Quantum Resources Management, LLC
St. Regis Gas Treatment Facility and Jay Gas Plant
Facility ID No.: 1130005
Santa Rosa County

Title V Air Operation Permit Renewal

FINAL Permit Project No.: 1130005-012-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
Northwest District
160 Governmental Center, Suite 308
Pensacola, FL 32502-5794
Telephone: 850/595-8300
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Title V Air Operation Permit Renewal

FINAL Permit No.: 1130005-012-AV

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Florida Department of Environmental Protection

Northwest District
160 Governmental Center, Suite 308
Pensacola, Florida 32502-5794

Rick Scott
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5 Houston Center
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Houston Texas 77010

FINAL Permit No.: 1130005-012-AV
Facility ID No.: 1130005
SIC No(s).: 13, 1311, 1321
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit. This facility is located at 5415 Oil Plant Road in Jay, Santa Rosa County; UTM Coordinates: Zone 17, 482.8km East and 3425.6 km North; and, Latitude: 30°52'45" North and Longitude: 87° 10' 45" West.

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named Permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix 40CFR60 A
Appendix 40CFR63 HH (General Provisions)
Appendix 40CFR63 ZZZZ (General Provisions)
Attachment 1, EPA Approved Custom Fuel Sample Schedule

Effective Date: January 17, 2011
Renewal Application Due Date: June 6, 2015
Expiration Date: January 17, 2016

/s/

Rick Bradburn
Air Program Administrator

RB/rp/c

Section I. Facility Information

This is a renewal of the initial Title V Air Operation Permit, No. 1130005-004-AV, effective March 4, 2005. Several subsequent construction permits were incorporated into the initial Title V Air Operation Permit, by two previous revisions: No. 1130005-009-AV, effective April 3, 2008 and No. 1130005-011-AV, effective September 16, 2008.

Subsection A. Facility Description

This facility consists of sulfur recovery plants, oil and gas treating including natural gas dehydration and tri-ethylene glycol (TEG) regeneration, saltwater disposal, and tertiary recovery.

Two Sulfur Recovery Plants (J2 and J3) (EU 034), were built in the early 1970s and precede NSPS requirements but are subject to emission limits in Rule 62-296.409(2), F.A.C. These plants control sulfur emissions from the production and treating of sour crude oil and gas from the Jay Oil Field. Acid gas containing H_2S from oil and gas production is oxidized and reacted to form elemental sulfur by a multi stage Claus process. A minimum of 96% of the H_2S is recovered as elemental sulfur. Unconverted H_2S is thermally oxidized to SO_2 prior to discharge.

The Primary Emergency Flare (FL01) and the Saltwater Disposal System Flare (FL02) (EU 035) were built in the early 1980s. The primary emergency flare includes continuous feed and purge streams with a 26.0 M cubic feet per hour pilot; and the JCSWD system flare, continuous feed streams and a 0.5 M cubic feet per hour pilot stream. SO_2 emissions, limited by Initial Title V Operation permit 1130005-001-AV, are controlled by a smokeless flare tip on each flare with a manual eductor gas system.

A Centaur turbine (EU 037) located at the Jay Central Saltwater Disposal Facility (JCSWD) was constructed in 1983. The natural gas fired turbine is subject to 40 CFR 60 Subpart GG - Stationary Gas Turbines, and 40 CFR 63 Subpart YYYY - Stationary Combustion Turbines, incorporated by reference in Rule 62-204.800(8)(b)40 and 62-204.800(11)(b)81, F.A.C., respectively. In addition this unit is subject to applicable requirements of both 40 CFR 60 and 63 Subpart A - General Provisions.

A recompressor 4-stroke rich-burn Engine (EU 038) is subject to 40 CFR 63 Subpart ZZZZ (RICE MACT) - Stationary Reciprocating Internal Combustion Engines, because it is located at a major source of HAP emissions.

Five 1,000 HP Ingersoll-Rand Recompressor Engines (EU 044) each with a heat input of 11.6 MMBtu per hour are equipped with catalytic converters. The catalytic converters limit the exhaust concentration of formaldehyde, to comply with 40 CFR 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines.

Sulfur Storage Pits (Jay 2 and Jay 3) (EU 039) are used to store molten sulfur. Loading racks transfer the molten sulfur to tanker trucks. The pits are regulated by Rule 62-296.411(1), F.A.C.

Glycol Reboiler Vent (EU 048) controls HAP and VOC emissions with an air-cooled condenser. Wet natural gas and dry tri-ethylene glycol (TEG) are contacted in a packed contactor tower to remove water from the natural gas. TEG is regenerated by heating and vaporizing the water

content as steam in the TEG reboiler. Dried TEG is reused in the contactor tower, while the vapor is condensed to recover organics. 40 CFR 63 Subpart HH - Oil and Natural Gas Production Facilities, regulates this process, a major source of HAP. The vent stream is combusted in the flame-zone of the TEG reboiler process heater with a venturi burner. This allows Quantum to be exempt from preparing a design analysis, and conducting performance testing and monitoring.

Various gas fired Process Heaters (Jay 2 and Jay 3 process heater, Jay 2 and Jay 3 stabilizer bottom heaters and Jay plant hot oil heater) (EU 040, 041 and 042) are used throughout the facility.

Two natural gas-fired Cooper-Bessemer Engines (EU 045 and 046) and are required in 40 CFR 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines, to maintain a record of an applicability determination for five years.

A natural gas-fired Waterflood Turbine (EU 050) is regulated by Rule 62-296.320, F.A.C., and 40 CFR 60 Subpart GG - Stationary Gas Turbines.

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

Based on the Title V permit renewal application received September 4, 2009, this facility is a major source of hazardous air pollutants (HAP).

Since Quantum Resources Management, Inc., St. Regis Gas Treatment Facility and Jay Gas Plant is a major source in accordance with Prevention of Significant Deterioration (PSD) as potential-to-emit emissions of VOC, SO_2, NO_X and CO are greater than 100 tons per year, any future modifications and/or construction must be evaluated with respect to the preconstruction review requirements of Rule 62-212.300(1) - (3), F.A.C.

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s)

EU I.D.	Brief Description
034	Sulfur Recovery Plants J2 and J3
035	Flares FL01 and FL02
037	JCSWD Solar Centaur Turbine Subject to 40 CFR 60 Subpart GG
038	Recompressor Engine with Catalytic Converter
039	Sulfur Pits
048	TEG Reboiler subject to 40 CFR 63 Subpart HH
040	Jay 2 and 3 Process Heaters - 56.7 MMBtu per hour each heater
041	Jay 2 and 3 Stabilizer Bottom Heaters - 28.4 MMBtu per hour each heater
042	Jay Plant Hot Oil Heater - 55.65 MMBtu per hour
044	Five 1,000 HP natural gas fired Ingersol Rand Compressor Engines with Catalytic Converters - 11.6 MMBtu per hour heat input
045	(1) - 5,000 HP natural gas fired Cooper-Bessemer “A” Engine - 42.0 MMBtu per hour heat input with “Clean Burn” Combustion Technology
046	(1) - 2,500 HP natural gas fired Cooper-Bessemer “B” Engine - 21.0 MMBtu per hour heat input
050	14,300 HP (South) Water Flood Gas Turbine

Unregulated Emissions Units and/or Activities

043	14,300 HP (North) Water Flood Gas Turbine
047	(2) - 630,000 gallon fixed roof processed crude oil Storage Tanks
049	Fugitive emissions

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents

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

These documents are provided to Permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Statement of Basis

These documents are on file with the permitting authority:
Appendix H-1: Permit History
Initial Title V Air Operation Permit issued February 9, 1999
Application for a Title V Air Operation Permit Revision received October 16, 2007
Additional Information Request dated December 14, 2007
Additional Information Response received March 27, 2008
Letter dated March 7, 2007 changing the Responsible Official
Title V Air Operation Permit Revision issued September 16, 2008
Application for a Title V Air Operation Permit Renewal received September 4, 2009
Additional Information Request dated October 29, 2009
Additional Information Response received March 4, 2010

Section II. Facility-wide Conditions

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. General Pollutant Emission Limiting Standards - Objectionable Odor Prohibited: No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards - General Visible Emissions Standard: Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1 & 4, F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA):
a. Permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

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

b. Permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]

5. Unregulated Emissions Units and/or Activities: Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities: Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions: Permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:

a. Tightly cover or close all VOC containers when they are not in use.
b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc., when they are

not in use.

c. Maintain all piping, valves, fittings, etc., in good operating condition.
d. Prevent excessive air turbulence across exposed VOC.
e. Immediately confine and clean up VOC spills and make sure appropriate wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.]

8. Emissions of Unconfined Particulate Matter: Pursuant to Rules 62-296.320(4)(c)1, 3 & 4, F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements outlined in the attached, "Precautions to Prevent Emissions of Unconfined Particulate Matter" and incorporated into this permit. (See Condition 57 of APPENDIX TV-6, TITLE V CONDITIONS):
The following requirements are included in this permit:

a. Trucks and vehicles shall stay on paved perimeter roads whenever possible to move from one location to another.
b. Vegetation and gravel shall be used to prevent wind generated dust associated with open spaces within the facility.
c. Walkways and paths within the facility shall be paved to minimize dust generated by personnel traffic.

[Rule 62-296.320(4)(c)2, F.A.C.]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440(1)(b), F.A.C.]

10. Statement of Compliance: The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2, F.A.C., shall be submitted to the Department and EPA within 60 days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3)(a)2 and 62-213.900(7), F.A.C.]
{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a) 2 & 3, F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

11. Permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northwest District Office.

Department of Environmental Protection
Northwest District Office
160 Governmental Center, Suite 308
Pensacola, Florida 32502-5794
Telephone: 850/595-8300; Fax: 850/595-8096

Notification of compliance testing may be submitted by electronic mail to NWDAIR@dep.state.fl.us.

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

United States Environmental Protection Agency, Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO): In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Rule 62-213.420(4), F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

14. Source Obligation: "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." This includes, but is not limited to, increases in the heat input or pollutant emission rates. [Rule 62-212.400(2)(g), F.A.C.]

Section III. Emissions Unit(s) and Conditions

Subsection A. This Section addresses the following emissions unit

EU I.D.	Brief Description
034	Sulfur Recovery Plants J2 and J3

The Sulfur Recovery Plants J2 and J3 were built in the early 1970s and pre-exist NSPS requirements, but are subject to emissions limits in Rule 62-296.409(2) & (3), F.A.C. These plants control sulfur emissions from the production and treating of sour crude oil and gas from the Jay Oil Field. Acid gas containing H_2S from oil and gas production is oxidized and reacted to form elemental sulfur by a multi stage Claus process. A minimum of 96% of the H_2S is recovered as elemental sulfur. Unconverted H_2S is thermally oxidized to SO_2 prior to discharge.

The maximum allowable potential regulated emissions are 6.83 tons per day of SO_2 for each sulfur recovery plant, limited to 2,490 tons per year total for both sulfur recovery plants.

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

Essential Potential to Emit (PTE) Parameters

A.1. Capacity: The maximum acid gas feed rate to Sulfur Recovery Plants J2 and J3 is limited to 2.5 million standard cubic feet (SCF) per day per Sulfur Recovery Plant. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

A.2. Hours of Operation: These plants are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-4.160(2) and Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A.3. Emissions Limit: Sulfur dioxide (SO_2) emissions shall not exceed 6.83 tons per calendar day per sulfur recovery plant, or a total for both sulfur recovery plants of 2,490 tons per year, at the maximum allowable operating rate of 2.5 MM SCF of acid gas feed per plant per day and an assumed maximum acid gas H_2S mole fraction of 0.81. At all lesser operating rates and acid gas mole fractions the SO_2 emissions shall not exceed 0.08 pound of SO_2 per pound of sulfur input. The allowable SO_2 emissions shall not exceed the value obtained from the following equation expressed as tons/day.

$$\text{Allowable } SO_2 = \frac{(QAG)(CAG)(32.06)(0.08)}{(380.68)(2000)}$$

Where: QAG = Acid gas flow rate, scf/d
CAG = Mole fraction of H_2S in acid gas based on most recent stack test (normally 0.77 - 0.81)
32.06 = Molecular weight of sulfur
0.08 = Allowable emission fraction of sulfur X ratio of molecular weight of SO_2 to sulfur
380.68 = scf per pound mole of any gas
2,000 = pounds per ton

[Rule 62-296.409(2), F.A.C.]

Test Methods and Procedures

A.4. SO_2 Emission Tests: SO_2 tests are required and shall be conducted once during each federal fiscal year (October 1 through September 30) for each sulfur recovery plant (J2 and/or J3) operated. [Rule 62-297.310(1) through (9), F.A.C.]

A.5. Test Methods: The test method for SO_2 shall be EPA Method 6 or as otherwise approved by the Department. [Rule 62-297.401(6), F.A.C.]

Monitoring of Operations

A.6. Permittee shall demonstrate continuing compliance with SO_2 emissions by monitoring and maintaining a record of acid gas composition, air rate, acid gas feed rate, and the sulfur plant tail gas ratio (H_2S to SO_2). An initial H_2S mole percent mean of 75.79% established from acid gas composition sampling (10 samples) beginning in January 2010, shall be used to compare subsequent acid gas sampling. Each subsequent **weekly** sample shall be added to the H_2S mole percent mean until the sample size of the mean reaches fifty-two (n = 52). Then the H_2S mole percent mean becomes a rolling average.

The acid gas sampling rolling average is set initially at **quarterly.** If a quarterly sample result is greater than one mole percent from the mean, then the sampling frequency is reset to **monthly**. If a **monthly** sample result is greater than one mole percent from the mean, then the sampling frequency is reset to **weekly**. If 12 consecutive **weekly** sample results are each less than one mole percent from the mean then the sampling frequency is reset to **monthly**. If three consecutive **monthly** sample results are each less than one mole percent from the mean then the sampling frequency is reset to **quarterly**. [Rule 62-4.070(1), F.A.C.]

A.7. Excess Emissions
Excess emissions resulting from startup, shutdown, or malfunction shall be routed to the low and high pressure flares providing best operation practices are adhered to in order to minimize emissions. 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.
When excess emissions resulting from malfunctions are flared, Permittee shall immediately notify the Department in accordance with Rule 62-4.130, F.A.C. The notification shall include pertinent information as to the cause and expected duration of the problem, and what steps are being taken to correct the problem and to prevent its recurrence. Such notification does not release Permittee from any liability for failure to comply with Department rules.
[Rule 62-210.700(1), (5) & (6), F.A.C.]

Recordkeeping and Reporting Requirements

A.8. Daily records of acid gas feed to the sulfur recovery plant, tons of sulfur produced, and calculated SO_2 emissions shall be maintained and made available for Department inspection. [Rule 62-4.030, F.A.C.]

A.9. This emissions unit is also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection B. This Section addresses the following emissions unit

EU I.D.	Brief Description
035	Flares FL01 and FL02

The primary emergency flare (FL01) and the saltwater disposal system flare (FL02) were built in the early 1980s. The primary emergency flare includes continuous feed and purge streams with a pilot that has a maximum heat input of 26.0 MMBtu per hour and the JCSWD system flare with continuous feed streams and a pilot that has a maximum heat input of 0.5 MMBtu per hour. SO_2 emissions, limited by permit 1130005-001-AV, are controlled by a smokeless flare tip on each flare with a manual eductor gas system.

Total SO_2 emissions from these flares are limited to 2 tons per day, except under excess emissions conditions consistent with Rule 62-210.700(1), (5) & (6), F.A.C. Under excess emissions conditions, emissions are limited to specified daily limits contained in specific condition **B.2**.

These flares are not subject to NSPS requirements, but are subject to previously established emission limits and are regulated emission points.

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

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation: The flares are allowed to operate continuously, i.e., 8,760 hours per year. [Rule 62-4.160 (2) and Rule 62-210.200 (PTE), F.A.C.]

Emission Limitations and Standards

B.2 Emissions Limit: Total SO_2 emissions shall not exceed a total of 2 tons per day from both flares (FL01 and FL02) except during periods of excess emissions, during which emissions shall not exceed the following daily limits for more than four consecutive calendar days without the approval of the Department:

January	21.1 tons/day	July	27.8 tons/day
February	18.0 tons/day	August	24.8 tons/day
March	20.8 tons/day	September	23.5 tons/day
April	18.4 tons/day	October	24.0 tons/day
May	21.8 tons/day	November	16.5 tons/day
June	26.0 tons/day	December	17.7 tons/day

[Rule 62-204.220(2) and Rule 62-204.240(1), F.A.C.]
{Permitting Note: These emission points should not produce visible emissions under acceptable operating conditions. Although visible emissions less than 20% opacity comply with the general pollutant emission limiting standard (Facility-Wide Condition No. 3) of 20% opacity, visible emissions of 5% to 15% opacity may suggest the presence of unacceptable operational problems.}

Monitoring of Operations

B.3. Permittee shall demonstrate compliance with the SO_2 standard by establishing and maintaining a record of the sulfur content of the process gas sent to each flare using approved ASTM methodology, with records maintained and made available for Department inspection. [Rule 62-4.070(1), F.A.C.]

B.4. Excess Emissions:
Excess emissions resulting from startup, shutdown, or malfunction of the other emission units shall be routed to the low and high pressure flares providing best operation practices are adhered to in order to minimize emissions.
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.
When excess emissions resulting from malfunctions are flared, Permittee shall immediately notify the Department in accordance with Rule 62-4.130, F.A.C. The notification shall include pertinent information as to the cause and expected duration of the problem, and what steps are being taken to correct the problem and to prevent its recurrence. Such notification does not release Permittee from any liability for failure to comply with Department rules.
[Rule 62-210.700(1), (5) & (6), F.A.C.]

Recordkeeping, Reporting, and Testing Requirements

B.5. Daily records of flare gas flows, quantities and types of gas flared, calculated SO_2 emissions, opacity during flaring, and cause of excess emissions shall be maintained and made available for Department inspection. [Rule 62-4.070(1), F.A.C.]

B.6. This emissions unit is also subject to all applicable conditions contained in Subsection J - Common Conditions.

B.7. This emissions unit has no regulatory based frequency for testing.

Section III. Emissions Unit(s) and Conditions

Subsection C. This Section addresses the following emissions unit

EU I.D.	Brief Description
037	JCSWD Centaur Turbine (NSPS & NESHAP)

A 3600 HP Centaur turbine (EU 037), located at the Jay Central Saltwater Disposal Facility (JCSWD) was constructed in 1983. The natural gas fired turbine is subject to 40 CFR 60 subpart GG - Stationary Gas Turbines, and may be subject to 40 CFR 63 Subpart YYYY - Stationary Combustion Turbines, at a future date, with both incorporated by reference in Rule 62-204.800(8)(b)40 and Rule 62-204.800(11)(b)81, F.A.C., respectively. In addition this unit is subject to applicable requirements of 40 CFR 60 and 63 Subpart A - General Provisions.

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

Essential Potential to Emit (PTE) Parameters

C.1. Capacity: The maximum heat input for this JCSWD Centaur turbine shall not exceed 43.1 MMBtu per hour heat input. [Rule 62-4.160(2) and Rule 62-210.200(PTE), F.A.C.]

C.2. Methods of Operation - (i.e., Fuels): The maximum sulfur content of the natural gas is limited to 0.1% sulfur by weight. Records of the natural gas sulfur content shall be kept and made available for Department inspection. [Rules 62-4.160(2) and 62-213.440(1), F.A.C., and 40 CFR 60.333(b)]
{Permitting Note: The above sulfur limit was requested by the applicant and is more stringent than that of 40 CFR 60 subpart GG (40 CFR 60.333(b)).}

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

Emission Limitations and Standards

C.4. Nitrogen Oxides (NO_X) emissions shall not exceed 150 parts per million at 15% O_2 dry basis (12 pounds per hour and 52.6 tons per year maximum potential to emit). This emissions unit shall be tested once prior to the submittal of and include with the Title V renewal permit application. [Rule 62-4.160(2) and Rule 62-213.440(1), F.A.C., 40CFR60.332(c), and 40 CFR 60.332(a)2]
{Permitting Note: The above NO_X limit was requested by the applicant and is more stringent than that of 40 CFR 60 subpart GG (40CFR60.332(c)).}

Monitoring of Operations/Excess Emissions

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

C.5. 40 CFR 60.334(h)
The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60 Subpart GG:

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see 40 CFR 60.17), which measure the major sulfur compounds may be used; and

(2) N.A.

(3) Notwithstanding the provisions of 40 CFR 60.334(h)(1) of this Section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data that show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of this chapter is required.

(4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

<u>40 CFR 60.334(i)</u>

The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:

(1) - (2) N.A.

(3) Custom schedules

Operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. The frequency of determination of these values shall be in accordance with the EPA approved custom schedule (EPA letter dated December 8, 1980) allowing monthly analysis of fuel gas attached to this permit as Attachment 1.

<u>40 CFR 60.334(j)</u>

For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under 40 CFR 60 subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required in 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

(1) N.A.

(2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this Section:

(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour

of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.1 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(ii) N.A.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

(3) – (4) N.A.

(5) All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter.

[40 CFR 60.334 and Rule 62-204.800(8)(b)40, F.A.C.]

Test Methods and Procedures

C.6. 40 CFR 60.335(a)

(a) The owner or operator shall conduct the performance tests required in 40 CFR 60.8, using either

(1) EPA Method 20,

(2) ASTM D6522-00 (incorporated by reference, see 40 CFR 60.17), or

(3) EPA Method 7E and either EPA Method 3 or 3A in Appendix A to this part to determine NO_X and diluent concentration.

(4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(5) Notwithstanding 40 CFR 60.335(a)(4), the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:

(i) You may perform a stratification test for NO_X and diluent pursuant to

(A) [Reserved]

(B) The procedures specified in Section 6.5.6.1(a) through (e) Appendix A to Part 75 of this chapter.

(ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O_2, is within 10 percent of the mean normalized concentration for all traverse points, then you may use three points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points shall be located along the measurement line that exhibited the highest average normalized NO_x concentration during the stratification test; or

(B) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O_2, is within five percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least one meter from the stack wall or at the stack centroid.

(6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this Section.

(b) The owner or operator shall determine compliance with the applicable NO_x emission limitation in specific condition D4 (40 CFR 60.332) and shall meet the performance test requirements of 40 CFR 60.8 as follows:

(1) For each run of the performance test, the mean NO_x emission concentration (NO_{XO}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and, units equipped with add-on emission control devices:

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

Where:
NO_X = emission concentration of NO_X at 15 percent O_2 and ISO standard ambient conditions, ppm by volume, dry basis,
NO_{Xo} = mean observed NO_X concentration, ppm by volume, dry basis, at 15 percent O_2,
P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,
P_o = observed combustor inlet absolute pressure at test, mm Hg,
H_o = observed humidity of ambient air, g H_2O/g air,
e = transcendental constant, 2.718, and
T_a = ambient temperature, [deg] K.

(2) The 3-run performance test required by 40 CFR 60.8 must be performed within five percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331).

(3) - (5) N.A.

(6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this Section) or as part of the initial performance test of the affected unit.

(7) - (9) N.A.

(10) If the owner or operator is required under 40 CFR 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:

(i) N.A.

(ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used subject to the prior approval of the Administrator.

(11) The fuel analyses required under paragraphs 40 CFR 60.335(b)(9) and (b)(10) may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

40 CFR 60.335(c)
The owner or operator may use the following as alternatives to the reference methods and procedures specified in this Section:

(1) Instead of using the equation in 40 CFR 60.335(b)(1) of this Section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions.

C.7. The owner or operator shall determine compliance with the SO_2 standards in 40 CFR 60.333(b) as follows: fuel samples shall be collected in accordance with the EPA-approved custom schedule (Attachment 1) and analyzed for the total sulfur content of the fuel using ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see 40 CFR 60.17). [40 CFR 60.335(b)10 and Rule 62-204.800(7)(b)39, F.A.C.]

General Provision Requirements

C.8. Permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A (See attached - Appendix 40 CFR 60 Subpart A – General Conditions).

C.9. This emissions unit is also subject to all applicable conditions contained in Subsection J - Common Conditions.

Additional MACT Requirements

C.10. The Combustion Turbine may be subject to (MACT) 40 CFR 63 Subpart YYYY - Stationary Combustion Turbines, at a future date. In accordance with 40 CFR 63.6090(b)(4), the unit does not have to meet the requirements of the subpart or Subpart A and no initial notification is required. Any future reconstruction as defined in 40 CFR 63.2, or installation of new equipment may result in the equipment becoming subject to additional requirements. [Rule 40 CFR 63 Subpart YYYY and Rule 62-204.800(11)(b)81, F.A.C.]

Section III. Emissions Unit(s) and Conditions

Subsection D. This Section addresses the following emissions unit

EU I.D.	Brief Description
038	1,000 HP Recompressor Engine with catalytic converter (NESHAP)
044	Five - 1,000 HP Recompressor Engines (with Catalytic converters (NESHAP)

Recompressor 4-stroke rich-burn Engines (EU 038 and EU 044) are subject to 40 CFR 63 Subpart ZZZZ (RICE MACT) - Stationary Reciprocating Internal Combustion Engines, because they are located at a major source of HAP emissions.

Five 1,000 Hp Ingersoll-Rand Recompressor Engines (EU 044) each with a heat input of 11.6 MMBtu per hour are equipped with catalytic converters. The catalytic converters limit the exhaust concentration of formaldehyde, to comply with 40 CFR 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines.

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

Essential Potential to Emit (PTE) Parameters

D.1. a. Permitted Capacity: The maximum heat input for each recompressor engine shall not exceed **11.6** MMBtu per hour heat input, based on a monthly average. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

D.1.b. In accordance with 40 CFR 63.6630, a performance test shall be conducted at capacity and initial compliance must be demonstrated. [40 CFR 63 Subpart ZZZZ]

D.2. Methods of Operation - (i.e., Fuels): The maximum sulfur content of the natural gas is limited to 0.1% sulfur by weight. Records of the natural gas sulfur content shall be kept and made available for Department inspection. [Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

D.3. Hours of Operation: Emission unit 038 is allowed to operate continuously, i.e., 8,760 hours per year. Total combined hours of operation for all five engines in EU 044 shall not exceed 33,935 hours per year. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.]

D.4. Engines shall only operate with the equipped catalytic converters. The operation of any of the engines while the converters are off line shall be considered excess emissions. 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 62-4.070(1), F.A.C.]

Test Methods and Procedures

D.5. These emissions units have no regulatory based frequency for testing.

D.6. Excess Emissions
(1) Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best operational practices to minimize emissions are adhered to.
(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. Operation of any of the recompressor engines without catalytic converters shall be considered excess emissions.
(3) 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.
(4) In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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, F.A.C.]

40 CFR 63 Subpart ZZZZ (RICE MACT)

D.7. 40 CFR 63.6595 - When do I have to comply with this Subpart?
(a) Affected sources.
(1) If you have an existing stationary RICE, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007.
(2) N.A.
(3) N.A.
(b) N.A.
(c) If you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR 63.6645 and in 40 CFR 63 Subpart A.

D.8. 40 CFR 63.6600 - What emission limitations and operating limitations must I meet?
(a) If you own or operate an existing, new, or reconstructed spark ignition four-stroke rich burn (4SRB) stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a of this Subpart and the operating limitations in Table 1b of this Subpart which apply to you.
(b) N.A.
(c) N.A.

D.9. 40 CFR 63.6605 - What are my general requirements for complying with this Subpart?
(a) You must be in compliance with the emission limitations and operating limitations in this Subpart that apply to you at all times, except during periods of startup, shutdown, and malfunction.
(b) You must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

D.10. 40 CFR 63.6610 - By what date must I conduct the initial performance tests or other initial compliance demonstrations?
(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 of this Subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2).

(b) N.A.
(c) N.A.
(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this Section.

(1) The test must have been conducted using the same methods specified in this Subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

D.11. 40 CFR 63.6615 - When must I conduct subsequent performance tests?
If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this Subpart.

D.12. 40 CFR 63.6620 - What performance tests and other procedures must I use?
(a) You must conduct each performance test in Tables 3 and 4 of this Subpart that applies to you.
(b) Each performance test must be conducted according to the requirements in 40 CFR 63.7(e)(1) and under the specific conditions that this Subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.
(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
(d) You must conduct three separate test runs for each performance test required in this Section, as specified in 40 CFR 63.7(e)(3). Each test run must last at least one hour.
(e)

(1) You must use Equation 1 of this Section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:
C_i = concentration of CO or formaldehyde at the control device inlet,
C_o = concentration of CO or formaldehyde at the control device outlet, and
R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2) (i) through (iii) of this Section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:
F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is oxygen, percent/100.
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm ^{3}/J (dscf/10 ^{6} Btu).
F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm ^{3}/J (dscf/10 ^{6} Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:
X_{co2} = CO_2 correction factor, percent.
5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NO_X and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:
% CO_2 = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.
(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g) (1) through (5) of this Section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h) (1) through (7) of this Section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

D.13. <u>40 CFR 63.6625 - What are my monitoring, installation, operation, and maintenance requirements?</u>

(a) N.A.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this Subpart, you must install, operate, and maintain each CPMS according to the requirements in 40 CFR 63.8.

(c) N.A.

D.14. <u>40 CFR 63.6630 - How do I demonstrate initial compliance with the emission limitations and operating limitations?</u>

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this Subpart.
(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this Subpart that applies to you.
(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645.

D.15. 40 CFR 63.6635 - How do I monitor and collect data to demonstrate continuous compliance?
(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this Section.
(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 at all times that the stationary RICE is operating.
(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

D.16. 40 CFR 63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?
(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b and Tables 2a and 2b of this Subpart that apply to you according to methods specified in Table 6 of this Subpart.
(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b and Tables 2a and 2b of this Subpart that apply to you. These instances are deviations from the emission and operating limitations in this Subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.
(d) Consistent with 40 CFR 63.6(e) and 40 CFR 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).
(e) N.A.

D.17. 40 CFR 63.6645 - What notifications must I submit and when?
(a) You must submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (f)(6), and 40 CFR 63.9(b) through (e), (g) and (h) that apply to you by the dates specified.
(b) As specified in 40 CFR 63.9(b)(2), if you start up your stationary RICE before the effective date of this Subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this Subpart.
(d) N.A.
(e) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1).
(f) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this Subpart, you must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 of this Subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 of this Subpart that includes a performance test conducted according to the requirements in Table 4 to this Subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).

D.18. <u>40 CFR 63.6650 - What reports must I submit and when?</u>
(a) You must submit each report in Table 7 of this Subpart that applies to you.
(b) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of this Subpart and according to the requirements in paragraphs (b)(1) through (5) of this Section.

(1) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 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 40 CFR 63.6595.

(2) The first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.

(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.

(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.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR Part 70 or 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.
(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this Section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR 63.10 (d)(5)(i).

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this Subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this Section and the information in paragraphs (d)(1) and (2) of this Section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this Subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this Section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(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.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 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 7 of 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 or operating limitation in this Subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
(g) N.A.

D.19. 40 CFR 63.6655 - What records must I keep?
(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) of this Section.

(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 that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

(2) The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

(b) For each CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this Section.

(1) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

(c) N.A.
(d) You must keep the records required in Table 6 of this Subpart to show continuous compliance with each emission or operating limitation that applies to you.

D.20. 40 CFR 63.6660 - In what form and how long must I keep my records?
(a) Your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).
(b) As specified in 40 CFR 63.10(b)(1), you must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
(c) You must keep each record readily accessible in hard copy or electronic form on-site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You can keep the records off-site for the remaining three years.

D.21. 40 CFR 63.6665 - What parts of the General Provisions apply to me?
Appendix to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you.

D.22. 40 CFR 63.6670 - Who implements and enforces this Subpart?
(a) N.A.
(b) N.A.
(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in 40 CFR 63.6600 under 40 CFR 63.6(g).

(2) Approval of major alternatives to test methods under 40 CFR 63.7(e)(2)(ii) and (f) and as defined in 40 CFR 63.90.

(3) Approval of major alternatives to monitoring under 40 CFR 63.8(f) and as defined in 40 CFR 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under 40 CFR 63.10(f) and as defined in 40 CFR 63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in 40 CFR 63.6610(b).

General Provision Requirements

D.23. Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ (See attached - Appendix 40 CFR 63 ZZZZ).

D.24. These emissions units are also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection E. This Section addresses the following emissions unit

EU I.D.	Brief Description
039	Sulfur Storage Pits and Loading Racks

Sulfur storage pits (Jay 2 and Jay 3) (EU 039) store molten sulfur prior to transfer by loading racks to tanker trucks. Each storage pit holds approximately 600 tons of molten sulfur. The pits are regulated by Rule 62-296.411(1), F.A.C.

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

Essential Potential to Emit (PTE) Parameters

E.1. Capacity: The process rate to each of the sulfur storage pits shall not exceed 75 tons per day. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.2. Hours of Operation: These sulfur storage pits are allowed to operate continuously, i.e. 8,760 hours per year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Operation Limitations and Standards

E.3. All molten sulfur transfer shall be through enclosed piping systems where feasible and practical. Contact surfaces between movable unloading arms and stationary pipes shall seat effectively around the entire circumference to minimize spillage. [Rule 62-296.411(1)(a), F.A.C.]

E.4. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or railcars shall be paved and curbed within 20 feet of the point of disconnection or transfer to contain any spilled molten sulfur, or shall be provided with non-corrodible drip pans or other secondary containment, positioned to collect spills, that are adequate to contain amounts of sulfur that may escape during routine disconnection, reconnection or operation of the system. [Rule 62-296.411(1)(b), F.A.C.]

E.5. All spilled molten sulfur shall be collected and properly disposed of whenever the containment area is filled to one-half its containment capacity, or monthly, whichever is more frequent. Spills of molten sulfur outside of a containment area, or where subject to vehicular traffic, shall be collected and disposed of as soon as possible, but no later than 24 hours after the spill occurs. Drip pans or other secondary containment shall be cleaned as needed to prevent exceedance of capacity, but at least weekly. [Rule 62-296.411(1)(d), F.A.C.]

E.6. All vent surfaces shall be cleaned monthly to remove captured particulate. [Rule 62-296.411(1)(e), F.A.C.]

Emission Limitations and Standards

E.7. Visible Emissions: Visible emissions shall not exceed 20 percent opacity (six-minute average). [Rule 62-296.411(1)(g), F.A.C.]

Test Methods and Procedures

E.8. Visible emissions testing for each sulfur pit vent shall be conducted once prior to the submittal of and included with the Title V Renewal Permit Application. The test shall be a 30-minute test conducted in accordance with EPA method 9. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing. The test reports shall comply with applicable portions of Rule 62-297.310, F.A.C, Test Reports. [Rules 62-4.070, 62-297.310(7) and 62-297.401(9), F.A.C.]

Recordkeeping and Reporting Requirements

E.9. Permittee shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur. Such records shall be retained for a minimum of two years and shall be available for inspection by the Department upon request. [Rule 62-296.411(1)(f), F.A.C.]

E.10. Excess Emissions: 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.]

E.11. This emissions unit is also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection F. This Section addresses the following emissions unit

EU I.D.	Brief Description
048	Glycol Reboiler Vent (NESHAP)

Glycol Reboiler Vent (EU 048) controls HAP and VOC emissions with an air-cooled condenser. Wet natural gas and dry tri-ethylene glycol (TEG) are contacted in a packed contactor tower to remove water from the natural gas. TEG is regenerated by heating and vaporizing the water content as steam in the TEG reboiler. Dried TEG is reused in the contactor tower, while the vapor is condensed to recover organics. 40 CFR 63 Subpart HH - Oil and Natural Gas Production Facilities, regulates this process, a major source of HAP. The vent stream is combusted in the flame-zone of the TEG reboiler process heater with a venturi burner. This exempts Quantum from preparing a design analysis, and conducting performance testing and monitoring.

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

Essential Potential to Emit (PTE) Parameters

F.1. Capacity: The maximum natural gas throughput rate of the glycol dehydration unit shall not exceed 90 MM standard cubic feet per day averaged monthly. Records shall be maintained of natural gas throughput showing the daily throughput based on each monthly average. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.]

F.2. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
{Permitting Note: The following conditions are the applicable 40 CFR 63 subpart HH requirements for this facility. Due to all subpart HH requirements not being applicable, the numbering system may not correlate to that of EPA's subpart HH (CFR published).

F.3. 40 CFR 63.762 - Startups, shutdowns, and malfunctions
(a) The provisions set forth in this Subpart shall apply at all times except during startups or shutdowns, during malfunctions, and during periods of non-operation of the affected sources (or specific portion thereof) resulting in cessation of the emissions to which this Subpart applies. However, during the startup, shutdown, malfunction, or period of non-operation of one portion of an affected source, all emission points that can comply with the specific provisions to which they are subject must do so during the startup, shutdown, malfunction, or period of non-operation.
(b) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with the provisions of this Subpart during times when emissions are being routed to such items of equipment, if the shutdown would contravene requirements of this Subpart applicable to such items of equipment. This paragraph does not apply if the item of equipment is malfunctioning, or if the owner or operator must shut down the equipment to avoid damage due to a contemporaneous startup, shutdown, or malfunction of the affected source or a portion thereof.
(c) During startups, shutdowns, and malfunctions when the requirements of this Subpart do not apply pursuant to paragraphs (a) and (b) of this Section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the maximum extent practical. For purposes of this paragraph, the term "excess emissions" means

emissions in excess of those that would have occurred if there were no startup, shutdown, or malfunction, and the owner or operator complied with the relevant provisions of this Subpart. The measures to be taken shall be identified in the applicable startup, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the source. Back-up control devices are not required, but may be used if available.
(d) The owner or operator shall prepare a startup, shutdown, and malfunction plan as required in 40 CFR 63.6(e)(3), except that the plan is not required to be incorporated by reference into the source's title V permit as specified in 40 CFR 63.6(e)(3)(i). Instead, the owner or operator shall keep the plan on record as required by 40 CFR 63.6(e)(3)(v). The failure of the plan to adequately minimize emissions during startup, shutdown, or malfunctions does not shield an owner or operator from enforcement actions.
[Rule 62-204.800(11)(b)24, F.A.C., and 40 CFR 63.762]

F.4. <u>40 CFR 63.765 - Glycol dehydration unit process vent standards</u>
The glycol dehydration unit process vent shall connect the process vent to the TEG reboiler process heater through a closed-vent system. The closed-vent system shall be designed and operated in accordance with the requirements of 40 CFR 63.771(c). The control device(s) shall be designed and operated in accordance with the requirements of 40 CFR 63.771(d). One or more safety devices that vent directly to the atmosphere may be used on the air emission control equipment installed to comply with 40 CFR 63.765(b)(1).
[Rule 62-204.800(11)(b)24, F.A.C, and 40 CFR 63.765]

F.5. <u>40 CFR 63.771 - Control equipment requirements</u>
(a) Closed-vent system requirements.
(1) The closed-vent system shall route all gases, vapors, and fumes emitted from the TEG reboiler vent to the TEG reboiler process heater so that the vent stream shall be introduced into the flame zone of TEG reboiler process heater.
(2) The closed-vent system shall be designed and operated with no detectable emissions.
(b) Control device requirements.
(1) The control device used to comply with 40 CFR 63 Subpart HH shall be operating at all times when gases, vapors, and fumes are vented from the HAP emissions unit or units through the closed-vent system to the control device, as required under 40 CFR 63.765, except when maintenance or repair on a unit cannot be completed without a shutdown of the control device.
[Rule 62-204.800(11)(b)24, F.A.C., and 40 CFR 63.771]

F.6. <u>40 CFR 63.773 - Inspection and monitoring requirements</u>
(1) The closed-vent system shall be inspected according to the procedures and schedule specified in the paragraphs below.
(i) For each closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two Sections of hard piping or a bolted and gasketed ducting flange), the owner or operator shall:
(A) Conduct an initial inspection according to the procedures specified in 40 CFR 63.772(c) to demonstrate that the closed-vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in 40 CFR 63.775(d)(1) or (2).
(B) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. The owner or operator shall monitor a

component or connection using the procedures in 40 CFR 63.772(c) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced or the connection is unsealed. Inspection results shall be submitted in the Periodic Report as specified in 40 CFR 63.775(e)(s)(iii).
(2) In the event that a leak or defect is detected, the owner or operator shall repair the leak or defect as soon as practicable, except as provided in paragraph (3) below.
(i) A first attempt at repair shall be made no later than five calendar days after the leak is detected.
(ii) Repair shall be completed no later than 15 calendar days after the leak is detected.
(3) Delay of repair of a closed-vent system or cover for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.761, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown.
(4) Any parts of the closed-vent system that are designated, as described in paragraphs (i) and (ii) below, as unsafe to inspect are exempt from the inspection requirements of this Section if:
(i) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with this Section; and
(ii) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
(5) Any parts of the closed-vent system or cover that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of this Section if:

(i) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(ii) The owner or operator has a written plan that requires inspection of the equipment at least once every five years.

(6) Records shall be maintained as specified in 40 CFR 63.774(b)(5) through (8).
[Rule 62-204.800(11)(b)24, F.A.C., and 40 CFR 63.773]

F.7. <u>40 CFR 63.774 Recordkeeping requirements</u>
(a) The recordkeeping provisions of 40 CFR 63 Subpart A, that apply and those that do not apply to owners and operators of sources subject to this Subpart are listed in Table 2 of 40 CFR 63 Subpart HH.
(b) Each owner or operator of a facility subject to this Subpart shall maintain the records specified below.
(1) The owner or operator of an affected source subject to the provisions of this Subpart shall maintain files of all information (including all reports and notifications) required below. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or period.

(i) All applicable records shall be maintained in such a manner that they can be readily accessed.

(ii) The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within two hours after a request.

(iii) The remaining four years of records may be retained offsite.

(iv) Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

(2) Records specified in 40 CFR 63.10(b)(2);

(3) Records identifying all parts of the cover or closed-vent system that are designated as unsafe to inspect in accordance with 40 CFR 63.773(c)(5), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
(4) Records identifying all parts of the cover or closed-vent system that are designated as difficult to inspect in accordance with 40 CFR 63.773(c)(6), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
(5) For each inspection conducted in accordance with 40 CFR 63.773(c), during which a leak or defect is detected, a record of the information specified below.

(i) The instrument identification numbers, operator name or initials, and identification of the equipment.

(ii) The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.

(iii) Maximum instrument reading measured by the method specified in 40 CFR 63.772 (c) after the leak or defect is successfully repaired or determined to be non-repairable.

(iv) "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.

(v) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown.

(vi) The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.

(vii) Dates of shutdowns that occur while the equipment is unrepaired.

(viii) The date of successful repair of the leak or defect.

(6) For each inspection conducted in accordance with 40CFR 63.773(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected.
(7) Information and data used to demonstrate that a piece of ancillary equipment or a compressor is not in VHAP service or not in wet gas service shall be recorded in a log that is kept in a readily accessible location.
[Rule 62-204.800(11)(b)24, F.A.C., and 40 CFR 63.774]

F.8. <u>40 CFR 63.775 - Reporting requirements</u>
(a) The reporting provisions of Subpart A of this Part, that apply and those that do not apply to owners and operators of sources subject to this Subpart are listed in Table 2.
(b) Each owner or operator of a major source subject to this Subpart shall submit the information required by 40 CFR 63.775. The applicable requirements include:

(1) The initial notifications required for existing affected sources under 40 CFR 63.9(b) shall be submitted by one year after an affected source becomes subject to the provisions of this Subpart or by June 17, 2000, whichever is later. Affected sources that are major sources on or before June 17, 2000, and plan to be area sources by June 17, 2002, shall include in this notification a brief, nonbinding description of a schedule for the action(s) that are planned to achieve area source status.
(2) N.A.
(3) N.A.
(4) A Notification of Compliance Status report as described in paragraph (c) of this Section.
(5) Periodic Reports as described in paragraph (e) of this Section; and
(6) Startup, shutdown, and malfunction reports specified in 40 CFR 63.10(d)(5) shall be submitted as required. Separate startup, shutdown, and malfunction reports as described in 40 CFR 63.10(d)(5); are not required if the information is included in the Periodic

Report specified in paragraph (e) of this Section.

(7) N.A.

(8) N.A.

(c) N.A.

(d) Each owner or operator of a source subject to this Subpart shall submit a Notification of Compliance Status Report as required under 40 CFR 63.9(h) within 180 days after the compliance date specified in 40 CFR 63.760(f). In addition to the information required under 40 CFR 63.9(h); the Notification of Compliance Status Report shall include the information specified in this Section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If all of the information required under this paragraph has been submitted at any time prior to 180 days after the applicable compliance dates specified in 40 CFR 63.760(f), a separate Notification of Compliance Status Report is not required. If an owner or operator submits the information specified in paragraphs (d)(1) through (12) of this Section at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information.

(1) If a closed-vent system and a control device other than a flare are used to comply with 40 CFR 63.764, the owner or operator shall submit the information in paragraph (d)(1)(iii) of this Section and the information in either paragraph (d)(1)(i) or (ii) of this Section.

(i) The design analysis documentation specified in 40 CFR 63.772(e)(4) of this Subpart, if the owner or operator elects to prepare a design analysis; or

(ii) If the owner or operator elects to conduct a performance test, the performance test results including the information specified in paragraphs (d)(1)(ii)(A) and (B) of this Section. Results of a performance test conducted prior to the compliance date of this Subpart can be used provided that the test was conducted using the methods specified in 40 CFR 63.772(e)(3) and that the test conditions are representative of current operating conditions.

(A) The percent reduction of HAP or TOC, or the outlet concentration of HAP or TOC (parts per million by volume on a dry basis), determined as specified in 40 CFR 63.772(e)(3) of this Subpart; and

(B) The value of the monitored parameters specified in 40 CFR 63.773(d) of this Subpart, or a site-specific parameter approved by the permitting agency, averaged over the full period of the performance test.

(iii) The results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.773(c)(2)(i) and (ii).

(2) – (6) N.A.

(7) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this Subpart. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this Subpart, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in this Subpart.

(8) N.A.

(9) The owner or operator shall submit the analysis performed under 40 CFR 63.760(a)(1).

(10) The owner or operator shall submit a statement as to whether the source has complied with the requirements of this Subpart.

(e) Periodic Reports. An owner or operator of a major source shall prepare Periodic Reports in accordance with paragraphs (e)(1) and (2) of this Section and submit them to the Administrator. An owner or operator of an area source shall prepare Periodic Reports in accordance with paragraph (e)(3) of this Section and submit them to the Administrator.

(1) An owner or operator shall submit Periodic Reports semiannually beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the six month period beginning on the date the Notification of Compliance Status Report is due.

(2) The owner or operator shall include the information specified in paragraphs (e)(2)(i) through (x) of this Section, as applicable.

(i) N.A.

(ii) N.A.

(iii) For each inspection conducted in accordance with 40 CFR 63.773(c) during which a leak or defect is detected, the records specified in 40 CFR 63.774(b)(7) must be included in the next Periodic Report.

(iv) – (vi) N.A.

(vii) The information in paragraphs (e)(2)(vii)(A) and (B) of this Section shall be stated in the Periodic Report, when applicable.

(A) No excursions.

(B) No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.

(viii) – (x) N.A.

(f) Notification of process change. Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the owner or operator shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report as required under paragraph (e) of this Section, whichever is sooner. The report shall include:

(1) A brief description of the process change;

(2) A description of any modification to standard procedures or quality assurance procedures;

(3) Revisions to any of the information reported in the original Notification of Compliance Status Report under paragraph (d) of this Section; and

(4) Information required by the Notification of Compliance Status Report under paragraph (d) of this Section for changes involving the addition of processes or equipment.

[Rule 62-204.800(11)(b)24, F.A.C., and 40 CFR 63.775]

Testing Requirements

F.9. This emissions unit has no regulatory based frequency for testing.

General Provision Requirements

F.10. Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ (See attached - Appendix 40CFR63 ZZZZ).

F.11. This emissions unit is also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection G. This Section addresses the following emissions units

EU I.D.	Brief Description (NESHAP)
040	Jay 2 and 3 Process Heaters - 56.7 MMBtu per hour each heater
041	Jay 2 and 3 Stabilizer Bottom Heaters - 28.4 MMBtu per hour each heater
042	Jay Plant Hot Oil Heater - 55.65 MMBtu per hour

Various gas fired Process Heaters (EU 040 - Jay 2 and Jay 3 Process Heaters, EU 041 - Jay 2 and Jay 3 Stabilizer Bottom Heaters and EU 042 - Jay Plant Hot Oil Heater) are used throughout the facility. With the vacature of 40 CFR 63 Subpart DDDDD - Heaters and Boilers, in Federal Court, the heaters have no rule requirement.

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

Testing Requirements

G.1. These emissions units have no regulatory based frequency for testing**.**

General Provision Requirements

G.2. These emissions unit are also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection H. This Section addresses the following emissions units

EU I.D.	Brief Description (NESHAP)
045	One 5,000 HP natural gas fired Cooper-Bessemer "A" Engine - 42.0 MMBtu per hour heat input with "Clean Burn" Combustion Technology (2SLB)
046	One 2,500 HP natural gas fired Cooper-Bessemer "B" Engine - 21.0 MMBtu per hour heat input (2SLB)

Two natural gas-fired Cooper-Bessemer Engines (EU 045 and 046) and are required in 40 CFR 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines, to maintain a record of an applicability determination for five years.

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

Testing Requirements

H.1. These emissions units have no regulatory based frequency of testing.

General Provision Requirements

H.2. Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ (See Appendix 40CFR63 ZZZZ).

H.3. These emissions units are also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection I. This Section addresses the following emissions unit

E.U. ID No.	Brief Description
050	14,300 HP (South) Water Flood Gas Turbine

A natural gas-fired Waterflood Turbine (EU 050) is regulated by Rule 62-296.320, F.A.C., and 40 CFR 60 subpart GG - Stationary Gas Turbines.

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

Essential Potential to Emit (PTE) Parameters

I.1. Capacity: The maximum allowable heat input rate for the combustion turbine shall not exceed 156.1 MMBtu per hour. {Based on facility testing at lower than capacity ~ 80% (at 124.0 MMBtu per hour), until retest the facility combustion turbine shall not exceed 136.4 MMBtu per hour.} [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; letter received by the Department dated October 30, 2007.]

I.2. Methods of Operation: This emissions unit shall be fueled with natural gas only. [Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

I.3. Hours of Operation: This emissions unit is allowed to operate 4,025 hours per year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and application No. 1130005-012-AV]

Emission Limitations and Standards

I.4. NO_X Emissions: NO_X emissions shall not exceed 18.2 pounds per hour (36.7 tons per year). [Rule 62-4.070(1), F.A.C. and application No. 1130005-012-AV]

I.5. Carbon Monoxide (CO) Emissions: CO emissions shall not exceed 47.2 pounds per hour (95.0 tons per year). [Rule 62-4.070(1), F.A.C. and application No. 1130005-012-AV]

Testing Requirements, Methods and Procedures

I.6. Nitrogen Oxides Tests: The test method for NO_X shall be EPA Method 7E, incorporated and adopted by reference in Chapter 62-297.401(7)(e), F.A.C., shall be conducted once prior to the submittal of and included with the Title V renewal permit application. The test shall be conducted by EPA Method 7E or other Department-approved method. [Rule 62-297.401(7)(e), F.A.C.]

I.7. Carbon Monoxide (CO) Tests: The test method for CO shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297.401(10), F.A.C., and shall be conducted prior to the submittal of and included with the Title V renewal permit application. The test shall be conducted by EPA Method 10 or other Department-approved method. [Rule 62-297.401(10), F.A.C.]

I.8. These emissions units are also subject to all applicable conditions contained in Subsection J - Common Conditions.

Section III. Emissions Unit(s) and Conditions

Subsection J. Common Conditions

EU I.D.	Brief Description
034	Sulfur Recovery Plants (J2 and J3)
035	Flares
037	JCSWD Solar Centaur Turbine Subject to 40 CFR 60 Subpart GG
038	Recompressor Engine with Catalytic Converter
039	Sulfur Pits
048	TEG Reboiler subject to 40 CFR 63 Subpart HH
040	Jay 2 and 3 Process Heaters - 56.7 MMBtu per hour each heater
041	Jay 2 and 3 Stabilizer Bottom Heaters - 28.4 MMBtu per hour each heater
042	Jay Plant Hot Oil Heater - 55.65 MMBtu per hour
044	Five 1,000 HP natural gas fired Ingersol Rand Compressor Engines - 11.6 MMBtu per hour heat input
045	One 5,000 HP natural gas fired Cooper-Bessemer "A" Engine - 42.0 MMBtu per hour heat input with "Clean Burn" Combustion Technology
046	One 2,500 HP natural gas fired Cooper-Bessemer "B" Engine - 21.0 MMBtu per hour heat input
050	14,300 HP (South) Water Flood Gas Turbine

The following conditions apply to the emissions units listed above:

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through I for applicability.}

J.1. Test Methods and Procedures:

a. Emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. Unless otherwise designated in a Specific Condition, tests shall be conducted during each federal fiscal year (October 1 - September 30) and generally at 12-month intervals. Results shall be submitted to the Department within 45 days after testing. 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. [Rules 62-297.310(7)(a)4. & 9., and 62-297.310(8)(b), F.A.C.]

b. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, unless otherwise stated as in common condition J.4, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions

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.]

c. The test reports shall comply with applicable portions of Rule 62-297.310(8), F.A.C., Test Reports. Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.

J.2. Determination of Process Variables: 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.

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.]

J.3. 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 my 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), F.A.C., and SIP approved]

J.4. Interim Alternative Test Methods and Procedures for Field Rate Dependant Emissions Units

EU I.D.	**Brief Description - Field Rate Dependant Emissions Units**
034	Sulfur Recovery Plants (J2 and J3)
038	Recompressor Engine with Catalytic Converter
044	Five 1,000 HP natural gas fired Ingersol Rand Compressor Engines - 11.6 MMBtu/hr heat input
050	14,300 Hp (South) Water Flood Gas Turbine

The following conditions apply to the emissions units listed above:

J.4.a. For a period of three years after the effective date of this permit, while the facility is completing repairs and ramping up its production, Specific Condition J.1.b shall be subordinate to the following specific conditions for the four Field Rate Dependant Emissions Units listed. Field Rate Dependent Emissions Unit 034 shall still be subject to Specific Conditions J.1.a, J.1.c, J.2 and J.3. Field Rate Dependant Emissions Units 038, 044, and 050 shall still be subject to Specific Conditions J.1.c, J.2 and J.3. If Permittee wishes to continue subordinating Specific Condition J.1.b, Permittee shall make a written request at least 60 days before this clause expires and show justification for the continuance. Otherwise, Specific Condition J.4 shall expire three years after the effective date of this permit. [Rules 62-4.070(1) and 62-297.620, F.A.C.]

J.4.b. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, or at the greatest practicable operating capacity of the threshold numbers listed below. Under no circumstances shall operations, including during testing, exceed the maximum allowable operation rate. [Rules 62-4.070(1), and 62-297.620, F.A.C.]

J.4.b.i. After operating capacity has exceeded 50% of the permitted maximum operating rate for 30 consecutive days, notice of testing shall be given to the Department at least 15 days prior to the start of the testing under Rule 62-297.310(7)(a)(9), F.A.C., and testing conducted at the greatest practicable operating capacity. The results of this test may be used to satisfy the requirement for annual testing under Specific Condition J.1.a for the current federal fiscal year if the facility has not yet reached or exceeded 75% of the permitted maximum for 30 consecutive days.

J.4.b.ii. After operating capacity has exceeded 75% of the permitted maximum operating rate for 30 consecutive days, notice of testing shall be given to the Department at least 15 days prior to the start of the testing under Rule 62-297.310(7)(a)(9), F.A.C., and testing conducted at the greatest practicable operating capacity. The results of this test may be used to satisfy the requirement for annual testing under Specific Condition J.1.a for the current federal fiscal year if the facility has not yet reached or exceeded 90% of the permitted maximum for ten consecutive days.

J.4.b.iii. After operating capacity has exceeded 90% of the permitted maximum operating rate for ten consecutive days, notice of testing shall be given to the Department at least 15 days prior to the start of the testing under Rule 62-297.310(7)(a)(9), F.A.C., and testing conducted at the greatest practicable operating capacity. The results of this test may be used to satisfy the requirement for annual testing under Specific Condition J.1.a for the current federal fiscal year.

J.4.b.iv. After operating capacity has exceeded 90% of the permitted maximum operating rate for ten consecutive days, the facility will notify the Department that the ramping up process is reasonably completed and the facility's permitted maximum operating rate has been achieved. At this point, Specific Condition J.4 shall cease to apply and testing and operating shall be as per Specific Condition J.1.b.