE-ISSUANCE

March 28, 1994

CERTIFIED MAIL #Z 128 058 970
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

DEP File No. AO50-234931
OGC Case No. 93-4191
Palm Beach County

Mr. Murray T. Brinson
Vice President Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, FL 33440

Enclosed is air pollution operation permit number AO50-234931 to operate Bryant Boiler No. 5 located off of U.S. Route 98 in Palm Beach County, FL; re-issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Mr. Murray T. Brinson
DEP File No. AO50-234931
Page 2

Executed in Fort Myers, Florida

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION



Ronald D. Blackburn
Acting Director of
District Management
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, FL 33901
(813) 332-6975

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT RE-ISSUANCE and all copies were mailed by certified mail before the close of business on March 28, 1994 to the listed persons.

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 Clerk 3-28-94 Date

copies furnished to:

Mr. Jeffery F. Koerner, PBCPHU
Mr. David A. Buff, P.E., KBN
Mr. Robert F. Van Voorhees, BRYAN CAVE
Mr. William H. Congdon, DEP OGC
Mr. R. Bruce Mitchell, DEP BAR

Enclosures

RDB/GM/gm



Lawton Chiles
Governor

Florida Department of Environmental Protection

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

PERMITTEE:

United States Sugar Corporation
P.O. Drawer 1207
Clewiston, FL 33440

I.D. No. 52FTM50006105
Permit/Certification
Number: A050-234931
Date of Issue: March 28, 1994
Expiration Date: March 28, 1999
County: Palm Beach
Latitude: 26° 50' 08" N
Longitude: 80° 36' 36" W
Section/Town/Range: 03/42S/37E
Project: Carbonaceous Fuel
Fired Boiler, No. 5
Bryant Mill

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For operation of boiler No. 5 at U.S. Sugar Corporation's Bryant mill. This boiler is a bagasse/oil fired boiler that was originally permitted in 1978 and began operating in the 1979-1980 crop season. U.S. Sugar Corporation (U.S. Sugar) is authorized to burn bagasse, new/virgin No. 6 fuel oil, or on-specification used oil. The maximum heat input rate of bagasse is 671 million Btu per hour (93 tons per hour on a wet basis). The maximum heat input rate of new/virgin No. 6 fuel oil is 215.6 million Btu per hour (1,467.0 gallons per hour).

Particulate matter emissions are controlled with two Model 100 Joy type turbulaire water impingement scrubbers with water spray nozzles operating in an internal atmosphere of negative draft gas flow.

The facility is located off of U.S. Route 98, Bryant, Palm Beach County, Florida.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

I.D. No. 52FTM50006105

Permit/Cert. No. AO50-234931

Date of Issue: March 28, 1994

Expiration Date: March 28, 1999

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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GENERAL CONDITIONS:

when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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GENERAL CONDITIONS:

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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GENERAL CONDITIONS:

- (c) Records of monitoring information shall include:
1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

1. Particulate matter (PM)/PM10 emissions shall not exceed any of the following limits [Rule 17-212.400(6)(b), F.A.C.]:

- (A) 87.5 pounds per hour (24 hour average - compliance with the 24 hour average will be determined based upon the normal testing time period for EPA Method 5, 40 CFR 60, Appendix A).
- (B) 0.15 pound per million Btu of heat input of carbonaceous fuel (bagasse) plus 0.10 pound per million Btu heat input of fossil fuel, assuming 55% thermal efficiency for the carbonaceous fuel part of the calculation.
- (C) 154.26 tons in any 12 consecutive month period.

2. Nitrogen oxides (NOx) emissions shall not exceed 161.7 pounds per hour (24 hour average). [Rule 17-272.300(3)(e), F.A.C.].

3. Visible emissions shall not exceed 20 percent opacity except that 40 percent opacity is permissible for not more than two minutes in any one hour. [Permit AC50-137573].

4. U.S. Sugar shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.].

5. The hours of operation shall not exceed 4,752 hours in any 12 consecutive month period. U.S. Sugar shall not operate this boiler during the period of May 1 through October 15. [Requested by Permittee].

6. Steam production, heat input, and bagasse consumption shall not exceed the quantities listed below:

Steam PSIG	Averaging °F	Averaging Time	Steam Prod. lbs/hour	Heat Input* MMBtu/hour	Bagasse Consumption (TPH-Wet)
850	900	1-hr. max.	323,189	671	93
850	900	24-hr. avg.	280,804	583	81
400	750	1-hr. max.	342,384	671	93
400	750	24-hr. avg.	297,482	583	81

* based upon 55% thermal efficiency while burning bagasse.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

6. (continued)

Steam production shall not exceed 990,676,512 pounds per year of 850 psig, 900 °F steam, nor 1,049,514,873 pounds per year of 400 psig, 750 °F steam. If steam in both pressure/temperature classes is produced during a year, then the allowable steam production in pounds per year is the weighted average of the limits for each class of steam production. U.S. Sugar shall maintain records (steam production, pressure, and temperature) to determine compliance with this condition. [PSD-FL-009].

7. U.S. Sugar is permitted to burn only the following fuels. The heat input rate of each fuel shall not exceed the following limits [Requested by the Permittee]:

- (A) Bagasse. The maximum heat input rate of bagasse shall not exceed 671 million Btu per hour (93 tons per hour on a wet basis).
- (B) New/virgin No. 6 fuel oil with a maximum sulfur content of 0.7 percent by weight.* The maximum heat input rate of new/virgin No. 6 fuel oil shall not exceed 215.6 million Btu per hour (1,467.0 gallons per hour).

* U.S. Sugar may burn blended new/virgin No. 6 fuel oil from a common fuel oil system. U.S. Sugar shall replace all fuel oil burned in this boiler with new/virgin No. 6 fuel oil having a maximum sulfur content of 0.7 percent by weight. Such replacement shall occur during the season that the fuel oil is burned.
- (C) On specification used oil with a maximum sulfur content of 0.7 percent by weight.

8. Burning of fuel oil shall not exceed 400,000. gallons per crop season. [Permit AO50-162367].

9. U.S. Sugar shall install, operate, and maintain an integrating fuel oil flow meter. [Permit AO50-162367].

10. U.S. Sugar shall maintain a log of the fuel oil consumption and invoices of the fuel oil purchased for this boiler that shows the sulfur content and heating value of the oil (determined by appropriate ASTM methods). U.S. Sugar shall keep hourly records documenting the quantities of steam produced and daily records documenting the quantity of fuel oil consumed. All records shall be available for regulatory agency inspection for at least five years. [Rule 17-4.070(3), F.A.C.].

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

11. Used Oil Combustion:

(A) U.S. Sugar shall not burn off-specification used oil. Used oil which fails to comply with any of the following specification levels is off-specification used oil [Requested by applicant; 40 CFR 279 Subpart B and Rule 17-4.070(3), F.A.C.]:

1. Arsenic shall not exceed 5.0 ppm.
2. Cadmium shall not exceed 2.0 ppm.
3. Chromium shall not exceed 10.0 ppm.
4. Lead shall not exceed 100.0 ppm.
5. Total halogens shall not exceed 4,000.0 ppm. * See note.
6. Flash point shall not be less than 100.0 °F.

*Note: Used oil containing more than 1,000.0 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1)(ii). Such oil shall not be burned unless U.S. Sugar demonstrates through the use of DEP approved analytical methods that the used oil does not constitute hazardous waste.

- (B) At least one representative sample of used oil per crop season shall be analyzed for: heating value as generated (Btu/lb), sulfur, arsenic, cadmium, chromium, lead, total halogens, and flash point using EPA/DEP or ASTM approved methods.
- (C) Results of used oil sampling and analysis shall be retained for at least three (3) years and shall be available for inspection by the Department or the Palm Beach County Public Health Unit.
- (D) On an annual basis, with the Annual Operation Report, U.S. Sugar shall submit reports of the monthly quantities of used oil burned and the results from sample analyses performed to the Department's South District Office and to the Palm Beach County Public Health Unit.

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

12. U.S. Sugar shall test this boiler for the following pollutants on an annual basis within 60 days of the date January 1. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated [Rule 17-297.340(1)(d), F.A.C.]:

(A) PM/PM10 - EPA Method 5. The compliance test results shall be calculated by assuming that the thermal efficiency of boiler No. 5 is equal to 55% while burning bagasse, or by any new method subsequently adopted by Department rule.

(B) Visible emissions - EPA Method 9; while conducting the EPA Method 5 test. Under circumstances when simultaneous Method 9 and Method 5 tests are not feasible, U.S. Sugar shall provide written notification of the reasons why simultaneous testing was not feasible to the Department and the Palm Beach County Public Health Unit within two business days of the scheduled testing date. In such circumstances, the tests shall be conducted as close to each other as is feasible.

13. U.S. Sugar shall test this boiler to determine its actual thermal efficiency in accordance with the ASME short-form procedure during the 1993/1994 crop season, and during the crop season just prior to applying for permit renewal. [Permit A050-162367].

14. U.S. Sugar should conduct emissions testing while operating this boiler within 90% - 100% of the maximum heat input rate of 671 million Btu per hour. Testing may be conducted while operating at less than 90% of the maximum heat input rate; however, if so, subsequent operation is limited up to 110% of the average heat input rate during the test. Operation at higher heat input rates is allowed for no more than 25 calendar days for the purpose of conducting additional compliance tests to regain the higher heat input rate, not to exceed 671 million Btu per hour. The actual heat input rate shall be specified in each test report. [Rule 17-4.070(3), F.A.C.].

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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Permit/Cert. No. A050-234931
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SPECIFIC CONDITIONS:

15. The following scrubber operating parameters, for each scrubber, shall be recorded at least every 15 minutes during each compliance test. This data must be included in each test report [Rule 17-4.070(3), F.A.C.]:

- ✓(A) Gas pressure drop.
- ✓(B) Scrubber water supply pressure.
- (C) Scrubber water supply flow rate.

✓ 16. U.S. Sugar shall file all test reports with the South District Office of the Department and the Palm Beach County Public Health Unit as soon as practical, but no later than 45 days after the test is complete. [Rule 17-297.570(2), F.A.C.].

✓ 17. U.S. Sugar shall notify the South District Office of the Department and the Palm Beach County Public Health Unit at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.].

✓ 18. Each scrubber shall be equipped with a manometer or equivalent instrument to measure the gas pressure drop, with pressure gauges to measure the scrubber water supply pressure, and with a flow meter or equivalent device (weir) to measure the scrubber water supply flow rate. Data from these instruments shall be recorded at least once per shift (every 8 hours). The recorded data shall be used to determine 8 hour averages. The pH of the scrubber water shall be measured and recorded at least once per day. These records shall be available for regulatory agency inspection for at least five years. U.S. Sugar shall notify the Department and the Palm Beach County Public Health Unit if chemicals are used to adjust pH. [Permit A050-162367 and Rule 17-4.070(3), F.A.C.].

✓ 19. While boiler number 5 is operating, the 8 hour average gas pressure drop shall not fall below 90 percent of the average value reported during the most recent satisfactory compliance test. The gas pressure drop shall not fall below 75 percent of the average value reported during the most recent satisfactory compliance test at any time except during startup or shutdown. [Rule 17-4.070(3), F.A.C.].

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

✓ 20. While boiler number 5 is operating, the 8 hour average scrubber water supply pressure shall not fall below 90 percent of the average value reported during the most recent satisfactory compliance test. The scrubber water supply pressure shall not fall below 75 percent of the average value reported during the most recent satisfactory compliance test at any time except during startup or shutdown. [Rule 17-4.070(3), F.A.C.].

✓ 21. While boiler number 5 is operating, the 8 hour average scrubber water supply flow rate shall not fall below 90 percent of the average value reported during the most recent satisfactory compliance test. The scrubber water supply flow rate shall not fall below 75 percent of the average value reported during the most recent satisfactory compliance test at any time except during startup or shutdown. [Rule 17-4.070(3), F.A.C.].

✓ 22. U.S. Sugar shall take reasonable precautions to prevent emissions of unconfined particulate matter. [Rule 17-296.310(3), F.A.C.].

✓ 23. If visible emissions from the bagasse handling system exceed 20% opacity, then U.S. Sugar shall take additional reasonable precautions, as approved by the Department, to minimize unconfined emissions. These precautions shall include covered conveyors, minimizing the distance that the bagasse is dropped during handling, and windbreaks around the material handling equipment. [Permit A050-162367 and Rule 17-296.310(3), F.A.C.].

✓ 24. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level by following the operating procedures described in the operation and maintenance plan dated June 29, 1993. [Permit A050-162367].

✓ 25. U.S. Sugar shall submit an annual operation report (DEP Form 17-210.900(4)) to the South District Office of the Department and the Palm Beach County Public Health Unit by March 1st each year. The form should be reproduced and used for the annual submittals. The report shall also include the amount of fuel oil burned, the amount of used oil burned, and the sulfur content of the oil purchased for the season. [Rule 17-4.070(3), F.A.C.].

26. If the Department has reason to believe that any applicable emission standard is being violated, then the Department may require U.S. Sugar to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests. [Rule 17-297.340(2), F.A.C.].

PERMITTEE:

United States Sugar Corporation
(U.S. Sugar)

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SPECIFIC CONDITIONS:

✓ 27. U.S. Sugar shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the Palm Beach County Public Health Unit in West Palm Beach, FL.

✓ 28. U.S. Sugar shall provide stack sampling facilities that comply with Rule 17-297.345, F.A.C.

✓ 29. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.
[Rule 17-4.070(3), F.A.C.].

✓ 30. Issuance of this permit does not relieve U.S. Sugar from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 17-210.300, F.A.C.].

✓ 31. In order to renew this operation permit, U.S. Sugar must submit an application for renewal at least 60 days prior to the expiration date of the permit. [Rule 17-4.090(1), F.A.C.].

Note: In the event of an emergency, the permittee shall contact the Department by calling (904) 488-1320. During normal business hours, the permittee shall call (813) 332-6975.

Issued this 28th day of March, 1994.

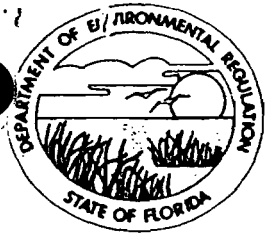
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Ronald D. Blackburn
Acting Director of
District Management

RDB/GM/gm

14 Pages Attached



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. A. R. Mayo, Senior Vice President
U.S. Sugar Corporation
P.O. Box 1207
Clewiston, Florida 33440


May 5, 1988

Enclosed is permit No. AC 50-137573, for U.S. Sugar Corporation to increase the steam production from boiler No. 5 at the Bryant Mill located on U.S. Route 98, Clewiston, in northwest Palm Beach County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management

Copy furnished to:

D. Knowles, SF Dist.
D. Buff, P.E.
B. Miller, EPA
G. Sacco, PBCHD

Final Determination

U.S. Sugar Corporation
Bryant, Florida
Palm Beach County

Boiler No. 5 Modification
Permit No. AC 50-137573

Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

April 29, 1988

Final Determination

The Technical Evaluation and Preliminary Determination for the proposed modification to Boiler No. 5 at U.S. Sugar Corporation's Bryant mill, which is located near Pahokee, Palm Beach County, Florida (File No. AC 50-137573), was distributed on February 4, 1988. Copies of the evaluation were available for public inspection at the Municipal Library in Bell Glade, the Palm Beach County Health Department in West Palm Beach, and the Department's offices in Ft. Myers and Tallahassee. The Notice of Proposed Agency Action was published in The Palm Beach Post on February 22, 1988.

Comments on the Department's proposed action were submitted by the Environmental Protection Agency and the attorney for the applicant.

In a letter dated March 9, 1988, the Environmental Protection Agency concurred with the Department's Preliminary Determination and listed the changes EPA will make to the federal permit (PSD-FL-009) for this source. Their changes are consistent with the Department's Preliminary Determination.

In a letter dated February 22, 1988, the attorney for the applicant requested a 30 day extension to the time allowed to file a petition for administrative proceedings regarding the proposed permit. The time was needed to evaluate and comment on the permit provisions.

In a letter dated March 22, 1988, the attorney for the applicant requested another 30 day extension to the time allowed to file a petition for administrative proceedings and submitted comments on five of the specific conditions in the proposed permit. One comment was revised in another letter dated March 24, 1988. Another extension to the time allowed to file a petition for administrative proceedings, until June 15, 1988, was requested in a letter dated April 19, 1988. Another specific condition revision was requested in a letter dated April 19, 1988. Their comments and the Department's responses follows.

Specific Condition No. 1

Comment - This specific condition limited the amount of steam and heat content that could be produced by the boiler each year to the values listed in the application and used in the heat balance to determine fuel consumption. The applicant asked to be allowed to produce an unspecified larger quantity of lower heat content steam.

Response - Limits on steam production and heat content are needed to provide reasonable assurance that permit conditions are being complied with. Unspecified steam values could require the Department to make a heat balance calculation for numerous steam pressure/temperature combinations to determine compliance with the heat input limit for this boiler. For this reason, the applicant's requested change is denied. However, the Department, using the alternate pressure and temperature steam parameters the company uses, has calculated the quantity of steam that can be produced with the amount of fuel allowed by the permit. These values were listed as an alternate steam production limit in Specific Condition No. 1. This change will give the applicant the flexibility they need and allow the Department to determine compliance with the heat input limitation without making heat balance calculations.

Specific Condition No. 2

Comment - Currently, some of the boilers at this facility are restricted to burning fuel oil with a maximum of 0.7% sulfur while others burn oil up to 2.4% sulfur. The applicant has requested permission to blend these oils in the fuel oil storage tank that serves all the boilers at this facility.

Response - Use of blended fuels in all of the boilers at this plant will result in a slight decrease in sulfur dioxide emissions. The Department has reworded this condition to allow the use of blended fuel oil in Boiler No. 5.

Specific Condition No. 3

Comment - Boiler operations are limited to the sugar cane production season. The applicant requested the dates the boiler is allowed to operate be adjusted to allow for an "early" season.

Response - The Department has reworded the condition to allow boiler operations during an earlier season as requested by the applicant.

Specific Condition No. 4

Comment - The applicant requested the second paragraph of this specific condition be reworded to allow the compliance tests to be conducted when the boiler is burning a mixture of bagasse and oil.

Response - The Department has reworded this specific condition to allow oil to be burned during the compliance test.

Specific Condition No. 8

Comment - The applicant requested scrubber parameters be recorded every 4 hours instead of every 3 hours as required by this Specific Condition.

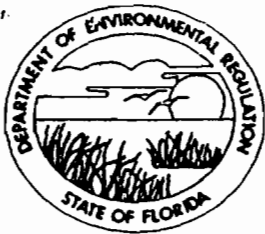
Response - The Department has reworded this Specific Condition to relax the scrubber data recording requirements to that requested by the applicant.

Specific Condition No. 13

Comments - The applicant requested the limit on steam production be relaxed (see discussion on Specific Condition No. 1) and that scrubber operation parameters be based on 8 hour averages instead of 6 hours averages because of the requested changes to Specific Condition No. 8.

Response - The Department has altered Specific Condition No. 13 to be consistent with the changes described in the discussions for Specific Condition Nos. 1 and 8.

The final action of the Department will be to issue the permit as proposed in the Technical Evaluation and Preliminary Determination except for the changes discussed above.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
U.S. Sugar Corporation
P. O. Drawer 1207
Clewiston, Florida 33440

Permit Number: AC 50-137573
Expiration Date: May 31, 1989
County: Palm Beach
Latitude/Longitude: 26° 50' 41"N
80° 37' 09"W

Project: Boiler No. 5
Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Authorization to increase the heat input of the No. 5 Boiler to 583 MMBtu/hr, 24 hour average, and 671 MMBtu/hr, maximum 1 hour average, at U.S. Sugar Corporation's existing sugar mill that is located in northwest Palm Beach County on U.S. Route 98, Bryant, Florida. The UTM coordinates of this site are Zone 17, 537.8 km E and 2969.1 km N.

Construction will be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Application received December 21, 1987.
2. Hopping, Boyd, Green, & Sams letter dated February 22, 1988.
3. EPA letter dated March 9, 1988.
4. Hopping, Boyd, Green, & Sams letter dated March 22, 1988.
5. Hopping, Boyd, Green, & Sams letter dated March 24, 1988.
6. Hopping, Boyd, Green, & Sams letter dated April 19, 1988 (request for specific condition revision).
7. Hopping, Boyd, Green, & Sams letter dated April 19, 1988 (request for extension in time to file for a hearing).

PERMITTEE:
U.S. Sugar Corporation

Permit Number:AC 50-137573
Expiration Date: May 31, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Steam production, steam pressure, steam temperature, heat input, and bagasse consumption shall not exceed the quantities listed below:

Steam PSIG	°F	Averaging Time	Steam Prod. lbs/hr	Heat Input* MMBtu/hour	Bagasse Consumption TPH-Wet
850	900	1-hr max.	323,189	671	93
850	900	24-hr avg.	280,804	583	81
400	750	1-hr max.	338,127	671	93
400	750	24-hr avg.	293,783	583	81

* assuming boiler efficiency for bagasse is 55%

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

SPECIFIC CONDITIONS:

Steam production shall not exceed 990,676,512 lbs/yr of 850 psig, 900°F steam or 1,036,465,880 lbs/yr of 400 psig, 750°F steam. If steam in both pressure/temperature classes is produced during the year, the allowable steam production, in lbs/yr, is the weighted average of the limits for each class of steam production. The permittee shall maintain records (steam production, pressure, and temperature) to determine compliance with this condition.

2. Heat input from No. 6 residual oil shall not exceed 215.6 MMBtu/hr (approximately 1,467 GPH) and 400,000 gallons per season. Blended fuel oil from the common fuel oil system may be burned in this boiler. Any fuel oil burned in Boiler No. 5 shall be replaced, during the season it is burned, with fuel oil whose sulfur content shall not exceed 0.7%. The boiler shall be equipped with an integrating fuel oil flow meter. The permittee shall maintain a log of the fuel oil consumption and invoices of the fuel oil purchased for this boiler that shows the sulfur content and heating value of the oil (determined by appropriate ASTM methods) to show compliance with this condition.

3. Boiler No. 5 shall not operate commercially during the period of May 1 through October 15. *~ 197 days*

*Permitted
5/16/89*

4. Particulate matter emissions from Boiler No. 5 shall not exceed 0.15 lbs/million Btu heat input for bagasse fuel (assuming 55% efficiency) or 0.10 lbs/million Btu heat input for No. 6 residual oil fuel. In the event that both fuels are burned concurrently, the allowable particulate matter emissions shall be prorated from the allowable standards for each fuel by their respective heat inputs. Compliance with the particulate matter standards shall be determined by EPA Reference Methods 1, 2, 3, 4, and 5 as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 5 is 55 percent for bagasse, or by any new method subsequently adopted by Department rule. For informational purposes only, the particulate matter emission rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years). Scrubber parameters (pressure drop, pressure, and flow) shall be recorded every 15 minutes or continuously during the compliance test.

All compliance tests shall be conducted while the boiler is operating between 90 and 100 percent of its permitted capacity; provided however, if the tests are conducted at less than 90% of the boiler's permitted capacity, the permittee shall notify the

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

South Florida District office and repeat the compliance tests when the steam production increases by 10% above the tested capacity. The boiler shall not be operated above the permitted capacity. The South Florida District office shall be notified 15 days prior to any compliance test.

5. Visible emissions from Boiler No. 5 shall not exceed 20% opacity except that 40% opacity is allowed for 2 minutes during any one hour. Compliance with the standards shall be determined by DER Method 9 as described in Chapter 17-2, FAC. The particulate matter emissions and visible emissions shall be determined concurrently. Under circumstances when this is not feasible, the company shall obtain prior approval from the South Florida District to conduct the tests at separate times. In such circumstances, the tests shall be conducted as close to each other as is feasible.

6. Bagasse fuel emission factors used in determining rule applicability for this modification are:

Pollutant	Emission Factor
SO ₂	0.25 lbs/MMBtu (24 hr-avg), 0.50 lbs/MMBtu (1 hr-avg)
NO _x	1.2 lbs/ton wet bagasse
CO	0.25 lbs/MMBtu
VOC	1.4 lbs/ton wet bagasse

7. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan approved by the Department.

8. The scrubber controlling the emissions from Boiler No. 5 shall be equipped with instruments or the company shall be capable of measuring the gas pressure drop, water pressure, volume flow, and pH of the scrubber water. During one season of operation at the higher steam production rates, readings at 4 hour intervals of the gas pressure drop shall be taken and logged for each day that Boiler No. 5 operates. If any 4 hour average gas pressure drop falls more than twenty-five percent below the average pressure drop recorded during the compliance test, the Department may require a compliance test at the lower pressure drop and may also require the installation of an instrument to continuously measure and record the gas pressure drop.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

SPECIFIC CONDITIONS:

Readings at 4 hour intervals of the pH of the scrubber water shall be taken and logged for each day during which bagasse is burned in boiler No. 5 during its first season of operation following issuance of this construction permit. The Department will be notified if chemicals are used to adjust pH. If any 4 hour average pH value falls more than ten percent below the pH that existed during the compliance test for sulfur dioxide, the Department may require the installation of an instrument to continuously measure and record scrubber water pH.

During compliance testing, the scrubber parameters shall be measured and recorded at 15 minute intervals.

Records of the measurements required by this condition shall be obtained each day Boiler No. 5 operates during the first season and copies of the records transmitted to the South Florida District and the Bureau of Air Quality Management at the end of the season.

After review of one complete season's data, the Bureau of Air Quality Management and the South Florida District will establish the scrubber parameters to be monitored and the frequency of monitoring. These requirements shall become a condition to any permit to operate issued for Boiler No. 5. The records required by the permit to operate shall be kept for a minimum of five years for agency inspection.

al test
Prior to the expiration date of this construction permit, the permittee shall confirm the emission factors used in the application by conducting tests by the procedures described in 40 CFR 60, Appendix A, for each of the pollutant listed in Specific Condition No. 6. This permit does not require routine compliance tests for these pollutants.

9. If visible emissions from the bagasse handling system exceed 20 percent opacity, the permittee shall take reasonable precautions, as approved by the Department, to minimize unconfined emissions. These precautions shall include covered conveyors, minimizing the distance the bagasse is dropped during handling, and windbreaks around the material handling equipment.

10. A test shall be made on Boiler No. 5 to determine its actual thermal efficiency in accordance with the ASME short-form procedure each time the operating permit for the boiler is renewed. The most recent report on the thermal efficiency test shall be included with the application for the permit to operate this boiler.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC 50-137573
Expiration Date: May 31, 1989

SPECIFIC CONDITIONS:

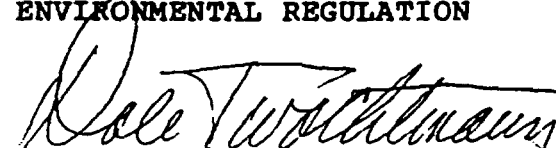
11. The boiler will not be operated at the higher steam production rate until EPA modifies the federal permit (PSD-FL-0009) for this source.

12. The permittee will demonstrate compliance with the conditions of the construction permit and submit a complete application for a permit to operate to the South Florida District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date.

13. Any permit to operate issued for Boiler No. 5 is limited to 990,676,512 lbs/yr of 850 psig, 900°F steam or 1,036,465,880 lbs/yr of 400 psig, 750°F steam. This limit can be prorated if steam in both classes is produced during a season. The permit to operate shall require the scrubber to be operated at an 8 hour average pressure drop not less than 90 percent of the 8 hour average pressure drop that existed during the particulate tests that showed compliance, or not less than 75% of this pressure drop at any time. The operating permit shall further require, as a minimum, annual particulate matter and visible emissions tests; an annual operation report, which will include the amount of oil burned and the sulfur content of the residual oil purchased for the season; and a monthly summary of the scrubber parameters listed in Specific Condition No. 8.

Issued this 2 day of May, 1988

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

ATTACHMENT 2

1000 22.1988

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314
(904) 222-7500

CARLOS ALVAREZ
BRIAN H. BIBEAU
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH, JR.

JAMES S. ALVES
KATHLEEN BLIZZARD
ANNE W. CLAUSSEN
THOMAS M. DE ROSE
ELEANOR M. HUNTER
DAVID L. POWELL
CHERYL G. STUART
OF COUNSEL
W. ROBERT FOKES

RECEIVED

February 22, 1988 FEB 22 1988

DER-BAQM

BY HAND DELIVERY

Dale H. Twachtmann, Esquire
c/o Office of General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 654
Tallahassee, Florida 32399-2400

Re: U. S. Sugar Corporation
Bryant Mill Boiler No. 5
Permit No. AC50-137573

Dear Secretary Twachtmann:

On February 8, 1988, U. S. Sugar Corporation, received the Department's Intent to Issue the above-referenced air construction permit, which would authorize an increase in the production capacity of Boiler No. 4 at its Bryant Mill. The proposed permit was issued by the Department's Bureau of Air Quality Management, along with a Technical Evaluation and Preliminary Determination. Pursuant to Florida Administrative Code Rule 17-103.155 and the Intent to Issue, U. S. Sugar has until February 22, 1988 to file a petition for administrative proceedings regarding the Department's Intent to Issue Permit No. AC50-137573 ("the proposed permit").

I am writing on behalf of U. S. Sugar Corporation to request an extension of thirty (30) days, to and including March 23, 1988, in which to file a petition for administrative proceedings regarding the proposed permit. This request is made pursuant to Florida Administrative Code Rule 17-103.070, which provides that a timely request for extension of time shall toll the running of the time period in which to file an appropriate petition. As good cause for granting the requested extension of time for filing, U. S. Sugar would show the following:

Dale H. Twachtmann, Secretary
February 22, 1988
Page 2

1. The proposed permit would authorize an increase in the production capacity of an existing bagasse-fired boiler previously permitted by the Department. The proposed permit contains thirteen specific conditions, and U. S. Sugar believes several of the permit provisions may benefit from revision or are in need of clarification.

2. This request is filed as a protective measure to avoid waiver of U. S. Sugar's rights to challenge any provision of the proposed permit. Grant of this request will allow the parties an opportunity to discuss the permit conditions of interest and to achieve a mutually acceptable resolution of U. S. Sugar's concerns without the need for initiation of formal administrative proceedings.

I hereby certify that I have spoken with Clair Fancy, Deputy Chief of the Department's Bureau of Air Quality Management, and that he is in agreement with the grant of this request.

Accordingly, I respectfully request that you formally extend the time for filing of a petition for administrative proceedings in regard to the Department's proposed agency action as embodied in its Intent to Issue Permit No. AC50-137573 to and including March 23, 1988.

Sincerely,


Peter C. Cunningham

PCC/gb

cc: Betsy Pittman, Esquire
Clair Fancy }
Willard Hanks } 2.23.88 (ny)
A. R. Mayo }

ATTACHMENT 3



MAR 15 1988
Atlanta, GA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MAR - 9 1988

AC 50-137573

4APT/APB-aes

RECEIVED

MAR 15 1988

DER-BAQM

Mr. C. H. Fancy, P.E.,
Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: U.S. Sugar Corporation - Bryant Mill

Dear Mr. Fancy:

This is to acknowledge receipt of your February 3, 1988, technical evaluation and preliminary determination for the steam production increase at the above referenced facility's No. 5 bagasse boiler. We concur with your determination and will modify federal PSD permit PSD-FL-009 to reflect the change upon receipt of your final determination.

The proposed modifications to federal PSD permit PSD-FL-009 will include a fuel oil burn rate of 1,467 gallons per hour and a maximum sulfur dioxide emissions limit of 195 lbs per hour while burning bagasse and fuel oil. The hourly emission rate is based on a maximum emissions increase of 39.9 tons per year of sulfur dioxide averaged over 3,500 hours and added to the maximum sulfur dioxide emission rate determined from original permit conditions. The maximum 24 hour average steam production rate of 280,084 lb/hr will also be placed in the permit to conserve the integrity of the determination of nonapplicability for PM₁₀ emissions. Conditions in the existing federal PSD permit regarding the maximum bagasse combustion and steam production while burning fuel oil will be deleted.

If you have any questions about the proposed federal PSD permit modification, you may contact Mr. Brandon at (404)347-2864.

Sincerely yours,

Bruce P. Miller

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

Copied. Willard Hanks }
CHF/ST

3.15.88 (my)

ATTACHMENT 4

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS
SUITE 420, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
(904) 222-7500

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CHERYL G. STUART

OF COUNSEL
W. ROBERT FOKES

March 22, 1988

BY HAND DELIVERY

Clair Fancy, P.E.
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 338
Tallahassee, Florida 32399-2400

RECEIVED

MAR 23 1988

DER-BAQM

Re: United States Sugar Corporation
Bryant Mill Boiler No. 5
Air Construction Permit No. AC50-137573

Dear Mr. Fancy:

I am writing on behalf of United States Sugar Corporation ("U. S. Sugar") in regard to the referenced permit as proposed by the Department in its Intent to Issue dated February 3, 1988, and accompanying Technical Evaluation and Preliminary Determination. I would first like to express U. S. Sugar's appreciation for the expeditious manner in which the Bureau of Air Quality Management handled the review and processing of this permit. After reviewing the permit proposed by the Department, U. S. Sugar has identified several conditions that would benefit from clarification or slight revision. The changes in permit language suggested by U. S. Sugar are set forth below. Peter Barquin of U. S. Sugar recently discussed these changes with Willard Hanks of your staff.

Specific Condition 1

As proposed, this condition accurately reflects the increase in steam production requested by U. S. Sugar. While the steam production rates listed in this condition are correct for the stated steam pressure and temperature (850 psig, 900° F), Boiler No. 5 will occasionally be required to produce steam with lower pressure and temperature (400 psig, 750° F). Under these conditions, a steam production rate somewhat higher than the figures

shown in this permit condition would be achievable with no increase in heat input. U. S. Sugar therefore recommends addition of the following language in Specific Condition 1 to address this potential situation:

1. Steam production, steam pressure, steam temperature, heat input, and bagasse consumption shall not exceed the following:

Steam PSIG	Averaging °F	Time	Steam Prod. lbs/hr	Heat Input* MMBTU/hour	Bagasse Consumption TPH-Wet
850	900	1-hr max.	323,189*	671	93
850	900	24-hr avg.	280,804*	583	81

Steam production shall not exceed 990,676,512 lbs/yr.* The permittee shall maintain records (steam production, pressure, and temperature) to determine compliance with this condition. * Higher steam production reflecting an equivalent heat output shall be allowed if steam pressure and temperature are less than 850 psig and 900° F.

Specific Condition 3

As proposed, this condition would prohibit commercial operation of Boiler No. 5 from "May through October". U. S. Sugar requests the following clarification to reflect the potential for an early crop season; and to make this condition consistent with Specific Condition 13:

3. Boiler No. 5 shall not operate commercially during the period of May through October 15.

Specific Condition 4

The second paragraph of this condition addresses the capacity at which the boiler is to be operated during compliance testing. U. S. Sugar requests the following wording change to clarify the intent of this provision:

4. (No change to first paragraph.)

All compliance tests shall be conducted while the boiler is operating within 10 percent of its permitted capacity with bagasse fuel; provided however, if the tests are conducted at less than 90% of the boiler's permitted capacity, the permittee shall notify the South Florida District Office and repeat the compliance tests when the steam production increases by 10% above the tested capacity. The South Florida District office shall be notified 15 days prior to any compliance test.

Specific Condition 8

The first two paragraphs of this condition contain requirements for monitoring of various scrubber parameters at three-hour intervals. U. S. Sugar recommends that these requirements be based on four-hour intervals, to make them more compatible with normal eight hour shifts, as follows:

8. The scrubber controlling the emissions from Boiler No. 5 shall be equipped with instruments or the company shall be capable of measuring the gas pressure drop, water pressure, volume flow, and pH of the scrubber water. During one season of operation at the higher steam production rates, readings at 3 4 hour intervals of the gas pressure drop shall be taken and logged for each day that Boiler No. 5 operates. If any three four hour average gas pressure drop falls more than twenty-five percent below the average pressure drop recorded during the compliance test, the Department may require a compliance test at the lower pressure drop and may also require the installation of an instrument to continuously measure and record the gas pressure drop.

Readings at 3 4 hour intervals of the pH of the scrubber water shall be taken and logged for each day during which bagasse is burned in boiler No. 5 during its first season of operation following issuance of this construction permit. The Department will be notified if chemicals are used to adjust pH. If any 3 4 hour average pH value falls more than ten percent below the pH that existed during the compliance test for sulfur dioxide, the Department may require the installation of an instrument to continuously measure and record scrubber water pH.

Clair Fancy, P.E.
March 22, 1988
Page 4

Specific Condition 13


This condition addresses provisions of the operation permit contemplated for Boiler No. 5 following expiration of the construction permit. To make the language consistent with the changes suggested above for Specific Condition 1 (regarding "equivalent heat output") and Specific Condition 8 (regarding monitoring of scrubber parameters), U. S. Sugar recommends the following revisions for Specific Condition 13:

13. Any permit to operate issued for Boiler No. 5 will limit operation to 990,676,512 lbs/yr steam production (or its equivalent heat output if the boiler is operated with steam pressure and temperature less than 850 psig and 900° F) between October 15 and May 1; require the scrubber to be operated at an six eight hour average pressure drop not less than 90 percent of the six hour average pressure drop that existed during the particulate matter tests that showed compliance or not less than 75% of the average six hour this pressure drop at any time; require, as a minimum, annual particulate matter and visible emissions tests; an annual operation report which will include the amount of oil burned to determine compliance with the limits on oil usage in this permit, and the sulfur content of the residual oil purchased for the season; and a monthly summary of the scrubber parameters listed in Specific Condition No. 8.

With the changes suggested above, U. S. Sugar would find the permit fully acceptable. Please do not hesitate to call Peter Barquin or me if you have any questions.

Your continued consideration in this matter is very much appreciated.

Sincerely,


Peter C. Cunningham

PCC/gb

cc: Willard Hanks
A. R. Mayo
Peter Barquin

Copied: Willard Hanks }
CAF/BT } 3.23.88

ATTACHMENT 5

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

CARLOS ALVAREZ
BRIAN H. BIBEAU
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WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
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ANNE W. CLAUSSEN
THOMAS M. DE ROSE
ELEANOR M. HUNTER
DAVID L. POWELL
CHERYL G. STUART

RECEIVED
OF COUNSEL
W. ROBERT FOXES

March 24, 1988

MAR 24 1988

DER-BAQM

Clair Fancy, P.E.
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 338
Tallahassee, Florida 32399-2400

Re: United States Sugar Corporation
Bryant Mill Boiler No. 5
Air Construction Permit No. AC50-137573

Dear Clair:

My letter to you of March 22, 1988 contained changes in the referenced draft permit requested by U. S. Sugar Corporation. I am writing to correct a minor typographical error in that letter which has just come to my attention. The revised language suggested for the second paragraph of Specific Condition 4 of the permit should read as follows:

All compliance tests shall be conducted while the boiler is operating within 10 percent of its permitted capacity with bagasse fuel; provided however, if the tests are conducted at less than 90% of the boiler's permitted capacity, the permittee shall notify the South Florida District Office and repeat the compliance tests when the steam production increases by 10% above the tested capacity. The South Florida District office shall be notified 15 days prior to any compliance test.

In my previous letter the words "with bagasse" in the third line of this paragraph should have been shown as deleted, but were inadvertently not struck through. With this correction, the condition would allow compliance tests to be conducted with the boiler burning some fuel oil if it proved necessary in order to achieve the desired production rate.

Clair Fancy, P.E.
March 24, 1988
Page 2

Please consider my letter of March 22, 1988 to be amended by this letter, with the above correction to the requested language in Specific Condition 4 of the permit. I regret any inconvenience this may have caused.

Sincerely,



Peter C. Cunningham

PCC/gb

cc: Willard Hanks
Peter Barquin

Copied. CHF/BT
Willard Hanks } 3 25.88 (M)

ATTACHMENT 6

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS
SUITE 420, FIRST FLORIDA BANK BUILDING
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TALLAHASSEE, FLORIDA 32314
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ELEANOR M. HUNTER
DAVID L. POWELL
CHERYL G. STUART

OF COUNSEL
W. ROBERT FOXES

April 19, 1988

BY HAND DELIVERY

Clair Fancy, P.E.
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 338
Tallahassee, Florida 32399-2400

RECEIVED

APR 19 1988

DER-BAQM

Re: U. S. Sugar Corporation
Bryant Mill Boiler No. 5
Air Construction Permit No. AC50-137573

Dear Mr. Fancy:

My letters of March 22 and 24, 1988 suggested certain changes in the wording of several of the specific conditions contained in the referenced permit as proposed by the Department. I am writing now to suggest one additional revision that Peter Barquin of U. S. Sugar Corporation has previously discussed with Willard Hanks of your staff. Specifically, U. S. Sugar requests that the following language be added to Specific Condition 2. of the permit:

2. Heat input from No. 6 residual oil shall not exceed 215.6 MMBtu/hr (approximately 1,467 GPH) and 400,000 gallons per season. Sulfur content of the fuel oil shall not exceed 0.7%. Fuel blending, procuring an amount of 0.7% sulfur fuel oil equal to the amount consumed by Boiler No. 5 and mixing with other plant fuel oil, will be acceptable. [No change to remaining language as proposed.]

U. S. Sugar's consultant has discussed inclusion of this sentence regarding fuel oil blending in the federal PSD permit for Bryant Boiler No. 5 with staff of EPA's Region IV office. As indicated in the attached copy of David Buff's letter to Bruce Miller, it appears that Region IV finds the

Clair Fancy, P.E.
April 19, 1988
Page 2

language to be acceptable. We hope that the Bureau concurs and that the fuel blending option is incorporated in the Department's final permit.

As requested by Mr. Hanks, attached please find a waiver of the 90 day deadline for action on the permit to allow time for resolving the fuel blending question.

The continued consideration of you and your staff on this matter is greatly appreciated. Please do not hesitate to call me if you have any questions.

Sincerely,

Peter C. Cunningham
Peter C. Cunningham *PC*

PCC/gb

cc: Willard Hanks
A. R. Mayo
Peter Barquin

Attachments

Copied Willard Hanks
CHF1BT
Bruce Miller, U.S.EPA } 4-21-88 *my*

APR 13 1988

Stephen Boyd
Green & Sams

April 15, 1988
88005

Mr. Bruce P. Miller, Chief
Air Programs Branch
U.S. Environmental Protection Agency
345 Courtland Street
Atlanta, GA 30308

Re: U.S. Sugar Corporation- Bryant Boiler No. 5

Dear Mr. Miller:

On behalf of U.S. Sugar Corporation, I have had several recent discussions with Michael Brandon of your staff concerning the above referenced permit application. The discussions focused on specific permit conditions which would insure that the maximum allowable emissions from the facility would not be exceeded, considering the seasonal operation of the sugar industry, the types of fuels used, and other aspects which are unique to the sugar industry. As a result of these discussions, agreement was reached on content of specific permit conditions which would be acceptable to USEPA and acceptable to U.S. Sugar. The proposed specific conditions are enumerated below.

* On an ANNUAL basis, maximum steam production will be limited to 990,676,512 lb/yr (or its equivalent heat output if operated at less than 850 psig, 900°F). The boiler will not burn more than 400,000 gallons of fuel oil per year.

* On a 24-HOUR AVERAGE basis, maximum steam production will be limited to 280,804 lb/hr (or its equivalent heat output if operated at less than 850 psig, 900°F). Maximum heat input to the boiler will not exceed 583.0×10^6 Btu/hr.

* On a 1-HOUR AVERAGE basis, maximum steam production will be limited to 323,189 lb/hr (or its equivalent heat output if operated at less than 850 psig, 900°F). Maximum heat input to the boiler will not exceed 671.0×10^6 Btu/hr.

* Sulfur content of fuel oil shall not exceed 0.7%. Fuel blending, procuring an amount of 0.7% sulfur fuel oil equal to the amount consumed by Boiler No. 5 and mixing with other plant fuel oil, will be acceptable. Suitable documentation to verify sulfur content and quantity of fuel oil received and quantity of fuel oil consumed in Boiler No. 5 shall be available at the plant site for inspection. Maximum heat input to the boiler due to fuel oil burning will not exceed 215.6 Btu/hr (1,467 gal/hr).

KBN ENGINEERING AND APPLIED SCIENCES, INC.

P.O. Box 14288 5700 SW 34th Street Gainesville, FL 32604 904/375-8000 Telex: 984689 KBN ENG UD



B. Miller
April 15, 1988
Page 2

We understand that these conditions will be included in the revision to the federal PSD permit for Bryant Boiler No. 5 to be issued by EPA following modifications of the state permit.

Thank you for your cooperation in arriving at these mutually acceptable conditions. Please call if you have any questions or need further discussion.

Sincerely,

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, M.E., P.E.
Principal Engineer

cc: A R. Mayo
Peter Cunningham

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRAMAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. AC50-137573

Applicant's Name: U. S. Sugar Corporation

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above reference license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 15th day of June 1988.

The undersigned is authorized to make this waiver on behalf of the applicant.

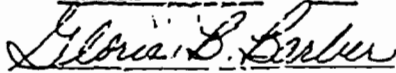

Signature

Peter C. Cunningham
Hopping Boyd Green & Sams

Please Type Name of Signee
P. O. Box 6526, Tallahassee, FL 32314
(904) 222-7500 4/19/88

Date

Sworn to and subscribed
before me this 19th day
of April 1988.


Notary Public

My Commission expires:

Notary Public, State of Florida
My Commission Expires (Type Date)
(ended 11/30/82)

DER Form 17-1.201(8)

Effective November 30, 1982

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions unless a shorter period of time for agency action is provided by law. The 90-day or shorter time period shall be tolled by the initiation of a proceeding under Section 120.57 and shall resume 10 days after the recommended order is submitted to the agency and the parties. Any application for a license not approved or denied within the 90-day period or shorter time period, within 15 days after conclusion of a public hearing held on the application, or within 45 days after the recommended order is submitted to the agency and the parties, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as prerequisite to licensure, the license shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to Section 120.57.

Section 403.0876, Florida Statutes

Permits; processing. ---Within 30 days after receipt of an application for a permit under this chapter, the department shall review the application and shall request submittal of all additional information the department is permitted by law to require. If the applicant believes any departmental request for additional information is not authorized by law or departmental rule, the applicant may request a hearing pursuant to s. 120.57. Within 30 days after receipt of such additional information, the department shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information. If the applicant believes the request of the department for such additional information is not authorized by law or departmental rule, the department, at the applicant's request, shall proceed to process the permit application. Permits shall be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application.

ATTACHMENT 7

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

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DAVID L. POWELL
CHERYL G. STUART

OF COUNSEL
W. ROBERT FOKES

April 19, 1988

RECEIVED

APR 19 1988

DER-BAQM

BY HAND DELIVERY

Dale H. Twachtmann, Secretary
c/o Office of General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 654
Tallahassee, Florida 32399-2400

Re: U. S. Sugar Corporation
Bryant Mill Boiler No. 5
Permit No. AC50-137573

Dear Secretary Twachtmann:

On February 8, 1988, U. S. Sugar Corporation, received the Department's Intent to Issue the above-referenced air construction permit, which would authorize an increase in the production capacity of Boiler No. 5 at its Bryant Mill. The proposed permit was issued by the Department's Bureau of Air Quality Management, along with a Technical Evaluation and Preliminary Determination. Pursuant to your order dated March 29, 1988, U. S. Sugar has until April 22, 1988 to file a petition for administrative proceedings regarding the Department's Intent to Issue Permit No. AC50-137573 ("the proposed permit").

I am writing on behalf of U. S. Sugar Corporation to request an additional extension, to and including June 15, 1988, in which to file a petition for administrative proceedings regarding the proposed permit. This request is made pursuant to Florida Administrative Code Rule 17-103.070, which provides that a timely request for extension of time shall toll the running of the time period in which to file an appropriate petition. As good cause for granting the requested extension of time for filing, U. S. Sugar would show the following:

Dale H. Twachtmann, Secretary
April 19, 1988
Page 2

1. The proposed permit would authorize an increase in the production capacity of an existing bagasse-fired boiler previously permitted by the Department. The proposed permit contains thirteen specific conditions, and U. S. Sugar believes several of the permit provisions may benefit from revision or are in need of clarification.

2. Peter Barquin of U. S. Sugar has discussed suggested changes in the wording of the proposed permit conditions with Willard Hanks of the Bureau of Air Quality Management. Based upon that discussion, it appears probable that the parties will be able to reach agreement on these conditions. U. S. Sugar's specific recommendations for revision of the permit language are contained in my letters to Clair Fancy of March 22 and 24, 1988.

3. U. S. Sugar has recently identified one other desired revision to the permit conditions proposed by the Department. Mr. Barquin has discussed the permit condition in question with Mr. Hanks, and U. S. Sugar's consultant has discussed the matter with staff of the U. S. Environmental Protection Agency's Region IV office.

4. In view of the need to resolve the permit condition language with both the U. S. Environmental Protection Agency and the Department, an extension of time until June 15, 1988 is warranted. In accordance with the request of Bureau of Air Quality Management staff, a waiver of the 90 day deadline for action on the permit has been executed on behalf of U. S. Sugar and submitted to the Department.

5. This request is filed as a protective measure to avoid waiver of U. S. Sugar's rights to challenge any provision of the proposed permit. Grant of this request will allow the parties an opportunity to complete discussion of the permit conditions of interest and to achieve a mutually acceptable resolution of U. S. Sugar's concerns without the need for initiation of formal administrative proceedings.

I hereby certify that I have spoken with Willard Hanks, of the Department's Bureau of Air Quality Management, and that he is in agreement with the grant of this request.

Accordingly, I respectfully request that you formally extend the time for filing of a petition for administrative

Dale H. Twachtmann, Secretary
April 19, 1988
Page 3

proceedings in regard to the Department's proposed agency action as embodied in its Intent to Issue Permit No. AC50-137573 to and including June 15, 1988.

Sincerely,

Peter C. Cunningham
Peter C. Cunningham *PCC*

PCC/gb

cc: Betsy Pittman, Esquire
Clair Fancy
Willard Hanks
A. R. Mayo
Peter Barquin

Co prod: Willard Hanks

CHF/BT

Bruce Miller, U.S. EPA

} 4-21-88 (m)

ATTACHMENT USS-EU10-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU10-IV3**ALTERNATIVE METHODS OF OPERATION FOR
BRYANT BOILER NO. 5**

Boiler No. 5 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 671 MMBtu/hr (maximum 1-hour average) and 583 MMBtu/hr (maximum 24-hour average); No. 6 fuel oil alone at a maximum fuel oil heat input rate of 215.6 MMBtu/hr (maximum 24-hour average); or a combination of carbonaceous fuel and No. 6 fuel oil at a combined maximum heat input of 671 MMBtu/hr (maximum 1-hour average) and 583 MMBtu/hr (maximum 24-hour average). The maximum sulfur content in the fuel oil is limited to 0.7 percent by weight. This unit is expected to operate for up to 6,168 hours during October 1 to June 14. Up to 500 cubic yards of soil contaminated with "virgin fuels" (No. 2 and No 6 oil) and on-spec oil (lubricants) can be burned in Boiler No. 5 during the season.

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
 - The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
 - This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
 - This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Bryant Diesel Generating Unit Nos. 1 and 2

3. Emissions Unit Identification Number: **005, 006**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--------------------------------	--------------------------	--	--

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

10. Generator Nameplate Rating: _____ MW

11. Emissions Unit Comment:
Two 1,000-kW diesel electric generator sets. These units are typically used during the sugar off-season.

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: DG-1 & DG-2		2. Emission Point Type Code: 3	
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: V	6. Stack Height: 28. feet	7. Exit Diameter: 1.2 feet	
8. Exit Temperature: 475 °F	9. Actual Volumetric Flow Rate: 2,881. acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Stack parameters apply to each unit.			

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Internal Combustion Engines - Electric Generation; Distillate Oil (Diesel); Reciprocating		
2. Source Classification Code (SCC): 2-01-001-02		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 0.189	5. Maximum Annual Rate: 145.65	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 137
10. Segment Comment: (13.3 MMBtu/hr x 1 gal/137,000 Btu) + (12.6 MMBtu/hr x 1 gal/137,000 Btu) = 97.1 + 92.0 = 189 gal/hr For maximum fuel usage, assume that Unit 2 is operating 1,500 hr/yr: 97.1 gal/hr x 1,500 hr/yr = 145,650 gal/yr		

Segment Description and Rate: Segment ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 12.0 lb/hour 4.62 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 127*S lb/1,000 gal Reference: Permit No. 0990061-006		7. Emissions Method Code: 3	
8. Calculation of Emissions: See Attachment USS-EU11-F1.8.			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum hourly emissions representative of both units combined. Annual emissions based on Unit No. 2 (1,525 bhp engine) operating at a maximum of 1,500 hours per year.			

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.5% S fuel	4. Equivalent Allowable Emissions: 12.0 lb/hour 4.62 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0990061-006-AV. Allowable emissions based on permit condition limiting sulfur content in fuel.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive 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: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 103.6 lb/hour 39.9 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 4.0 lb/MMBtu Reference: Test Data		7. Emissions Method Code: 3	
8. Calculation of Emissions: See Attachment USS-EU11-F1.8.			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum hourly emissions representative of both units combined. Annual emissions based on Unit No. 2 (1,525 bhp engine) operating at a maximum of 1,500 hours per year.			

**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	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 4.75 lb/MMBtu	4. Equivalent Allowable Emissions: 123.0 lb/hour 47.4 tons/year
5. Method of Compliance: Fuel Analysis	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0990061-006-AV.	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Rule 62-296.320(4)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

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

EMISSIONS UNIT INFORMATION
Section [11]
Bryant Diesel Generating Unit Nos. 1 and 2

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor ____ of ____

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

Continuous Monitoring System: Continuous Monitor ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

<p>1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU11-I1</u> <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU11-I2</u> <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU11-I4</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.</p>
<p>7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU11-IV1</u> <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: <u>CAM Plan</u> <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [11]

Bryant Diesel Generating Unit Nos. 1 and 2

Additional Requirements Comment

[Empty rectangular box for additional requirements comment]

ATTACHMENT USS-EU11-F1.8

CALCULATION OF EMISSIONS

Attachment USS-EU11-F1.8. Annual and Short Term Emissions of Regulated Criteria Pollutants,
U.S. Sugar Corporation Bryant Diesel Generator Nos. 1 and 2

Regulated Criteria Pollutants	Estimated Emissions (No. 2 Diesel Fuel Oil - Each Unit)								Combined Annual Hours of Operation	Worst Case Emissions ^b		
	Diesel Generator Unit 1				Diesel Generator Unit 2					Hourly Emissions (lb/hr)	Annual Emissions (lb/hr)	Annual Emissions (Tons/yr)
	Emission Factor	Ref	Activity Factor ^a	Hourly Emissions (lb/hr)	Emission Factor	Ref	Activity Factor ^a	Hourly Emissions (lb/hr)				
Sulfur dioxide	63.5 lb/1000 gal	1	92.0 gal/hr	5.84	63.5 lb/1000 gal	1	97.1 gal/hr	6.16	1,500	12.0	4.62	
Nitrogen oxides	4.00 lb/MMBtu	2	12.6 MMBtu/hr	50.4	4.00 lb/MMBtu	2	13.3 MMBtu/hr	53.2	1,500	103.6	39.90	

Footnotes:

^a Unit 1 activity factor is based on 1,440 bhp; Unit 2 on 1,525 bhp. Conversion factors are 8,750 Btu/bhp-hr, and 137,000 Btu/gal for diesel fuel.

^b Worst case hourly emissions based on Units 1 and 2 operating at the same time.

Worst case annual emissions based on operating Unit 2, the larger of the two units, at the maximum hours of operation.

References:

1. Emission rate from permit specific condition = 127*S lb/1000 gal. S= sulfur content = 0.5%.
2. Emission rate from permit specific condition = 4.75 lb/MMBtu based on Rule 62-296.570(4)(b)7., F.A.C. Permittee is assuming a lower limit of 4.0 lb/MMBtu.

Example Calculations:

Hourly Emissions:

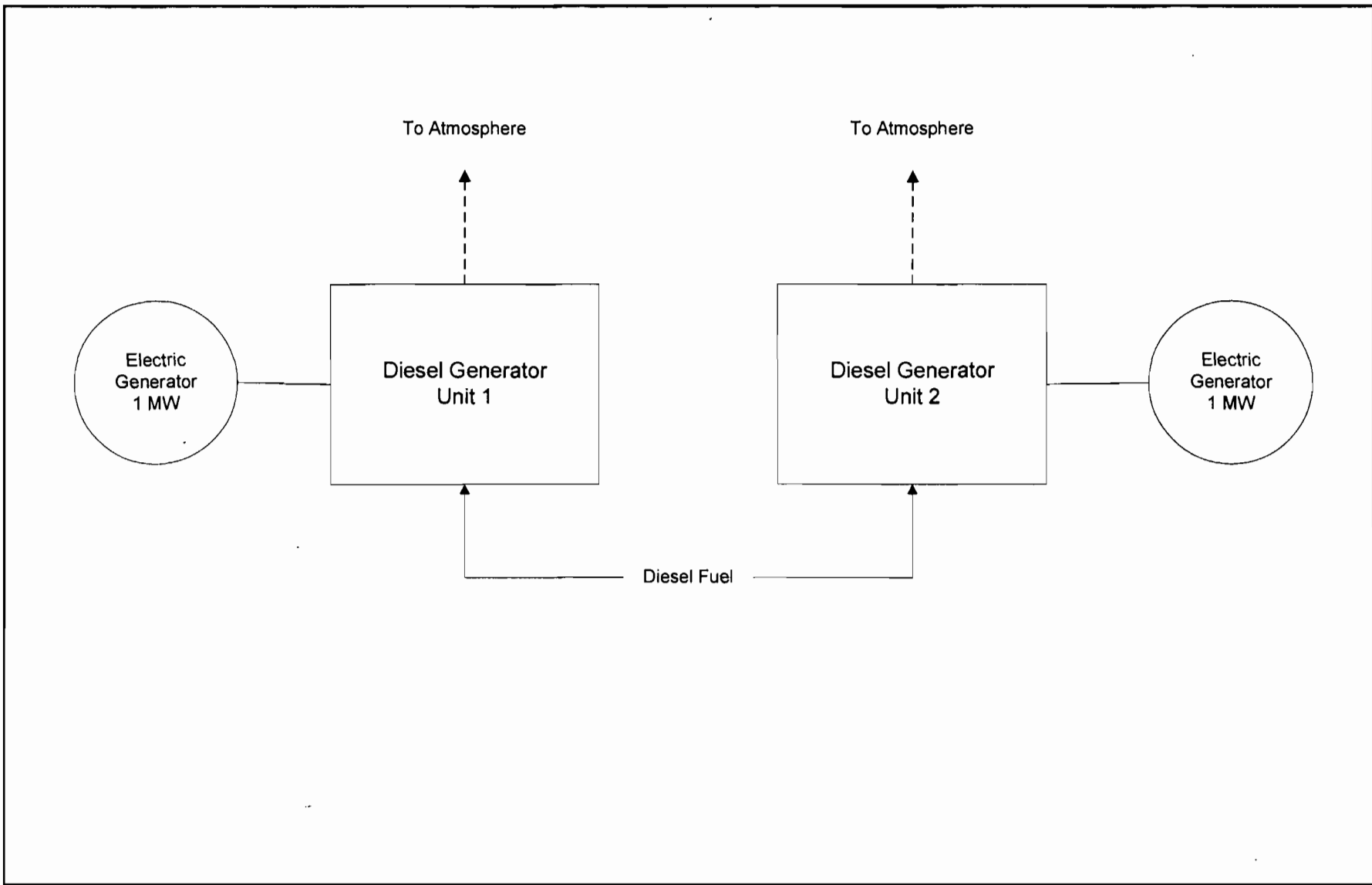
Hourly Emission Rate = Emission Factor X Activity Factor X Control Efficiency (if applicable)

Annual Emissions:

Annual Emissions = (Summation of Unit 1 and Unit 2 Hourly Emission Rate X Annual Operational Hours) / 2000 lb/ton

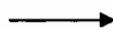
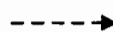
ATTACHMENT USS-EU11-11

PROCESS FLOW DIAGRAM



Attachment USS-EU11-I1
 Process Flow Diagram
 U.S. Sugar Corporation
 Diesel Generator Units 1 & 2

Process Flow Legend

Solid/Liquid 
 Gas 

Path: 0537540/4/4.4/USS-EU11-I1.VSD

Date: 06/01/05



ATTACHMENT USS-EU11-I2

FUEL ANALYSIS

ATTACHMENT USS-EU11-I2

BRYANT DIESEL GENERATING UNITS 1 AND 2 FUEL ANALYSIS

Parameter	Fuel
	No. 2 Fuel Oil ^a (0.5% max S)
Density (lb/gal)	6.83
Approximate Heating Value (Btu/lb)	20,058
Approximate Heating Value (Btu/gal)	137,000
<u>Ultimate Analysis:</u>	
Carbon	87.3%
Hydrogen	12.6%
Nitrogen	0.006%
Oxygen	0.04%
Sulfur	0.5%
Ash/Inorganic	< 0.01%
Moisture	--

Note: All values represent average fuel characteristics.

^a Source: Perry's Chemical Engineers' Handbook. Sixth Edition, 1984.

ATTACHMENT USS-EU11-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU11-I4**PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions will be taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Diesel Generator Nos. 1 and 2.

Diesel Generator Startup (1 – 3 hours)

1. The units are maintained at operating temperatures at all times for fuel-efficient startup.
2. When the electrical loading of the unit takes place, the flow fuel is gradually increased by hand.
3. When the electrical loading of the unit takes place, small amounts of fuel are added until full load has been achieved.
4. Once full load is achieved, the mechanical governor setting minimized any fluctuation in generator speed.
5. Normally, a cold startup will require 1 to 3 hours from first firing to full load operation.

Diesel Generator Shutdown

1. To shut down, engine RPMs are reduced to the point of shutdown by manually reducing the fuel flow to the engine.

ATTACHMENT USS-EU11-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU11-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS****Bryant Diesel Generator Nos. 1 and 2**

- 62-296.320(4)(b)1., F.A.C.: General Visible Emission Standards
- 62-296.570(1)(a), F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(2), F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(3), F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(4)(a)1., F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(4)(a)2., F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(4)(a)3., F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-296.570(4)(b)7., F.A.C: NO_x RACT for Diesel Generators
- 62-296.570(4)(c), F.A.C: RACT Requirements for major for VOC and NO_x emitting facilities
- 62-297.310(1), F.A.C: General Compliance Test Requirements
- 62-297.310(2)(b), F.A.C: General Compliance Test Requirements
- 62-297.310(3), F.A.C: General Compliance Test Requirements
- 62-297.310(4), F.A.C: General Compliance Test Requirements
- 62-297.310(5), F.A.C: General Compliance Test Requirements
- 62-297.310(6), F.A.C: General Compliance Test Requirements
- 62-297.310(7)(a)3., F.A.C: General Compliance Test Requirements
- 62-297.310(7)(a)4., F.A.C: General Compliance Test Requirements
- 62-297.310(7)(a)5., F.A.C: General Compliance Test Requirements
- 62-297.310(7)(a)9., F.A.C: General Compliance Test Requirements
- 62-297.310(7)(a)10., F.A.C: General Compliance Test Requirements
- 62-297.310(8), F.A.C: General Compliance Test Requirements
- 62-297.401(7)(e), F.A.C: EPA Test Method 7E
- 62-297.401(9), F.A.C: EPA Test Method 9
- 62-297.440(1)(b), F.A.C: Supplemental Test Procedures



Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

PERMITTEE:
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

I.D. No: 52FTM500061 07 & 08
Permit/Certification
Number: A050-269446
Date of Issue: May 31, 1995
Expiration Date: May 31, 2000
County: Palm Beach
Latitude: 26° 50' 41" N
Longitude: 80° 37' 09" W
Section/Town/Range: 3/42S/37E
Project: Bryant Mill
Diesel Electric
Generators Nos. 1 & 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Operation of two (2) 1,000 KW diesel electric generator sets. Both units have 2-cycle, 1,440 bhp engines, Model No. 16-567-B, manufactured by the Cleveland Diesel Engine Division of General Motors Corporation and were installed in 1985. These units are typically used during the sugar off-season..

Pertinent Documents

Dated

RACT 62-296.570(4) (b)7.
Application received
Construction Permit AC50-259704
Compliance testing

Oct. 21, 1994
Feb. 9, 1995
Feb. 19, 1995

For Title V Permits
SIC Number 2061 (alt 4911)
SCC Numbers 2-02-004-01

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: A050-269446
Date of Issue: May 31, 1995
Expiration Date: May 31, 2000

SPECIFIC CONDITIONS:

FACILITY OPERATIONS:

1. All fugitive dust generated at this site shall be adequately controlled. [Reference Rule 62-296.310(3), F.A.C.]
2. This facility shall be operated in such a fashion so as to preclude objectionable odors. [Reference Rule 62-296.320(2), F.A.C.]
3. The hours of operation of the generators are not restricted.

CONDITIONS OF COMPLIANCE:

4. Visible emissions shall not exceed 20% opacity. [Reference Rule 62-296.310(2)(a), F.A.C.]
5. Emissions of NO_x from the diesel generator shall not exceed 4.75 pounds per million Btu. [Reference Rule 62-296.570(4)(b)7., F.A.C.]
6. Sulfur content in fuel shall not exceed 0.5%.
7. Stack sampling facilities provided by the owner shall be in accordance with the requirements of Chapter 62-297.345, F.A.C.
8. Notification and reporting requirements of this permit shall also be sent to the Palm Beach County Public Health Unit

REQUIRED TESTING:

9. Notification of the Department prior to any required testing shall include as a minimum: the date and time of the test, the exact location of the test, and the name and telephone number of the contact person at the site. [Reference Rule 62-296.340(1)(i), F.A.C.]
10. Testing of emissions should be conducted with the source operating within 10% of its rated capacity. Testing may be conducted at less than 90% of rated capacity; however, if so, subsequent source operation is limited to up to 110% of the test load. Once the unit is so limited, then operation at higher capacities is allowed for purposes of additional compliance testing to regain rated capacity in the permit with prior notification to the Department's South District.

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AO50-269446
Date of Issue: May 31, 1995
Expiration Date: May 31, 2000

SPECIFIC CONDITIONS:

REQUIRED TESTING:

11. Nitrogen oxide emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 7E as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year within 60 days prior to February 19th. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rules 62-297.340(1), and 62-296.570(4)(a)3., F.A.C.]

12. Visible emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year within 60 days prior to February 19th. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rules 62-297.340(1), F.A.C.]

REPORTS AND RECORDKEEPING:

13. A log of the running hours and fuel consumption shall be kept for a period of three years and be available for the Department to examine. The following table shall be used to compute the annual emissions from the facility:

POLLUTANT	EMISSION FACTOR
Nitrogen Oxides	11 grams/hp-hr
	3.1 pounds/MMBtu heat input
	425 pounds/1000 gallons
Sulfur Dioxide	3.67*S grams/hp-hr
	1.01*S pounds/MMBtu heat input
	150*S pounds/1000 gallons
Based on AP-42 factors Diesel fuel @ 137,000 Btu/gallon and 7.1 pounds/gallon S is the percent sulfur in the fuel	

14. Analysis of fuel oil including sulfur content shall be submitted with the annual report.

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: A050-269446
Date of Issue: May 31, 1995
Expiration Date: May 31, 2000

SPECIFIC CONDITIONS:

GENERAL CONDITIONS:

15. An integral part of this permit is the attached 15 General Conditions. [Rule 62-4.160, F.A.C.]

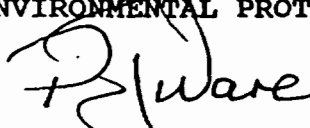
PERMIT RENEWAL:

16. Prior to sixty days before the expiration of this operating permit, the permittee shall apply for a renewal of the permit using the current version of the permit renewal application form. A renewal application shall be timely and sufficient. If the application is submitted prior to sixty days before the expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by this agency or, if there is court review of the final agency action, until a later date is required by Section 120.60, F.S. [Reference Rule 62-4.090, F.A.C.]

Note: In the event of an emergency the permittee shall contact the Department by calling (904) 413-9911. During normal business hours, the permittee shall call (813) 332-6975.

Issued this 31st day of May, 1995.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION



Peter J. Ware
Director of
District Management

PJW/AEL/jw

10 Pages Attached

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AO50-269446
Date of Issue: May 31, 1995
Expiration Date: May 31, 2000

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5) Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-30.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

PERMITTEE:
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

I.D. No: 52FTM500061 07 & 08
Permit/Certification
Number: AC50-259704
Date of Issue: February 9, 1995
Expiration Date: February 9, 1996
County: Palm Beach
Latitude: 26° 50' 41" N
Longitude: 80° 37' 09" W
Section/Town/Range: 3/42S/37E
Project: Bryant Mill
Diesel Electric
Generators Nos. 1 & 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct (after the fact) two (2) 2-cycle diesel electric generator sets. One unit is a 1,440 bhp engine, Model No. 16-567-B, and the other is a 1,525 bhp engine, Model No. 16-567-c, manufactured by the Cleveland Diesel Engine Division of General Motors Corporation and were installed in 1985. These units are typically used during the sugar off-season..

Pertinent Documents

RACT 62-296.570(4)(b)7.
Application received
Letter from KBN with corrections

Dated

Oct. 21, 1994
Jan. 30, 1995

For Title V Permits

SIC Number 2061 (alt 4911)
SCC Numbers 2-02-004-01

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AC50-259704
Date of Issue: February 9, 1995
Expiration Date: February 9, 1996

SPECIFIC CONDITIONS:

FACILITY OPERATIONS:

1. All fugitive dust generated at this site shall be adequately controlled. [Reference Rule 62-296.310(3), F.A.C.]
2. This facility shall be operated in such a fashion so as to preclude objectionable odors. [Reference Rule 62-296.320(2), F.A.C.]
3. The hours of operation of the generators are not restricted.

CONDITIONS OF COMPLIANCE:

4. The applicant shall retain a registered professional engineer for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. [Reference Rule 62-4.050(3), F.A.C.] An APPLICATION FOR AIR PERMIT - SHORT FORM (DEP Form 62-210.900(2) attached) shall be submitted as an application for an operation permit, along with the compliance tests results. These are to be submitted within 60 days after completion of construction. [Reference Rule 62-4.220, F.A.C.]
5. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during construction.
6. Visible emissions shall not exceed 20% opacity. [Reference Rule 62-296.310(2)(a), F.A.C.]
7. Emissions of NO_x from the diesel generator shall not exceed 4.75 pounds per million Btu. [Reference Rule 62-296.570(4)(b)7., F.A.C.]
8. Sulfur content in fuel shall not exceed 0.5%.
9. Stack sampling facilities provided by the owner shall be in accordance with the requirements of Chapter 62-297.345, F.A.C.
10. Notification and reporting requirements of this permit shall also be sent to the Palm Beach County Public Health Unit

REQUIRED TESTING:

11. Notification of the Department prior to any required testing shall include as a minimum: the date and time of the test, the exact location of the test, and the name and telephone number of the contact person at the site. [Reference Rule 62-296.340(1)(i), F.A.C.]

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AC50-259704
Date of Issue: February 9, 1995
Expiration Date: February 9, 1996

SPECIFIC CONDITIONS:

REQUIRED TESTING:

12. Testing of emissions should be conducted with the source operating within 10% of its rated capacity. Testing may be conducted at less than 90% of rated capacity; however, if so, subsequent source operation is limited to up to 110% of the test load. Once the unit is so limited, then operation at higher capacities is allowed for purposes of additional compliance testing to regain rated capacity in the permit with prior notification to the Department's South District.

13. Nitrogen oxide emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 7E as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted within 30 days after completion of construction. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rules 62-297.340(1), and 62-296.570(4)(a)3., F.A.C.]

14. Visible emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted within 30 days after completion of construction. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rules 62-297.340(1), F.A.C.]

GENERAL CONDITIONS:

15. An integral part of this permit is the attached 15 General Conditions. [Rule 62-4.160, F.A.C.]

REPORTS AND RECORD KEEPING:

16. A log of the running hours and fuel consumption shall be kept for a period of three years and be available for the Department to examine. The following table shall be used to compute the annual emissions from the facility:

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AC50-259704
Date of Issue: February 9, 1995
Expiration Date: February 9, 1996

SPECIFIC CONDITIONS:

16. Continued

POLLUTANT	EMISSION FACTOR
Nitrogen Oxides	11 grams/hp-hr
	2.77 pounds/MMBtu heat input*
	379 pounds/1000 gallons*
Sulfur Dioxide	3.67*S grams/hp-hr
	0.92*S pounds/MMBtu heat input*
	127*S pounds/1000 gallons*

Based on AP-42 factors
Diesel fuel @ 137,000 Btu/gallon and 7.1 pounds/gallon
S is the percent sulfur in the fuel
*Based on 8750 Btu/bhp-hr for 2 cycle diesel engine

Note: In the event of an emergency the permittee shall contact the Department by calling (904) 413-9911. During normal business hours, the permittee shall call (813) 332-6975.

Issued this 9th day of February, 1995.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Peter J. Ware
Director of
District Management

PJW/AEL/jw

9 Pages Attached

PERMITTEE:
United States Sugar Corp.

I.D. No.: 52FTM500061 07 & 08
Permit/Cert. No.: AC50-259704
Date of Issue: February 9, 1995
Expiration Date: February 9, 1996

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5) Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-30.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)				
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).				
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.				
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.				
2. Description of Emissions Unit Addressed in this Section: Facility-wide Unregulated				
3. Emissions Unit Identification Number:				
4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. Package Unit: Manufacturer:		Model Number:		
10. Generator Nameplate Rating:		MW		
11. Emissions Unit Comment: See Attachment USS-EU12-A11 for a list of unregulated emission sources at the Clewiston and Bryant Mills.				

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: 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: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 6

1. Segment Description (Process/Fuel Type): Food and Agriculture - Fugitive Emissions		
2. Source Classification Code (SCC): 3-02-888-01		3. SCC Units: Tons Product
4. Maximum Hourly Rate: 446.8	5. Maximum Annual Rate: 2,995,125	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Segment refers to bagasse throughput for entire Clewiston Mill bagasse handling system. Hourly rate refers to the maximum hourly rate during the crop season. Annual rate is based on the maximum bagasse usage of Boiler Nos. 1, 2, 4, 7, and 8.		

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type): Food and Agriculture - Fugitive Emissions		
2. Source Classification Code (SCC): 3-02-888-01		3. SCC Units: Tons Product
4. Maximum Hourly Rate: 241.4	5. Maximum Annual Rate: 1,147,080	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Segment refers to bagasse throughput for entire Bryant Mill bagasse handling system. Hourly rate refers to the maximum hourly rate during the crop season. Annual rate is based on an operating maximum of 4,752 hours per year.		

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 3 of 6

1. Segment Description (Process/Fuel Type): Sugar Cane Processing: Other not Classified		
2. Source Classification Code (SCC): 3-02-015-99		3. SCC Units: Tons Material Processed
4. Maximum Hourly Rate: 33	5. Maximum Annual Rate: 289,080	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Salt unloading and storage for Clewiston Molasses Plant Salt Silo.		

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type): Manufacturing Industries; Mineral Products; Bulk Materials Storage Bins		
2. Source Classification Code (SCC): 3-05-102-96		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 25	5. Maximum Annual Rate: 2,100	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Lime unloading and storage at Clewiston Sugar Mill.		

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type): Manufacturing Industries; Mineral Products; Bulk Materials Storage Bins		
2. Source Classification Code (SCC): 3-05-102-96		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 25	5. Maximum Annual Rate: 900	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Lime unloading and storage at Clewiston Water Treatment Plant.		

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type): Manufacturing Industries; Mineral Products; Bulk Materials Storage Bins		
2. Source Classification Code (SCC): 3-05-102-96		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 25	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Lime unloading and storage at Bryant Sugar Mill.		

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted:		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code:	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive 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.

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

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: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Applies to Clewiston Lime Storage Silo (EU 011), Bryant Lime Storage Silo (EU 007), and Bryant Sugar Mill and Boiling House (EU008). Rule 62-296.320(4)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Applies to Clewiston Lime Storage Silo at the Water Treatment Plant (EU 010), the Clewiston Bagasse Handling System dust collector(s) (EU 027), and the Clewiston Molasses Plant Salt Silo bin vent filter.	

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor ____ of ____

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

Continuous Monitoring System: Continuous Monitor ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU12-11</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU12-13</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU12-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [12]

Facility-wide Unregulated

Additional Requirements Comment

[Empty rectangular box for comment]

ATTACHMENT USS-EU12-A11

**LIST OF UNREGULATED
EMISSIONS UNITS AND/OR ACTIVITIES**

ATTACHMENT USS-EU12-A11a

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES

Clewiston Mill

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

EU

ID No. Brief Description of Emissions Units and/or Activity

011 Lime Storage Silo

The Lime Storage Silo is equipped with a Mikro-Pulsaire Model 64S-8-20 baghouse filter.

(A) Visible emissions limit is 20-percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.]

010 Lime Storage Silo at Water Treatment Plant

The Lime Storage Silo is equipped with a baghouse filter.

(A) Visible emissions shall not exceed 5-percent opacity during silo loading.

[Rule 62-296.320(4)(b)1., F.A.C., and Permit No. 0510017-001-AC]

027 Bagasse Handling System

The Bagasse Handling System is equipped with five dust collectors.

(A) Visible emissions shall not exceed 5-percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C. and Permit No. 0510003-024-AC]

--- Molasses Plant Salt Silo

The Molasses Plant Salt Silo is equipped with an Industrial Accessories Company Model No. 587B-BVI-16:56 bin vent filter.

(A) Visible emissions shall not exceed 5-percent opacity during silo loading, or from hoppers and other storage or conveying equipment.

[Rule 62-297.620(4), F.A.C. and Permit No. 0510003-025-AC]

Sugar Mill and Boiling House

Bagacillo cyclones and handling system Boiling house

Centrifugals Boiling house

Crystallizer Cooling Towers Boiling house

Evaporator cleaning operations Boiling house

Evaporators Boiling house

EU

ID No. Brief Description of Emissions Units and/or Activity

Sugar Mill and Boiling House (continued)

Handling of raw sugar	Boiling house
Juice heaters	Boiling house
Lime slaker	Boiling house
Mud belt presses	Boiling house
Process tanks including: Batch, chemical neutralization, juice, clarified juice, clarifier, flocculant/coagulant mix, flash, hot liming, mingler, mixer, melter, mud mixing, mud receiving, pan feed, magma, mud waste muriatic acid, spent acid, sugar receiver, syrup storage, and alcohol storage (IPA) storage tanks.	Boiling house
Vacuum mud filters and vacuum pumps	Boiling house
Vacuum pans/receivers, condensers	Boiling house
Cane mills	Sugar mill
Cush-cush and DSM screens	Sugar mill
Turbine vents	Sugar mill

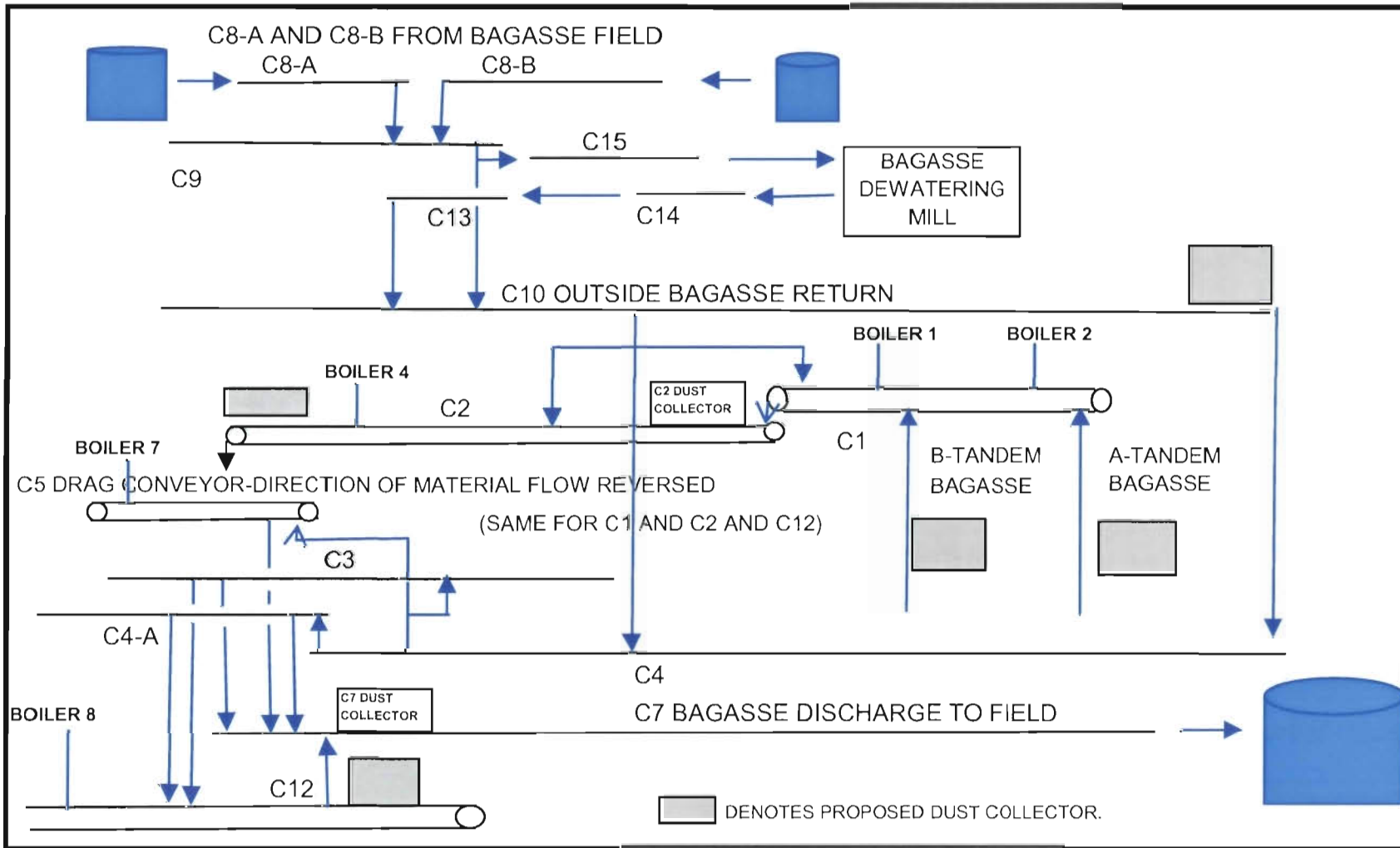
ATTACHMENT USS-EU12-A11b**LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES****Bryant Mill**

The below listed emissions units and/or activities at the Bryant Mill are neither “regulated emissions units” nor “insignificant emissions units”.

EU ID No.	Brief Description of Emissions Units and/or Activity
007	Lime Storage Silo The Lime Storage Silo is equipped with a Sutor Built Series 400 baghouse filter. (A) Visible emissions limit is 20-percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]
008	Sugar Mill and Boiling House The sugar mill and boiling house consists of bagacillo cyclones and handling system; centrifugals; crystallizers; evaporator cleaning operations; evaporators with NCG vent; juice and clarified juice heaters (steam); lime slaker; mud filter vacuum pumps; processing tanks; rotary mud filters; and vacuum pans/receivers, and condensers; cane mills; cush-cush and DSM screens; and turbine vents. (A) Visible emissions limit is 20-percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]

ATTACHMENT USS-EU12-11

PROCESS FLOW DIAGRAM



ATTACHMENT USS-EU12-II
 Bagasse Handling System Flow Diagram

Source: U.S. Sugar, Golder, 2005.



ATTACHMENT USS-EU12-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU12-I3a**DETAILED DESCRIPTION OF CONTROL EQUIPMENT****Clewiston Molasses Plant Salt Silo****Bin Vent Filter**

Parameter	Design Basis
Manufacturer/Model	Industrial Accessories Co. Bin Vent Model 58TB-BVI-16:S6
Volumetric air flow capacity (cfm)	750
Style	Pulse Cleaning
No. filter elements	16 bags
Filter Area (ft ²)	127
Air to Cloth Ratio	5.9 to 1
Bag Access	Top Removal
Clean air plenum access	Top Door
Filter Media	16 oz. Polyester Singed
Pressure drop (in. of H ₂ O)	2 to 4
Outlet Grain Loading (gr/dscf)	0.02

ATTACHMENT USS-EU12-I3b

**CONTROL EQUIPMENT
BAGASSE HANDLING SYSTEM**

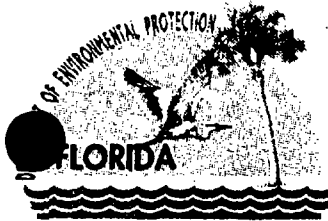
Five dust collectors will be installed for particulate control in the bagasse handling system.

	Dust Collector 1	Dust Collector 2	Dust Collector 3	Dust Collector 4	Dust Collector 5
Manufacturer	Prime Systems Inc. ^a	Prime Systems Inc. ^a	Prime Systems Inc. ^a	Prime Systems Inc. ^a	Prime Systems Inc. ^a
Model Number	BV-6X8-120 ^a	BV-6X7-120 ^a	BV-8X8-120 ^a	BV-6X8-120 ^a	BV-6X8-120 ^a
Inlet Gas Temp	Ambient	Ambient	Ambient	Ambient	Ambient
Inlet Gas Flow	3,550 CFM	3,100 CFM	4,725 CFM	3,550 CFM	3,550 CFM
Control Efficiency	99.99% for >4 microns	99.99% for >4 microns	99.99% for >4 microns	99.99% for >4 microns	99.99% for >4 microns

^a U.S. Sugar may install an equivalent dust collector.

ATTACHMENT USS-EU12-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS



Jeb Bush
Governor

GOLDER ASSOCIATES INC.
DEC 27 2004
**Department of
Environmental Protection** **GAINESVILLE**

South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Colleen M. Castille
Secretary

NOTICE OF FINAL PERMIT

December 21, 2004

CERTIFIED MAIL 7004 0750 0003 9120 4226
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

William A. Raiola, Senior Vice President
Sugar Processing Operations
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, Florida 33440

Hendry County - AP
U.S. Sugar Clewiston Mill
DEP File No. 0510003-025-AC

Enclosed is Final Permit Number 0510003-025-AC. This permit authorizes the United States Sugar Corporation to construct one (1) Bin Vent, 16-bag dust collector onto an existing molasses plant storage silo. The dust collector is defined as Industrial Accessories Company (IAC) Model No. 58TB-BVI-16:S6. The maximum process rate for salt loading is 33 tons per hour and the particulate matter emissions are defined at 0.13 lb/hr and 0.57 tons/year. This facility is located at W.C. Owens Avenue and S.R. 832, Clewiston, Florida, 33440, Hendry County, Florida. This permit is issued pursuant to Section 403.087, Florida Statutes.

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

Executed in Fort Myers, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart
Acting Director of
District Management
Post Office Box 2549
Fort Myers, Florida 339002-2549
(239) 332-6975

JMI/CE/jw



Department of Environmental Protection

Jeb Bush
Governor

South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Colleen M. Castille
Secretary

PERMITTEE:

U.S. Sugar Corporation
Clewiston Mill
111 Ponce DeLeon Avenue
Clewiston, Florida 33440

Facility I.D. No. 0510003
Permit Number: 0510003-025-AC
Date of Issue: December 21, 2004
Expiration Date: December 21, 2009
County: Hendry
Latitude: 26° 44' 06" N
Longitude: 80° 56' 19" W
Project: Molasses Plant, Salt Silo Vent Filter
Installation

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The permit authorizes the construction of one (1) Bin vent, 16 bag fabric filter dust collector, Industrial Accessories Company (IAC) Model No. 58TB-BVI-16:S6 onto an existing molasses plant salt storage silo. The maximum process rate for salt loading is 33 tons per hour and the particulate matter emissions are defined at 0.13 lb/hr and 0.57 tons/year.

The facility is located at the U.S. Sugar Corporation, Clewiston Mill, W.C. Owens Avenue and S.R. 832 Clewiston, Florida 33440, Hendry County.

Pertinent Documents

Construction Application
Notice of Intent to issue:

Dated

August 31, 2004
October 28, 2004

PERMITTEE:
U.S. Sugar Corporation
Clewiston Mill

Facility I.D. No.: 0510003
Permit Number: 0510003-025-AC
Date of Issue: December 21, 2004
Expiration Date: December 21, 2009

SPECIFIC CONDITIONS:

- f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. Confining abrasive blasting where possible.
- h. Enclosure or covering of conveyor systems.

[Rule 62-296.320, F.A.C.]

6. Discharges: There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

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

7. Visible emissions shall not exceed 5% opacity during silo loading, or from hoppers and other storage, or from conveying equipment.

[Rule 62.297.620(4), F.A.C.]

Test Methods and Procedures:

8. Visible emissions test is required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA Method 9 as published in 40 CFR-60 Appendix A, or State approved equivalent method. The dust collector exhaust point shall be tested for visible emissions within 60 days after completion of construction.

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

9. This dust collector exhaust port shall be tested by a certified observer in accordance with EPA Method 9 for a minimum of 30 minutes or, if the operation is normally completed in less than 30 minutes and does not recur within that time, the test shall last for the length of the silo loading operation.

[Rule 62-297.310(4)(a) and Rule 62-297.401(9)(a) F.A.C.]

10. A visible emissions test shall be conducted while loading the silo at a rate that is representative of the normal silo-loading rate. Each test report shall state the actual silo-loading rate during emissions testing.

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

11. The permittee shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin. The permittee shall provide written notification of the date, time and location of each test, and provide the name, company and telephone number of the person conducting the test.

[Rule 62-297.310(7)(a)(9), F.A.C.]

PERMITTEE:
U.S. Sugar Corporation
Clewiston Mill

Facility I.D. No.: 0510003
Permit Number: 0510003-025-AC
Date of Issue: December 21, 2004
Expiration Date: December 21, 2009

SPECIFIC CONDITIONS:

17. All recorded data shall be maintained on file at the facility for a period of five (5) years.
[Rule 62-4.070(3) F.A.C.]


General Conditions:

18. An integral part of this permit is the attached fifteen (15) paragraphs of the General Conditions and Construction Application noted as "Pertinent Documents".

NOTE: In the event of an emergency the permittee shall contact the Department by calling (850) 413-9911. During normal business hours, the permittee shall call (239) 332-6975.

Issued this 21st day of December 2004.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Jon M. Iglehart
Acting Director of
District Management
Post Office Box 2549
Fort Myers, Florida 33902-2549
(239) 332-6975

JMI/CE/jw

PERMITTEE:
U.S. Sugar Corporation
Clewiston Mill

Facility I.D. No.: 0510003
Permit Number: 0510003-025-AC
Date of Issue: December 21, 2004
Expiration Date: December 21, 2009

GENERAL CONDITIONS:

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of non-compliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit incorporates the following previously issued determinations:

- (a) Determination of Best Available Control Technology (not applicable);
- (b) Determination of Prevention of Significant Deterioration (not applicable); and
- (c) Compliance with New Source Performance Standards (not applicable).



Department of Environmental Protection

Lawton Chiles
Governor



Mailing Address:
Post Office Box 2549
Fort Myers, Florida 33902-2549

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT ISSUANCE

December 3, 1998

CERTIFIED MAIL #P 506 066 482
RETURN RECEIPT REQUESTED

In the Matter of an Application
for Permit by:

Lawrence D. Worth
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Post-It® Fax Note	7671	Date	8-20-98	# of pages	2
To	DAVID BUTT	From	DON GRIFFIN		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			

DEP File No. 0510017-001-AO
Hendry County - AP

Enclosed is Permit Number 0510017-001-AO to United States Sugar Corporation to operate a Lime Silo at Clewiston Water Treatment Plant, issued under section(s) 403.087 of the Florida Statutes.

The Department will issue the permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency

Handwritten notes and signatures in the top right corner, including initials and dates like '12-7-98' and '12/3/98'.

action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and

(f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

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

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

David M. Knowles

David M. Knowles, P.E.
District Air Program Administrator
Post Office Box 2549
Fort Myers, Florida 33902-2549
(941) 332-6975

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on December 4, 1998 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date under section 120.52(7) Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Janice Kelp - *12-4-98*
(Clerk) (Date)

DMK/JRS/jw

Copies furnished to:

Jose Lopez, P.E.



Department of Environmental Protection

Lawton Chiles
Governor

Mailing Address:
Post Office Box 2549
Fort Myers, Florida 33902-2549

Virginia B. Wetherell
Secretary

PERMITTEE:
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

I. D. No.: 0510017
Permit Number: 0510017-001-AO
Date of Issue: December 3, 1998
Expiration Date: December 3, 2003
County: Hendry
Latitude: 26 ° 44 ' 15" N
Longitude: 80° 56 ' 07 " W
Section/Town/Range: 21/43S/34E
Project: Lime Silo at Clewiston
Water Treatment Plant

This permit is issued under the provisions of Chapter 403.087, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-296, 62-297 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Operate a lime silo at Clewiston Water Treatment Plant.

The facility is located at 1731 South W. C. Owen Avenue, Clewiston, Florida.

PERMITTEE:
United States Sugar Corporation

I. D. No.: 0510017
Permit/Cert. No.: 0510017-001-AO
Date of Issue: December 3, 1998
Expiration Date: December 3, 2003

SPECIFIC CONDITIONS:

FACILITY OPERATIONS

1. All fugitive dust generated at this site shall be adequately controlled. [Reference Rule 62-296.320(4)(c), F.A.C.]
2. This facility shall be operated in such a fashion so as to preclude objectionable odors. [Reference Rule 62-296.320(2), F.A.C.]
3. The permittee shall not allow any person to circumvent any pollution control device nor allow the emissions of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

CONDITIONS OF COMPLIANCE

4. Visible emissions shall not exceed 5% opacity during silo loading. [Reference Rule 62.297.620(4), F.A.C.]

SPECIFIC CONDITIONS:

REQUIRED TESTING

5. Visible emissions test are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60 Appendix A, or State approved equivalent method. Such tests shall be conducted once per year. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rule 62-297.310(7)]
6. Notification of the Department prior to any required testing shall include as a minimum: the date and time of the test, the exact location of the test, and the name and telephone number of the contact person at the site. [Reference Rule 62-297.310(7)(a)9, F.A.C.]

PERMITTEE:
United States Sugar Corporation

I. D. No.: 0510017
Permit/Cert. No.: 0510017-001-AO
Date of Issue: December 3, 1998
Expiration Date: December 3, 2003

SPECIFIC CONDITIONS:

GENERAL CONDITIONS:

7. An integral part of this permit is the attached 15 General Conditions.
[Rule 62-4.160, F.A.C.]

NOTE: In the event of an emergency the permittee shall contact the Department by calling (850) 413-9911. During normal business hours, the permittee shall call (941) 332-6975.

Issued this 3rd day of December, 1998.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

David M. Knowles

David M. Knowles, P.E.
District Air Program Administrator

DMK/JRS/jw

9 Pages Attached

PERMITTEE:
United States Sugar Corporation

I. D. No.: 0510017
Permit/Cert. No.: 0510017-001-AO
Date of Issue: December 3, 1998
Expiration Date: December 3, 2003

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5) Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-30.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. PSD-FL-333A
Project No. 0510003-024-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: July 1, 2007

FACILITY AND LOCATION

The United States Sugar Corporation operates the existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

STATEMENT OF BASIS

Boiler 8 is being constructed under original Permit No. PSD-FL-333 issued on November 20, 2003. It will be a new bagasse-fired boiler with a maximum heat input rate of 1030 MMBtu/hour. This permitting action is a revision of the original air construction permit to specifically address the shakedown period for the boiler and SNCR system, authorized periods of uncontrolled NOx emissions, and the firing of de-watered DAF filter material. The revised permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

Michael G. Cooke

Michael G. Cooke, Director
Division of Air Resource Management

11/3/07

Effective Date

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SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Bagasse Handling System

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
027	Bagasse Handling System

EQUIPMENT

1. **Modification of Existing System:** The permittee is authorized to modify the existing bagasse handling system to accommodate the additional bagasse required for Boiler 8. These changes include: expanding conveyor belt C4; adding a new conveyor belt to feed bagasse to Boiler 8; eliminating transfer belt conveyor No. 2 and increasing the bagasse throughput of the handling system. [Design; Rule 62-212.400(2)(e) and (g), F.A.C.]
2. **Air Pollution Control Equipment:** To minimize fugitive particulate matter, bagasse conveyors shall be enclosed. Dust collectors shall be installed on the conveyor transfer points. The preliminary design for the bagasse conveyor dust collection system is based on the following specifications.

Dust Collector	Manufacturer	Model No.	Flow Rate (acfm)	Outlet (grains/afc)	Approximate Outlet Height (feet)
1	Prime Systems	BV-6X8-120	3550	0.02	57
2	Prime Systems	BV-8X8-120	3100	0.02	62
3	Prime Systems	BV-8X7-120	4725	0.02	61
4	Prime Systems	BV-6X8-120	3550	0.02	57
5	Prime Systems	BV-6X8-120	3550	0.02	57

{Permitting Note: This system has previously been permitted and is under construction. The original plan called for the installation of six dust collectors. With the elimination of transfer belt conveyor No. 2, only the five duct collectors described above will be installed.} [Design]

EMISSIONS STANDARDS

3. **Opacity:** As determined by EPA Method 9, there shall be no visible emissions ($\leq 5\%$ opacity) from the dust collector outlets. [Rule 62-212.400(5)(c), F.A.C.]

TESTING REQUIREMENTS

4. **Opacity Tests:** Within 180 days of completing construction of the bagasse handling system and during the sugar mill season, an initial test shall be conducted in accordance with EPA Method 9 to demonstrate compliance with the opacity standard. Tests shall be conducted while the sugar mill and boilers are in normal operation. Each test shall be at least 30 minutes in duration. Subsequent tests shall be repeated for each federal fiscal year (October 1st to September 30th) to demonstrate compliance with the opacity standard. [Rules 62-212.400(5)(c) and 62-297.310(7)(a)4, F.A.C.]

REPORTS

5. **Test Report:** Within 45 days of conducting an opacity test, the permittee shall submit a report to the Compliance Authority summarizing the results of the test. [Rule 62-297.310(8), F.A.C.]

**COMPLIANCE ASSURANCE MONITORING
(CAM)
PLAN**

CAM PLAN

TO BE PROVIDED