Taminco Inc.
Taminco Pace Plant
Facility ID No.: 1130004
Santa Rosa County

Title V Air Operation Permit Renewal

FINAL Permit Project No.: 1130004-018-AV
Renewal of Title V Air Operation Permit No. 1130004-011-AV

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Northwest District

160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

Telephone: 850/595-8300
Fax: 850/595-8096

Title V Air Operation Permit Renewal

FINAL Permit No.: 1130004-018-AV

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Florida Department of Environmental Protection
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160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

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Secretary

Permittee:
Taminco Inc.
4575 Highway 90 East
Pace, Florida 32571-0467

FINAL Permit No.: 1130004-018-AV
Facility ID No.: 1130004
SIC No(s).: 2819
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit, issued on August 22, 2005. This existing facility is located at 4575 Highway 90 East in Pace, Santa Rosa County; UTM Coordinates: Zone 16, 487 km East and 3383.4 km North; and, Latitude: 30° 34' 05" North and Longitude: 87° 9' 05" 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 A-1, Abbreviations, Definitions, Citations, and ID Numbers
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
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40 CFR 63 Subpart FFFF (MON)

Effective Date: July 13, 2011
Renewal Application Due Date: December 1, 2015
Expiration Date: July 13, 2016
/s/

Rick Bradburn
Air Program Administrator

RB/rp/dm/c

Section I. Facility Information

This is a renewal of Title V operating permit 1130004-011-AV, effective August 22, 2005. It follows Title V operating permit revision 1130004-014-AV, effective February 1, 2008. Construction permit applications 1130004-015-AC and 1130004-016-AC were combined into the current construction permit 1130004-017-AC, effective July 29, 2008, but construction has not begun and the facility does not plan to begin construction during 2010 (see letter to DEP dated 7/1/10).

Subsection A. Facility Description

Taminco owns and operates an Amines Plant. The site's No. 1 and No. 4 Plants primarily produce a variety of Methylamines. The No. 2 Plant primarily produces a variety of higher amines, including alkylamines and amylamines. In the No. 3 Plant, a 72-inch batch distillation column processes higher amines and crude methanol.

Methanol Storage (remaining from old Methanol Plant)
The Methanol Plant was shut down and decommissioned, effective November 3, 2003. The storage tanks were retained for continued use storing incoming raw material. Methanol is no longer loaded from the facility so the facility has requested the removal of the EU 028, the Methanol Loading Scrubber.

Boilers
Boilers manufactured by Riley Stoker (EU 001) and B & W (EU 003) have boilerplate capacities of 90,000 pounds per hour of steam at 600 psig, which is considered equivalent to 130 MMBtu heat input (with 75 percent boiler efficiency and 1080 Btu per pound of steam). The boilers are fueled by natural gas, process off-gases (both boilers) and process liquids, and used oil (Riley Boiler only). Process liquids originate from methylamines and higher amines production plants and used oil is from on-site compressors and other equipment. Gulf Power owns a cogeneration facility that is located within the Taminco Pace Plant boundaries. Taminco personnel operate the unit; however, Gulf Power maintains compliance with the Title V air permit (1130173-008-AV).

Methylamines (Plant Nos. 1 and 4)
At the Methylamines Plant No. 1 (EU 005, 006, 046, 049, 050, 051, 053, and 054), and No. 4 (EU 060, 033, 034, 035, 036, 053, and 037), methanol is continuously reacted with ammonia to yield methylamines. A natural gas-fired preheater is used to reach reaction temperature. Volatile off-gases from the product scrubbers are controlled with the Amines Plants Flare (EU 005), which operates with a natural gas pilot. Process gas from the high pressure absorber vents can also be controlled in the Riley Stoker boiler or B&W boilers. Visible emissions from the gas fired heater and the flare are controlled by proper combustion. Methylamines Plant No. 1 also has the capability to produce Dimethylurea from a reaction of monomethylamine and urea.

Higher Amines Plant (Plant Nos. 2 and 3)
At the Higher Amines Plant, alcohols, ammonia, ethers, aldehydes, ketones, and other amines are reacted to yield various alkylamines and amylamines. A natural gas-fired preheater is used to bring the mixture to reaction temperature. The volatile off-gases from the product scrubbers are controlled in the Amines Plants Flare. Process gas from the high pressure absorber vent in the Higher Amines Plant (#2) can also be controlled in the Riley Stoker or B&W Boilers. Visible Emissions from the gas fired heater and the flare are controlled by proper combustion.

Prevention of Significant Deterioration (PSD): As a chemical processing plant with emissions of NOx, CO and VOC greater than 100 TPY this facility is a major stationary source with respect to PSD. The facility (Air Products and Chemicals, ref: letter dated November 20, 2003) voluntarily surrendered all net emission reductions from the decommissioning of the Ammonia and Methanol Plants and gave up their rights to use these emission decreases in future netting analysis to avoid PSD review on other new projects. On an annual basis, these reductions were 1,596 tons of NO_X, 175 tons of CO, 141 tons of VOC, 26 tons each of PM and PM_{10}, and 1 ton of SO_X. These reductions are separate from subsequent reductions realized from shutdown of two Nitric Acid Plants and the Ammonia Nitrate unit in 2005.

Facility-Wide Estimated Emissions (Tons per Year)*

POLLUTANT	TPY
PM	22.81
PM10	22.80
NO_X	453.05
SO_2	13.90
CO	169.14
VOC	114.03
Methanol	55.64

*includes reconciliation of sources (cooling towers, wastewater, fugitive leaks) and shutdown of nitric acid plants and ammonia nitrate plant. The shutdowns resulted in net emission decreases in PM/PM_{10}, SO_2, and CO because waste oil throughput decreased.

Several changes were made during this permit renewal (see TABLE Summary Emissions Unit Updates). Regulatory analysis determinations were updated and corrected for the units at the facility which are regulated under the Hazardous organic NESHAP (HON) and Miscellaneous organic NESHAP (MON) rules under 40 CFR 63 subparts F, G. H, and FFFF. An updated Notification of Compliance status (NOCS) for both HON and MON was submitted with the renewal application. As a result of the analysis, several emission units were removed, EU descriptions were updated, emission factors were updated, and several EUs were created for regulatory purposes. Emissions Unit 067, Higher Amines Plant Equipment Leaks, was deleted. After re-evaluation of the Amyl Amines Project (submitted in June 26, 2007), it was determined that NSPS Subpart VV was not triggered for the Higher Amines Plant. The changes are regulatory/facility reconciliations that are allowed under the Title V renewal process.

Ammonia has been removed from the Title V inventory as (1) ammonia is not a regulated pollutant and (2) emissions from the Taminco Pace Plant are much less than the cutoff of 250 tons per year under FAC 62-213.420(3)(c)(6). The current plant configuration includes two ammonia tanks that are vented to a scrubber and then a flare (D-67130 and D-68101) and three pressurized ammonia storage tanks (D-30206A, D-30206B, and D-30206D), which are designed to return vapors to the tank during unloading.

In this permit renewal, the testing frequency for opacity on the B&W Boiler (EU#003) and the Riley Boiler (EU#001) has been reduced from annual to once every five years. Since 62-296.406(1) does not prescribe testing and the facility historically has shown no visible emissions,

the opacity testing frequency has been changed to "once during the last twelve months of this permit." To ensure worst case conditions, the facility has committed to operating at the permitted capacity during the test. In addition, for the Riley Boiler, the facility will conduct Method 9 tests while burning amines waste and used oil (Note: these may be done in separate runs).

The Taminco Pace Plant operates five emergency diesel internal combustion engines (ICE) (B-area emergency fire water pump and No. 2 well water pump, each at 234 hp, plant emergency generator at 330 hp, north foxtrot at 380 hp, and south foxtrot at 340 hp). These engines are considered categorically and conditionally exempt per 62-210.300(3)(a)(35)(d): one or more emergency generators located within a single facility provided that one fuel (in this case diesel) is burned and the collective annual amount of fuel burned by all units does not exceed 32,000 gallons of diesel fuel. Regarding regulatory applicability to new source performance standards (NSPS) Subpart IIII (manufacturers, owners, and operators of Stationary, Compression Ignition (Diesel) ICE), all engines listed were manufactured prior to July 11, 2005, and are therefore not subject to this subpart per 40 CFR 60.4200(a)(2). Regarding regulatory applicability to the national emission standards for hazardous air pollutants (NESHAP) Subpart ZZZZ (owners or operators of Stationary, Reciprocating ICE), existing stationary reciprocating internal combustion engines [per 40 CFR 63.6590(a)(1)(ii)] with a rating of less than 500 brake Hp, located at a major source of hazardous air pollutants (HAP) emissions and constructed.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. CAM does not apply.

Based on the Title V Air Operation Permit Renewal application received January 12, 2010, this facility is a major source of hazardous air pollutants (HAP).

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

EU I.D.	Brief Description
	Methanol Storage (remaining from old Methanol Plant):
029	Methylamines Plants Nos. 1 and 4 Group 1 HON Storage Tanks: TK-53407, TK-53405, TK-53401B
047	Methanol Storage HON Maintenance Wastewater
048	Methylamines Plants Sample Points (storage tanks part of Methylamines)
	Boilers:
001	Riley Stoker Boiler
003	B & W Boiler
	Methylamines Plant No. 1:
005	Amines Plants Flare
006	Methylamines No. 1 Plant Gas-Fired Heater
036	Methylamines Plant No. 1 and 4 HON Equipment Leaks
046	Sitewide HON Heat Exchangers
049	Methylamines Plant No. 1 Process Vents
050	Methylamines Plant No. 1 Wastewater
051	Methylamines Plant No. 1 HON Maintenance Wastewater
054	Methylamines Plant No. 1 NSPS Storage Tanks
	Higher Amines Plant:
007	Higher Amines Plant Gas-Fired Heater
055	72” Batch Column Process Vents
056	72” Batch Column MON Maintenance Wastewater
057	Higher Amines and 72” Batch Column MON Equipment Leaks
058	Higher Amines and 72” Batch Column MON Group 2 Storage Tanks
059	72” Batch Column Wastewater
066	Higher Amines and 72” Batch Column Group 2 MON Transfer Rack
070	Higher Amines Plant Process Vents
071	Higher Amines Plant MON Maintenance Wastewater
072	Higher Amines Plant MON Wastewater
073	Higher Amines and 72” Batch Colum MON Group 1 Storage Tanks
074	Sitewide MON Heat Exchangers
	Methylamines Plant No. 4:
060	Methylamines Plant No. 4 Gas-Fired Heater
033	Methylamines Plant No. 4 Process Vents
034	Methylamines Plant No. 4 Wastewater
035	Methylamines Plant No. 4 HON Maintenance Wastewater
037	Methylamines Plant No. 4 VOC Equipment Leaks
053	Methylamines Plants Nos. 1 & 4 HON Group 2 Storage Tanks

Unregulated Emissions Units and/or Activities

062	Facility-Wide Equipment Leak Fugitives
063	Cooling Towers (4) (that do not use chromium-based water treatment chemicals)
075	Wastewater Treatment Plant Fugitives

Note: see Appendix U-1 for a more detailed listing.

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:
Initial Title V Air Operation Permit issued December 1, 1999
Appendix H-1, Permit History
Title V Air Operation Permit Revision issued February 1, 2008
Application for Title V Air Operation Permit Renewal (EPSAP No. 2413-1) received January 12, 2010
Additional Information Request dated March 9, 2010
Additional Information Response and Application (EPSAP No. 2413-2) received June 14, 2010
Waiver of 90 Day Time Limit received September 7, 2010
Additional Information received November 5, 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.

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.; and permits 1130004-010-AC, 012-AC and 1130004-013-AC]

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. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: 703/227-7650

Documents on file with USEPA
The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

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. No emission control devices or systems are deemed necessary or ordered at this time. [Rule 62-296.320(1), F.A.C.; and renewal Title V permit application received January 12, 2010]

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 (see Condition 57. of APPENDIX TV-6, TITLE V CONDITIONS):

a. Construction Activities: stockpiled soils will be wetted down with water or another dust suppressant to control emissions.

b. Road Dust: Plant speed limit on all roads except the mile of paved road between Area A and Area B is 20 miles per hour. The speed limit on the road to Area B is 30 miles per hour.

c. Abrasive Cleaning: Tarping is used extensively to reduce particulate emissions generated by sandblasting activities in the process areas. When possible and practical, equipment that must be sandblasted is taken to a location that is protected on nearly all sides by trees, which help to knock down any fugitive dusts. Furthermore, when the maintenance experts advise against the use of sandblasting, or recommend for the use of other cleaning methods such as needle-gunning or scraping, these alternative methods are employed where possible.

d. Chromium NESHAP Cooling Towers and Area B Cooling Tower: Particulate emissions from cooling towers are controlled using drift eliminators to catch the entrained droplets, coalesce them, and allow the water to drain back into the cooling tower. In addition, the louvers are designed with an inward slope towards the tower so that any droplets that impinge on the louvers will also drain back into the tower. Finally, since the droplets are wet and heavier

than air, most of the relatively few droplets that do escape from the tower fall to the ground a short distance from the tower, before they can evaporate and contribute to airborne particulate emissions.
[Rule 62-296.320(4)(c)2, F.A.C.; Permit 1130004-010-AC and permit application No. 113004-018-AV]

9. 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 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, 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)}

10. 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 W. Government Street, Suite 308
Pensacola, Florida 32502-5740
Telephone: 850/595-8300; Fax: 850/595-8096

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

11. 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

12. 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 Chapter 62-213, 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.]

13. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. This includes, but is not limited to, increases in the heat input or pollutant emission rates. [Rule 62-212.400(12), F.A.C.]

Section III. Emissions Unit(s) and Conditions

Subsection A. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
029	Methylamines Plants Nos. 1 and 4 Group 1 HON Storage Tanks: TK-53407, TK-53405, TK-53401B

Storage tanks TK-53401B, TK-53405 and TK-53407 are used to store methanol. Methanol is used in the Methylamines Plants. Emissions from the tanks are controlled by white paint and by an internal floating roof with double wiper seals and slotted guide pole covers on each tank. Also, the deck is in contact with the liquid surface and pontoons mounted on the top side of the deck keep the deck afloat. Automatic bleeder vents are designed to remain normally closed except when the roof is being floated off or landed on the leg supports. Deck fittings are gasketed or equipped with flexible fabric sleeves to minimize air emissions. This facility is a participant in EPA's Storage Tank Emission Reduction Partnership Program (STERP) [Federal Register Notice 19891 (April 13, 2000)]. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (attached).

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

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rules 62-213.440(1) and 62-210.200(PTE), F.A.C.]

Equipment Limitations and Standards

A.2. Each floating roof shall be equipped with a metallic shoe seal. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.119(a)(1) and (b)(3)]

A.3. The EPA's Storage Tank Emission Reduction Partnership Program (STERP):
a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.
b. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.
[Federal Register Notice 19891 (April 13, 2000)]

A.4. This emissions unit is subject to the emission limitations and standards contained in Common Conditions;- Startup, Shutdown, and Malfunction Plans and Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions, which are located in Section FF - Common Conditions.

Test Methods and Procedures

A.5. Permittee must visually inspect the internal floating roofs and the secondary seals through manholes and roof hatches on each fixed roof at least once every 12 months after January 27,

1998. Also, Permittee must visually inspect each internal floating roof, the primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after April 22, 1997. If during an inspection, an internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, repairs shall be made to the equipment or storage vessel must be emptied and removed from service within 45 calendar days. If a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, Permittee may utilize up to two extensions of up to 30 additional calendar days each, provided that documentation of a decision to utilize an extension is maintained that includes a description of the failure, that documents that alternate storage capacity is unavailable, and that specifies a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practicable. If during the inspections, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the repairs shall be made before the vessel is refilled with organic HAP. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.120(a)(2),(4) & (7)]

A.6. Storage Tank Emission Reduction Partnership Program (STERP): Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material. [Federal Register Notice 19891 (April 13, 2000)]

Recordkeeping and Reporting Requirements

A.7. Periodic reports are to include a summary of the results of each internal or external inspection conducted in which a failure was detected with the date of the inspection, identification of the storage vessel in which a failure was detected and a description of the failure. Also, the nature of and date the repair was made or the date the storage vessel was emptied is to be documented. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.122(a)(4), (a)(5), (d), and 40 CFR 63.123(a), (c), (g)]

A.8. Except as provided below, for all the inspections, the owner or operator shall notify the Department in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Department the opportunity to have an observer present. If the required inspections are not planned and the owner or operator could not have known about the inspection 30 calendar days in advance of refilling the vessel, the owner or operator shall notify the Department at least seven calendar days prior to the refilling of the storage vessel. Notification made by telephone shall be immediately followed by written documentation demonstrating why the inspection was unplanned. Documentation pertaining to the utilization of any extensions is to be included. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Department at least seven calendar days prior to refilling. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.120(a)(5) & (6)]

A.9. Records showing each tank's dimensions and capacities and records of each inspection shall be maintained as long as the tank retains Group 1 or Group 2 status under the HON and is in operation. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 63.123(a) and (c)]

A.10. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions**.**

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting Requirements for 40 CFR 63 Subparts F, G, and H

Subsection B. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
046	Sitewide HON Heat Exchangers

This emissions unit is comprised of non-contact heat exchangers E-671119, E-67119, and E-67037, used to cool process fluids at the Amines Plant. This emissions unit is subject to 40 CFR 63 Subpart F, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI), Hazardous Organic NESHAP's (HON), (attached).

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

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Operating Conditions and Standards

B.2. All sitewide heat exchange systems not meeting the conditions specified in 40 CFR 63.104(a)(1) through (6), shall be monitored by inspecting the cooling water for the presence of one or more organic HAPs or other representative substance whose presence in cooling water indicates a leak as specified in 40 CFR 63.104(b)(1) through (6), or by using a surrogate indicator of heat exchanger system leaks as specified in 40 CFR 63.104(c)(1) through (3). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.104(a), (b), and (c)]

B.3. Any leaks that are detected shall be repaired as soon as practical but not later than 45 days after Permittee receives results of monitoring tests indicating a leak. After repair, Permittee shall confirm that the heat exchange system has been repaired within seven calendar days of the repair or startup, whichever is later. Repairs may be delayed beyond 45 days if the criteria specified in 40 CFR 63.104(e) are met. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.104(d) and (e)]

Recordkeeping and Reporting Requirements

B.4. Permittee shall maintain records of required monitoring, leaks detected, the date when leak was detected, (if demonstrated not to be a leak, the basis for that determination), the dates of efforts to repair leaks, and the method or procedures used to confirm repair of a leak and the date the repair was confirmed. Periodic reports are required only if Permittee invokes the delay of repair. Periodic reports shall include information required by 40 CFR 63.104(f)(2). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.104(f)]

B.5. This emissions unit is subject to the limitations and standards contained in Common Conditions; General Recordkeeping Requirements, and General Reporting Requirements for 40 CFR 63 Subpart G, which are located in Subsection FF - Common Conditions.

Subsection C. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
047	Methanol Storage HON Maintenance Wastewater

Methanol storage equipment is flushed out in order to prepare the equipment for maintenance. Emission estimates of HAPs are based on all methanol tanks flushed and cleaned during the same year, and ancillary equipment (i.e., pumps, piping and valves) cleaned and flushed more frequently. This emissions unit is composed of the methanol-containing wastewater resulting from the flushing activity. The Methanol Storage HON Maintenance Wastewater is disposed of in the plant sewer system. This emissions unit is regulated by 40 CFR 63 subpart F, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI), Hazardous Organic NESHAP's (HON), (attached).

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

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Operational Conditions and Standards

C.2. Permittee shall maintain a description of maintenance procedures for management of wastewaters containing those organic HAPs listed in Table 9 of 40 CFR 63 Subpart G (See attached Subpart G)**,** which are generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:

(a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities,
(b) Specify procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere, and
(c) Specify the procedures to be followed when clearing materials from process equipment.

Permittee shall modify and update the maintenance procedures as needed.
[Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.105(b) and (c)]

Recordkeeping and Reporting Requirements

C.3. Permittee shall incorporate the procedures and maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). Plans shall be maintained and kept readily available for inspection for the life of the source, or until 40 CFR 63 standards no longer apply to the source. Previous versions of Plans shall also be maintained for a period of 5 years following revision. No notification or periodic reporting of maintenance wastewater activities is required. [Rule 62-204.800(11)(b) , F.A.C. and 40 CFR 63.105(d) & (e)]

Subsection D. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
048	Methylamines Plants Sample Points

This emissions unit is composed of points in the process where the methanol is sampled for testing and consists solely of various sample points in the process. This emissions unit is regulated by 40 CFR 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, Hazardous Organic NESHAP's (HON), (attached). HON requires that sample purges be contained and returned to the process.

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

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Operating Conditions and Standards

D.2. Sampling points in organic HAP service shall meet the criteria set forth in 40 CFR 63.166. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.166]

D.3. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured. Each sampling system shall meet one of the specifications specified in 40 CFR 63.166(b). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.166]

Recordkeeping and Reporting Requirements

D.4. Permittee shall maintain records specified in 40 CFR 63.181(b)(1)(i) and no periodic reporting is required under 40 CFR 63.182. Notwithstanding, Title V semiannual progress reports shall be submitted that identify any instances of non-compliance and annual Title V compliance certification reports must certify whether or not compliance with applicable requirements has been achieved. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181]

Subsection E. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
001	Riley Stoker Boiler

The Riley Stoker Boiler produces 90,000 pounds per hour of steam at 600 psig which is considered equivalent to 130 MMBtu per hour heat in put with 75 percent boiler efficiency and 1080 Btu per pound of steam. The boiler is fueled by natural gas, process off-gases and non-hazardous liquids (from the alkylamines production plant), and used oil from on-site compressors and other equipment. The boiler is equipped with an air preheater. The boiler recovers energy from process purge streams and meets the definition of "fuel gas system" in 40 CFR 63 Subparts F, G, and H. This emissions unit is regulated by Rule 62-296.406, F.A.C.

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

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

E.2. Capacity: The maximum allowable operating rate of the Riley Stoker Boiler is 130 MMBtu per hour, averaged daily. [Rule 62-213.440(1), F.A.C.]

E.3. Used Oil as Fuel: The facility may operate using on-spec used oil from their on-site compressors and other equipment. The owner shall maintain records to demonstrate that the used fuel oil meets the standards for on-spec used oil in 40 CFR 279.11. [Rule 62-710.210(3), F.A.C.]

Emission Limitations and Standards

E.4. Visible emissions shall not exceed 20 percent opacity under normal operating conditions except for one 2-minute period per hour at not more than 40 percent opacity. [Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

E.5. EPA Method 9 testing shall be conducted on the boiler stack with the boiler operating at capacity. Such tests shall be conducted once during the last twelve months of this permit. Test results are to be submitted within 45 days of the test. [Rules 62-297.310(2)(b), and 62-297.401(9), F.A.C., and permit application 113004-018-AV]

E.6. This emissions unit is subject to the test methods and procedures contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Test Methods - Visible Emissions
Operation Rate During Testing
Special Compliance Tests

Recordkeeping and Reporting Requirements

E.7. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Notification of Testing
Test Methods - Visible Emissions
Test Reports
Special Compliance Tests

Subsection F. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
003	B & W Boiler

The B & W Boiler produces 90,000 pounds per hour of steam at 600 psig which is considered equivalent to 130 MMBtu per hour heat in put with 75 percent boiler efficiency and 1080 Btu per pound of steam. The boiler is fueled by natural gas, and process off-gases (from the alkylamines production plant). The boiler is equipped with an air preheater. The boiler recovers energy from process purge streams and meets the definition of "fuel gas system" in 40 CFR 63 Subparts F, G, and H. This emissions unit is regulated by Rule 62-296.406, F.A.C.

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

Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

F.2. Capacity: Maximum allowable operating rate of the B & W Boiler is 130 MMBtu per hour, averaged daily. [Rule 62-213.440(1), F.A.C.]

Emission Limitations and Standards

F.3. Visible emissions shall not exceed 20 percent opacity under normal operating conditions except for one 2-minute period per hour at not more than 40 percent opacity. [Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

F.4. EPA Method 9 testing shall be conducted on the boiler stack with the boiler operating at capacity. Such tests shall be conducted once during the last twelve months of this permit. Test results are to be submitted within 45 days of the test. [Rules 62-297.310(2)(b), and 62-297.401(9), F.A.C. and permit application 113004-018-AV]

F.5. This emissions unit is subject to the test methods and procedures contained in the following Common Conditions, which are located in Section FF - Common Conditions.

Test Methods - Visible Emissions
Operation Rate During Testing
Special Compliance Tests

Recordkeeping and Reporting Requirements

F.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Notification of Testing
Test Methods - Visible Emissions
Test Reports
Special Compliance Tests

Subsection G. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
005	Amines Plants Flare

Off-gases from the product scrubbers at Methylamines Plant Nos. 1 and 4 and the Higher Amines Plant, as well as other process vents at the facility, are continuously released through a non-assisted flare with a natural gas pilot. Natural gas is ratioed to process gas which is mostly hydrogen 0.33:1 to ensure complete combustion. Thermocouples continuously monitor the flame and alarm the control room if the flame appears to go out. Since the flare will not relight itself, a delay built into the computer logic is sufficient to allow for brief instances where the wind blows the flame away from the thermocouple. The ratio of natural gas to process gas insures that the minimum heating value of the gas being burned can never fall below the minimum requirement under NSPS and a high glow alarm on the natural gas flow ensures that the maximum allowable flare exit velocity (18.3 ms/or 60 ft/sec) is not exceeded.

This emissions unit is regulated by 40 CFR 60.18 and 40 CFR 63.11 (attached in 40 CFR 60 Subpart A and 40 CFR 63 Subpart A), 40 CFR 60 Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 63 Subpart F, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI), Hazardous Organic NESHAP's (HON), 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, and 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (attached).

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

Essential Potential to Emit (PTE) Parameters

G.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

G2. The Amines Plants Flare, a non-assisted flare, shall:
(a) Be operated at all times when HON or MON-regulated emissions may be vented to it and shall maintain a minimum net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) (calculated using the higher heating value) when emission units subject to 40 CFR 63 Subparts G, H, or FFFF are venting to the flare;
(b) Be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame; and
(c) Maintain the exit velocity of gas from the flare at less than or equal to 60 ft/sec (18.3 m/sec).
[Rules 62-204.800 (8)(d) and (11)(b) & (d), F.A.C., 40 CFR 63.11(b)(3), (5), (6) and (7), and 40 CFR 60.18(c)(2), (c)(3), (c)(4), (e), (f)(2) and (f)(4)]

G.3. The Amines Plants Flare shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes in any 2 consecutive hours. [Rules 62-204.800 (8)(d) and (11)(b) & (d), F.A.C. and 40 CFR 63.11(b)(4) and 40 CFR 60.18(c)(1) and (f)(1)]

G.4. During periods of flare startup, shutdown, malfunction, and maintenance, or other such periods that the Permittee may choose, the Permittee may divert emissions from the flare to the Fuel Gas System Boilers. This condition does not apply to any of the Amines Plants High-Pressure Absorber Vents, which are typically routed to the Fuel Gas System and may be routed to the flare during startup, shutdown, malfunction and maintenance of the Fuel Gas System. [Rule 62-204.800(8)(d) and (11)(b) & (8)(d), F.A.C. and 40 CFR 63.6(e)(3]

G.5. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

<u>Test Methods and Procedures</u>

G.6. Permittee shall:

(a) Demonstrate compliance with the minimum net heating value requirement by maintaining a vent gas to natural gas fuel input ratio sufficient to maintain a minimum net heating value of 7.45 MJ/scm (200 Btu/scf) (calculated using the higher heating value). Approved alternate monitoring allows use of the Honeywell control system that continuously monitors the natural gas and process gas flow rate at the flare in lieu of collecting samples of gas ducted to the flare tip for heating value analysis and testing to measure the velocity at the flare tip;
(b) Continuously monitor for the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame; and
(c) Utilize a high velocity alarm to ensure the maximum allowable velocity of 60 ft/sec (18.3 (m/sec) will not be exceeded.

[Rules 62-204.800(8)(d) and (11)(b) & (d), F.A.C., 40 CFR 63.11(b)(3), (5), (6) and (7), and 40 CFR 60.18(c)(2), (c)(3), (c)(4), (e), (f)(2), (f)(3) and (f)(4)]]

G.7. Permittee shall conduct an EPA Method 22 test during operations at a time when Methylamines Plant No.1 or No. 4 are operating at maximum production rates twelve months prior to the submittal of and included with the Title V Renewal Permit Application. The observation period shall be at least two hours. [Rules 62-204.800(8)(d) and (11)(b) & (d), F.A.C., 40 CFR 63.11(b)(4), and 40 CFR 60.18(c)(1) and (f)(1)]

G.8. Permittee shall maintain compliance with 40 CFR 63 requirements pertaining to startup, shutdown, and malfunction in accordance with other permit conditions set forth in this permit that pertain to emission units that emit organic hazardous air pollutants to the Amines Flare and that are regulated under 40 CFR 63 Subparts F, G, H, and FFFF. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 63.10(d)(5)]

G.9. This emissions unit is subject to the test methods and procedures contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Operation Rate During Testing
Special Compliance Tests
Closed Vent System Inspections

Recordkeeping and Reporting Requirements

G.10. Permittee shall maintain records of the following information:

(a) Identification of the dates and durations of periods during which the minimum heating value, pilot flame, and exit velocity requirements were not maintained and the reasons why these requirements were not met; and

(b) Identification of the dates and durations during which flare control and monitoring systems were inoperative.

[Rule 62-204.800(8)(d) and (11)(b) & (8)(d), F.A.C., 40 CFR 63.118(a)(1), 40 CFR 63.130(a)(1), and 40 CFR 63.130(a)(2)(i)]

G.11. Permittee shall submit periodic reports that identify each occurrence during which heating value, pilot flame, and exit velocity requirements were not maintained. Periodic reports shall also specify periods during which the control and monitoring systems were inoperative. The lack of monitoring data shall not constitute an excursion if other process data is available that adequately demonstrates that the flare was operating normally. Permittee shall submit an annual calibration report for calibration of the nine orifice plates that measure the flow rate of natural gas and process gas sent to the flare. [Rules 62-204.800(8)(d) and (11)(b) &(d), F.A.C., 40 CFR 63.122(g)(3), 40 CFR 152(c)(4)(E)(iii), and 40 CFR 60.115b]

G.12. Results of testing must be reported to the Department within 45 days after testing and must contain, at a minimum, information required in 62-297.310(8), F.A.C. Periodic reports will only specify that EPA Method 22 testing was conducted and indicate any deviations from the visible emissions requirement. [Rule 62-297.310(8), F.A.C.]

G.13. Permittee shall maintain compliance with 40 CFR 63 requirements pertaining to reporting of maintenance activities in accordance with other permit conditions set forth in this permit for emission units that emit organic hazardous air pollutants to the Amines Flare and that are regulated under 40 CFR 63 Subparts F, G, H, and FFFF. [Rule 62-204.800 (8)(d) and (11)(b) & (d), F.A.C. and 40 CFR 63.10(d)(5)]

G14. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Special Compliance Tests
Compliance Monitoring
Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Additional Reporting Requirements for Sources with Continuous Monitoring Systems (CMS)
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection H. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
006	Methylamines Plant No. 1 Gas-Fired Heater

At Methylamines Plant No. 1, a natural gas-fired preheater is used to heat the reaction of methyl alcohol, ammonia and recycled methylamines from the process to yield methylamine. This emissions unit is not subject to any unit specific rule or regulation.

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

Essential Potential to Emit (PTE) Parameters

H.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

H.2. Capacity: The maximum allowable operating rate of the Methylamines Gas-Fired Heater is 10.0 MMBtu per hour heat input. The actual gas-fired heater heat input will be calculated on a semi-annual basis as the sum of the previous 12 months total measured flow of natural gas to the heater and the average higher heating value of the natural gas. [Rule 62-213.440(1), F.A.C.]

Emission Limitations and Standards

H.3. Visible emissions shall be less than 20% opacity at all times. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

H.4.a. EPA Method 9 testing (minimum duration 30 minutes) shall be conducted once during the twelve month period prior to the required permit renewal application submittal deadline. [Rule 62-297.310(7)(a)3, F.A.C.]

H.4.b. This emissions unit is subject to the testing requirement contained in Common Condition; Notification of Testing, which is located in Subsection FF - Common Conditions. [Rule 62-297.310(7)(a)9, F.A.C.]

Recordkeeping and Reporting Requirements

H.5. Permittee shall maintain records of the most recent five years of EPA Method 9 tests conducted on this source. [Rules 62-4.070 and 62-4.160(2), F.A.C.]

H.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Test Methods - Visible Emissions
Operation Rate During Testing
Test Reports

H.7. The records for heat input as described in specific condition H.2 shall be recorded in a logbook, made available for inspection by the Department, and maintained for 5 years. [Rules 62-4.070 and 62-4.160(2), F.A.C.]

Subsection I. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
049	Methylamines Plant No. 1 Process Vents

Emissions from several process vents at Methylamines Plant No. 1 are collected using a vapor collection system and routed to the Amines Flare (EU 005) during normal operation. Methylamines Plant No. 1 process vents used intermittently include, but are not limited to, the Low Pressure Absorber vent and the High Pressure Absorber vent. Emissions from the High Pressure Absorber are the only emissions at the Methylamines Plant No. 1 that are routed to the Fuel Gas System (EU 001 & 003) during normal operation and to the flare (EU 005) during system upsets and other abnormal events. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, (attached).
{Permitting Note: The absorber is used for product recovery and is not considered a pollution control device.}
{Permitting Note: As stated in 40 CFR 63 Subpart G "After the compliance dates specified in 40 CFR 63.100 Subpart F of this part, a Group 1 process vent that is also subject to the provisions of 40 CFR 60 subpart NNN is required to comply only with the provisions of this subpart." 40 CFR 63.110(d)(4) and "After the compliance dates specified in 40 CFR 63.100 Subpart F of this part, a Group 1 process vent that is also subject to the provisions of 40 CFR 60 Subpart RRR is required to comply only with the provisions of this subpart." 40 CFR 63.110(d)(7).}

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

Essential Potential to Emit (PTE) Parameters

I.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

I.2. Permittee shall reduce emissions of organic hazardous air pollutants (i.e., chemicals listed in Table 2 of 40 CFR 63 Subpart F) using a vapor collection system and flare meeting the criteria of 40 CFR 63.11(b). This condition does not apply to any of the Amines Plants High Pressure Absorber Vents that are typically routed to the Fuel Gas System. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.113(a)(1)]

I.3. This emissions unit is subject to the limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.
Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

I.4. Organic hazardous air pollutant emissions from Methylamines Plant No. 1 Process Vents shall be vented to the Amines Plants Flare, which shall meet the general control device requirements of 40 CFR 63.11(b). This condition does not apply to any of the High Pressure

Absorber Vents that are typically routed to the Fuel Gas System. Specific permit conditions applicable to the Amines Plants Flare are specified elsewhere in this permit. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.113(a)(1)]

I.5. This emissions unit is subject to the test methods and procedures contained in Common Condition - Closed Vent System Inspections, which is located in Subsection FF - Common Conditions.

Recordkeeping and Reporting Requirements

I.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection J. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
050	Methylamines Plant No. 1 Wastewater

The Methylamines Plant No. 1 Wastewater is the bottoms stream from various Methylamines Plant No. 1 Distillation Columns. The stream, consisting of water and negligible quantities of product, and methanol is directed to the plant sewer system after processing in the dehydration column and/or the environmental column. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, (attached).
{Permitting Note: The current EUs for individual plant wastewater are for regulatory purposes and emissions from all wastewater have been included under EU 075 – Wastewater Treatment Plant Fugitives.}

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

Essential Potential to Emit (PTE) Parameters

J.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Emission Limitations and Standards

J.2. Permittee shall comply with the requirements in 40 CFR 63.132 (a)(1) through (a)(3), which requires a determination of a waste water emissions source being a Group 1 or Group 2 stream. For Group 2 streams, the Permittee shall comply with the recordkeeping requirements of 40 CFR 63.146. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.132(a) & 63.146]

Recordkeeping and Reporting Requirements

J.3. If Permittee has used process knowledge to determine the annual average concentration of a wastewater stream and/or the annual average flow rate and thereby concluded that a wastewater stream is not a Group 1 stream, Permittee shall keep in a readily accessible location the documentation of how process knowledge was used. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.147(f)]

J.4. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G

Subsection K. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
051	Methylamines Plant No. 1 HON Maintenance Wastewater

Wastewater removed during maintenance activities at the Methylamines Plant No. 1 is disposed of in the plant sewer system. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, (attached).
{Permitting Note: The current EUs for individual plant wastewater are for regulatory purposes and emissions from all wastewater have been included under EU 075 – Wastewater Treatment Plant Fugitives.}

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

Essential Potential to Emit (PTE) Parameters

K.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Operational Limitations and Standards

K.2. Permittee shall maintain a description of the maintenance procedures for management of wastewaters containing those organic HAPs listed in Table 9 of 40 CFR Subpart G which are generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdown (i.e., routine maintenance). The descriptions shall:

(a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities,
(b) Specify procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere, and
(c) Specify the procedures to be followed when clearing materials from process equipment.

Permittee shall modify and update the maintenance procedures as needed.
[Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.105(b) and (c)]

Recordkeeping and Reporting Requirements

K.3. Permittee shall maintain a record of the required information as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). Plans shall be maintained and kept readily available for inspection for the life of the source, or until 40 CFR 63 standards no longer apply to the source. Previous versions of Plans shall also be maintained for a period of 5 years following revision. No notification or periodic reporting of maintenance wastewater activities is required. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.105(d)]

K.4. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G

Subsection L. This section addresses the following emissions unit.

EU I.D.	Brief Description
053	Methylamines Plants Nos. 1 and 4 HON Group 2 Storage Tanks

This emissions unit previously consisted of only Tank D-67101, however Tank D-67101 is being removed from this emissions unit because the analysis shows only HAP as impurities. Storage tanks D-68127, D-68146, and D-67116O, and D-67134B in the common service of both Methylamines Plants Nos. 1 and 4 are being added because they are subject to the HON requirements of 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, (attached). Working losses from these tanks are routed to the Low Pressure Absorber which then vents to the Flare (and controlled emissions are included in the maximum potential emissions).
{Permitting Note: All product storage tanks are vented through scrubbers and/or knock out pots and vented to the flare. The scrubbers are used to maximize product recovery with air emissions being controlled through the flare.}

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

Essential Potential to Emit (PTE) Parameters

L.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Recordkeeping and Reporting Requirements

L.2. Permittee shall keep records showing the dimensions of the Group 2 storage vessel and an analysis showing its capacity. Permittee is not required to comply with any other provisions of 40 CFR 63.119 through 40 CFR 63.123. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.123(a)]

Subsection M. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
054	Methylamines NSPS Storage Tanks

Storage tanks D-67204E, D-67216A and D-67216B located at Methylamines Plant No. 1 are used in the common service of Methylamines Plants Nos. 1 & 4 and are exempt from the HON regulations but remain subject to the NSPS requirements of 40 CFR 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, (attached).
{Permitting Note: All product storage tanks are vented through scrubbers and/or knock out pots and vented to the flare. The scrubbers are used to maximize product recovery with air emissions being controlled through the flare.}

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

Essential Potential to Emit (PTE) Parameters

M.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

M.2. The Methylamines NSPS Storage Tanks shall vent through a closed vent system followed by a control device designed and operated to reduce inlet emissions of VOC by 95 percent. [Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.112b(a)(3)(i)]

M.3. Emissions from the storage tanks shall be vented to the Amines Plants Flare, which shall meet the general control device requirements of 40 CFR 60.18. Specific permit conditions applicable to the Amines Plants Flare are specified elsewhere in this permit. [Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.112b(a)(3)(ii)]

M.4. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b). [Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.112b(a)(3)(i)]

M.5. Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions: Excess emissions resulting from startup, shutdown, and malfunction shall be permitted provided the following conditions are met:

- Best operational practices to minimize emissions are adhered to, and
- The duration of excess emissions does not exceed 2 hours in any 24 hour time period, unless specifically authorized by the Department for longer.

Furthermore, during permitted periods of startup, shutdown, and malfunctions; monitoring system breakdowns, and repairs; scheduled maintenance; and periods of process nonoperation shall not be included in any emissions or parametric averaging period required under any applicable requirement specified in this Title V permit.

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.
In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]

Test Methods and Procedures

M.6. Closed Vent System Operating Standards: Each closed vent system controlled with a flare shall meet the test methods and procedures requirements as specified in the general control device requirements, 40 CFR 60.18(e) and (f). [Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.113b(d)]

Recordkeeping and Reporting Requirements

M.7. Closed Vent System Recordkeeping Requirements: Each closed vent system controlled with a flare shall meet the requirements:

- A report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6) shall be furnished to the Department. This report shall be submitted within 6 months of the initial start-up date.
- Records shall be kept of all periods of operation during which the flare pilot flame is absent.
- Semiannual reports of all periods recorded in which the pilot flame was absent shall be furnished to the Department.

[Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.115b and 60.115b(d)]

M.8. Storage Tank Recordkeeping Requirements: Records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel shall be kept readily accessible for each storage tank subject to 40 CFR 60 Subpart Kb. [Rule 62-204.800(8)(b)(16) and (8)(d), F.A.C. and 40 CFR 60.116b(b)]

Subsection N. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
007	Higher Amines Plant Gas-Fired Heater

At the Higher Amines Plant #2, a natural gas-fired preheater is used to heat the reaction of alcohols, ethers, aldehydes, ketones, and other amines to yield various alkylamines. This emissions unit is not subject to any unit-specific rule or regulation.

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

Essential Potential to Emit (PTE) Parameters

N.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hour/year. [Rule 62-213.440(1), F.A.C.]

N.2. Capacity: The maximum allowed operating rate of the Higher Amines Gas-Fired Heater is 8.4 MM Btu/hr. The gas-fired heater heat capacity will be calculated on a semi-annual basis as the sum of the previous 12 months total measured flow of natural gas to the heater and the average higher heating value of the natural gas. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

N.3. Visible emissions shall be less than 20% opacity at all times. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

N.4.a. EPA Method 9 testing (minimum duration 30 minutes) shall be conducted once during the twelve month period prior to the required permit renewal application submittal deadline. [Rule 62-297.310(7)(a)(3), F.A.C.]

N.4.b. This emissions unit is subject to the testing requirement contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Notification of Testing
Test Methods - Visible Emissions
Operation Rate During Testing

Recordkeeping and Reporting Requirements

N.5. Permittee shall maintain records of the five years of the most recent EPA Method 9 compliance tests for this source. [Rule 62-213.440(1), F.A.C.]

N.6. This emissions unit is subject to the recordkeeping and reporting requirement contained in Common Condition - Test Reports, which is located in Subsection FF - Common Conditions.

Subsection O. This section addresses the following emissions unit.

EU I.D. No.	**Brief Description**
055	72" Batch Column Process Vent

A 72-inch batch distillation column is physically located within the Higher Amines Plant area but is a detached stand-alone processing unit. The column may process a HON-regulated chemical as the primary product and is subject to 40 CFR 63 subpart G (attached). The process vent from the column exhausts to the Amines Plants Flare only during startups, shutdowns, and malfunctions. When the column is processing a chemical that is a HAP or contains a HAP, this vent is classified as a Group 2 continuous process vent in accordance with 40 CFR 63 subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached), with a TRE index greater than 5.0. Therefore, no control requirements are applicable under 40 CFR 63 subpart FFFF.
{Permitting Note: Under 40 CFR 63 subpart FFFF, the source of feed to the 72" batch column (the kettle, D-69102) would be considered a surge control vessel (SCV) and the distillation column would be considered a Continuous Process Vent (CPV), as there is addition of raw material and withdrawl of product simultaneously during column operation. As the column is a batch process (i.e., not used for the same process all year), the actual operation of the column is continuous operation when in use.}

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

Essential Potential to Emit (PTE) Parameters

O.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

O.2. The 72" Batch Column Process vent shall maintain TRE index greater than 5 for Group 2 status per 63.2455(b) and comply with provisions of TRE calculation in 63.115(d). [40 CFR 63.2455(b)]

O.3. The owner or operator of a Group 2 process vent shall recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to Group 1 vent per 63.115(e). [40 CFR 63.115(e)]

O.4. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.
Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Recordkeeping and Reporting Requirements

O.5. Each owner or operator subject to the provision of this subpart and who elects to demonstrate compliance with the TRE index value greater than 5.0 under 40 CFR 63.113(e) of this subpart or greater than 1.9 under 40 CFR 63.113(a)(3) or 40 CFR 63.113(d) of this subpart

shall keep up to date, readily accessible records of any process changes as defined in 40 CFR 63.115(e) of this subpart; and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e) of this subpart. [40 CFR 63.118(c)]

O.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

FF.7 - Startup, Shutdown, and Malfunction Plans
FF.8 - Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions

O.7. 40 CFR 63 Subpart FFFF (MACT): In accordance with 63.2460(b), the facility has determined that these emissions unit vents are Group 2. Therefore, no pollution control devices are required. However, the facility is required to comply with Recordkeeping requirements of 63.2525(a) and the Reporting requirements of 63.2520. [40 CFR 63 Subpart FFFF as modified at Appendix FFFF]

Subsection P. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
056	72" Batch Column MON Maintenance Wastewater

Wastewater removed during maintenance activities on the 72-inch batch distillation column and associated equipment is disposed of in the plant sewer system. The 72-inch Batch Column is physically located within the Higher Amines Plant area but is a detached stand-alone activity. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached).

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

Essential Potential to Emit (PTE) Parameters

P.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

P.2. Per Table 7 in subpart FFFF, Permittee shall comply with the requirements in 63.105 and the requirements referenced therein, except as specified in 40 CFR 63.2485. Permittee shall maintain the description of maintenance procedures for management of wastewaters containing those organic HAPs listed in Table 9 of 40 CFR 63 Subpart G, which are generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdown (i.e., routine maintenance). The descriptions shall:

(a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities,
(b) Specify procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere, and
(c) Specify the procedures to be followed when clearing materials from process equipment.

Permittee shall modify and update the maintenance procedures as needed
[Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(b) and (c), and 40 CFR 60 Subpart G - Table 9]

Recordkeeping and Reporting Requirements

P.3. Permittee shall maintain a record of the required information as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). Plans shall be maintained and kept readily available for inspection for the life of the source, or until 40 CFR 63 standards no longer apply to the source. Previous versions of Plans shall also be maintained for a period of five years following revision. No notification or periodic reporting of maintenance wastewater activities is required. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(d), and 40 CFR 63.6(e)(3)]

Subsection Q. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
057	Higher Amines and 72" Batch Column MON Equipment Leaks

The MON Equipment Leaks comprise fugitive emissions from the pump seals, surge control vessels, open-ended valves or lines, valves, connectors, and sampling points associated with the distillate from the 72-inch batch distillation column and in organic hazardous air pollutant service. This emissions unit is physically located within the Higher Amines Plant area but is a detached stand-alone activity. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached).
{Permitting note: EUs for equipment leaks are for regulatory purposes only and emissions are reported under EU#62 (Facility-wide Equipment Leak Fugitives).}

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

Essential Potential to Emit (PTE) Parameters

Q.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

Q.2. As required in 63.2480 of subpart FFFF, the Permittee shall comply with the requirements of subpart H of Part 63 and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d), for the following types of equipment: pumps in light liquid service; sampling connection systems; open-ended valves or lines; valves in gas/vapor service and in light liquid service; connectors in gas/vapor service and in light liquid service; and surge control vessels. [40 CFR 63.2480]

Q.3. Pumps: Permittee shall meet the criteria set forth in 40 CFR 63.163 for pumps in light liquid service that have been designated by Permittee to be in organic hazardous air pollutant light liquid service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.163]

Q.4. Pressure relief devices: Permittee shall comply with the requirements set forth in 40 CFR 63.165 for pressure relief devices in gas/vapor service that have been designated by Permittee to be in organic hazardous air pollutant gas/vapor service for 300 or more hours per year. Pressure relief devices that are routed to a process or fuel gas system are exempt. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.165]

Q.5. Open-ended valves or lines: Permittee shall comply with requirements set forth in 40 CFR 63.167 for open-ended lines that have been designated by Permittee to be in organic hazardous air pollutant service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.167]

Q.6. Valves: Permittee shall comply with Phase III leak detection and repair criteria set forth in 40 CFR 63.168 for valves in light liquid and gas service that have been designated by Permittee

to be in organic hazardous air pollutant light liquid/gas service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.168]

Q.7. Connectors: Permittee shall comply with Phase III leak detection and repair criteria set forth in 40 CFR 63.174 for connectors in light liquid and gas service that have been designated by Permittee to be in organic hazardous air pollutant light liquid/gas service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.174]

Q.8. Sampling Points: Permittee shall meet the criteria set forth in 40 CFR 63.166 for sampling points in organic hazardous service that have been designated by Permittee to be in organic hazardous air pollutant service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.166]

Compliance Methods and Procedures

Q.9. Pumps: In order to comply with the requirements of 40 CFR 63.163, Permittee shall either comply with the Phase III leak detection and repair requirements specified in 40 CFR 63.163 or comply by using methods specified in 40 CFR 63.163(e), (f), or (g). [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.163]

Q.10. Pressure relief devices: After pressure releases from pressure relief valves that are not equipped with upstream rupture disks, the pressure relief device shall be returned to less than 500 ppmv above background, as confirmed by the method specified in 40 CFR 63.180(c), as soon as practicable, but no later than five days after the release. Any pressure relief device with an upstream rupture disk is exempt from monitoring, provided that in the event that a release ruptures the disk, the disk is replaced as soon as practicable, but no later than five days after the release. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.165, and 40 CFR 63.180]

Q.11. Open-ended valves or lines: Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for open-ended valves specified in 40 CFR 63.167(d) and (e), which are exempt. Permittee shall also comply with work and operating practices specified in 40 CFR 63.167(a)(2), (b), and (c). [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.167]

Q.12. Valves: Permittee shall inspect and repair valves according to the criteria specified in 40 CFR 63.168. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.168, and 40 CFR 63.180]

Q.13. Connectors: Permittee shall inspect and repair connectors according to the criteria specified in 40 CFR 63.174. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.174]

Q.14. Sampling Points: Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured. Each sampling system shall meet one of the specifications specified in 40 CFR 63.166(b). [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.166]

Recordkeeping and Reporting Requirements

Q.15. Pumps: Permittee has elected to demonstrate compliance with the requirements of 40 CFR 63.163 by implementing a leak detection and repair program. Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i), (b)(7), (c), (d), and if a quality improvement plan is implemented, records required under paragraph (h) shall also be maintained. If Permittee elects to demonstrate compliance using methods specified in 40 CFR 63.163(e), (f), or (g), other relevant records specified in 40 CFR 63.163 shall be maintained. Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.163, and 40 CFR 63.181 and 63.182]

Q.16. Pressure relief devices: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i), (b)(3), and (f). Periodic reports meeting the specifications of 40 CFR 63.182(d)(xiv) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.181 and 63.182]

Q.17. Open-ended valves or lines: Permittee shall maintain records specified in 40 CFR 63.181 (b)(1)(i) and no periodic reporting shall be required under 40 CFR 63.182. Notwithstanding, Title V semi-annual progress reports shall be submitted that identify any instances of non-compliance and annual Title V compliance certification reports must certify whether or not compliance with applicable requirements has been achieved. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.181 and 63.182]

Q.18. Valves: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i) and (ii), (b)(7), (d), and if a quality improvement plan is implemented, records required under paragraph (i) shall also be required. Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.181 and 63.182]

Q.19. Connectors: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i) and (ii), (b)(5), (b)(7), and (d). Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.181 and 63.182]

Q.20. Sampling Points: Permittee shall maintain records specified in 40 CFR 63.181(b)(1)(i) and no periodic reporting shall be required. [Rule 62-204.800(11)(b), F.A.C,. and 40 CFR 63.181]

Q.21. This emissions unit is subject to the recordkeeping and reporting requirements contained in Common Condition - Schedule of Reporting for 40 CFR 63 Subparts F, G, and H, which is located in Subsection FF - Common Conditions.

Subsection R. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
058	Higher Amines and 72" Batch Column MON Group 2 Storage Tanks

The Group 2 tanks for Nos. 2 and 3 Plants (D-68110 A, D-68110B, D-68142), located at the 72" Batch Column are subject to the requirements of 40 CFR 63 FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached). Control devices are not required. The tanks are painted white and working losses from these tanks are routed to the Low Pressure Absorber which then vents to the Flare (and controlled emissions are included in the maximum potential emissions). The 72-inch Batch Column is physically located within the Higher Amines Plant area but is a detached stand-alone activity.

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

Essential Potential to Emit (PTE) Parameters

R.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Recordkeeping and Reporting Requirements

R.2. Permittee shall keep records showing the dimensions of each storage vessel and an analysis showing the capacity of each vessel. Permittee is not required to comply with any other provisions of 40 CFR 63.119 through 40 CFR 63.123. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.123(a)]

Subsection S. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
059	72" Batch MON Column Wastewater

Wastewater is comprised of the Group 2 column bottoms stream from the 72-inch batch distillation column. This wastewater is disposed in the plant sewer system. The 72-inch Batch Column is physically located within the Higher Amines Plant area but is a detached stand-alone activity. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. (attached).
{Permitting Note: Group 2 wastewater emissions are reported under EU 075, Wastewater Treatment Plant Fugitives.}

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

Essential Potential to Emit (PTE) Parameters

S.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

S.2. Permittee shall comply with the requirements in 63.132 through 63.148 and the requirements referenced therein, except as specified in 63.2485. The compounds in tables 8 and 9 of subpart FFFF apply. Permittee shall comply with requirements set forth in 40 CFR 63.132(a)(1) through (a)(3), which requires that Permittee determine whether a wastewater emission source is a Group 1 or Group 2 stream. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.132(a) and 40 CFR 63.2485(a)]

Recordkeeping and Reporting Requirements

S.3. If Permittee uses process knowledge to determine the annual average concentration of a wastewater stream and/or the annual average flow rate used to determine that a wastewater stream is not a Group 1 stream, Permittee shall keep in a readily accessible location the documentation of how process knowledge was used. For Group 2 streams, Permittee shall comply with the reporting requirements of 40 CFR 63.146 and the recordkeeping requirements of 40 CFR 63.147. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.146 and 147]

Subsection T. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
066	Higher Amines and 72" Batch Column Group 2 MON Transfer Rack

The 72-inch Batch Column utilizes a Group 2 transfer rack to load product into railcars. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached). The 72-inch Batch Column is physically located within the Higher Amines Plant area but is a detached stand-alone activity. The transfer rack is vented through knock out pot to the flare.

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

Essential Potential to Emit (PTE) Parameters

T.1. This transfer rack (Ground Transfer Rack) is limited to loading no more than 0.65 million liters/year of liquids that contain organic HAP with a rack-weighted average partial pressure, as defined in 40 CFR 63.111, greater than or equal to 1.5 pound per square inch absolute. [40 CFR 63.2550(i)-definition of "Group 2 Transfer Rack"]

T.2. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards
{Permitting Note: This transfer rack is a Group 2 source and is therefore exempt, per 40 CFR 63.2475, from the control requirements of TABLE 5 to Subpart FFFF of Part 63 - Emission Limits And Work Practice Standards For Transfer Racks.}

Recordkeeping and Reporting Requirements

T.3. As required in 40 CFR 63.2520(a) and (b), a compliance report must be submitted according to the schedule shown in the following table:

TABLE 11 TO SUBPART FFFF OF PART 63 - REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain	You must submit the report
3. Compliance report	The information specified in 40 CFR 63.2520(e).	Semiannually according to the requirements in 40 CFR 63.2520(b).

[40 CFR 63.2520]

Subsection U. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
060	Methylamines Plant No. 4 Gas-Fired Heater

At Methylamines Plant No. 4, a natural gas-fired preheater is used to heat the reaction of methyl alcohol, ammonia and recycled methylamine to yield methylamine. This emissions unit is not subject to any unit specific rule or regulation.

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

Essential Potential to Emit (PTE) Parameters

U.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

U.2. Capacity: The maximum allowable operating rate of the Methylamines Plant No. 4 Gas-Fired Heater is 10 MM BTU/hr. The gas-fired heater heat capacity will be calculated on a semi-annual basis as the sum of the previous 12 months total measured flow of natural gas to the heater and the average higher heating value of the natural gas. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

U.3. Visible emissions must be less than 20 percent opacity at all times. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

U.4.a. EPA Method 9 testing (minimum duration of 30 minutes) of the heater stack shall be conducted once during the twelve months prior to the permit application renewal deadline while operating at the maximum allowable rate. Test results are to be submitted within 45 days of the test date or with the permit renewal application, whichever is earlier. [Rule 62-297(7)(a)3, F.A.C.]

U.4.b. This emissions unit is subject to the testing requirement contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Notification of Testing
Test Methods - Visible Emissions
Operation Rate During Testing

Recordkeeping and Reporting Requirements

U.5. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Test Methods - Visible Emissions
Operation Rate During Testing
Test Reports

Subsection V. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
033	Methylamines Plant No. 4 Process Vents

Emissions from several process vents at the Methylamines Plant No. 4 are collected using a vapor collection system and routed to the amines plant flare during normal operation. Methylamines Plant No. 4 process vents used intermittently include, but are not limited to, the Low Pressure Absorber vent and the High Pressure Absorber vent. Emissions from the High Pressure Absorber are the only emissions at the Methylamines Plant No. 4 that are routed to the Fuel Gas System (EU 001 & 003) during normal operation and the flare during system upsets and other abnormal events. (The absorber is used for product recovery and is not considered a pollution control device.) This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, attached.
{Permitting Note: As stated in 40 CFR 63 Subpart G "After the compliance dates specified in 40 CFR 63.100 of Subpart F of this part, a Group 1 process vent that is also subject to the provisions of 40 CFR 60 Subpart NNN is required to comply only with the provisions of this subpart." 40 CFR 63.110(d)(4) and "After the compliance dates specified in 40 CFR 63.100 of Subpart F of this part, a Group 1 process vent that is also subject to the provisions of 40 CFR 60 Subpart RRR is required to comply only with the provisions of this Subpart." 40 CFR 63.110(d)(7).}

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

Essential Potential to Emit (PTE) Parameters

V.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

V.2. Permittee shall reduce emissions of organic hazardous air pollutants (i.e., chemicals listed in Table 2 of 40 CFR 60 Subpart F) using a vapor collection system and flare meeting the criteria of 40 CFR 63.11(b). [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.11(b), and 40 CFR 63.113(a)(1)]

V.3. Organic hazardous air pollutant emissions from Methylamines Plant No. 4 Process Vents shall be vented to the Amines Plants Flare (when not routed to the Fuel Gas System Boilers), which shall meet the general control device requirements of 40 CFR 63.11(b). Specific permit conditions applicable to the Amines Plants Flare are specified in this permit under Emissions Unit 005. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.11(b), and 40 CFR 63.113(a)(1)]

V.4. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

V.5. This emissions unit is subject to the test methods and procedures contained in Common Condition - Closed Vent System Inspections, located in Subsection FF, Common Conditions.

Recordkeeping and Reporting Requirements

V.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following permit conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection W. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
034	Methylamines Plant No. 4 Wastewater

The Methylamines Plant No. 4 Wastewater is the wastewater stream from the Methylamines Plant No. 4 distillation process. The stream, consisting of water and negligible quantities of product, is directed to the plant sewer system. This emissions unit is regulated by 40 CFR 63 Subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, (attached).
{Permitting Note: The EUs for individual plant wastewater are for regulatory purposes only and emissions from all wastewater have been included under EU 075, Wastewater Treatment Plant Fugitives. The wastewater stream covered under HON includes the #4 Dehydration Column Bottoms.}

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

Essential Potential to Emit (PTE) Parameters

W.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission Limitations and Standards

W.2. Permittee shall comply with the requirements in 40 CFR 63.132(a)(1) through (a)(3), which requires that Permittee determine whether a wastewater emission source is a Group 1 or Group 2 stream. For Group 2 streams, Permittee shall comply with the recordkeeping requirements of 40 CFR 63.146. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.132(a)]

Recordkeeping and Reporting Requirements

W.3. If Permittee uses process knowledge to determine the annual average concentration of a wastewater stream and/or the annual average flowrate used to determine that a wastewater stream is not a Group 1 stream, Permittee shall keep in a readily accessible location the documentation of how process knowledge was used. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.147]

W.4. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G

Subsection X. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
035	Methylamines Plant No. 4 HON Maintenance Wastewater

Wastewater removed during maintenance activities at the Methylamines Plant No. 4 is disposed of in the plant sewer system. This emissions unit is regulated by 40 CFR 63 Subpart F, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI), Hazardous Organic NESHAP's (HON), (attached).

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

Essential Potential to Emit (PTE) Parameters

X.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Operational Limitations and Standards

X.2. Permittee shall maintain a description of maintenance procedures for management of wastewaters containing those organic HAPs listed in Table 9 of 40 CFR 63 Subpart G which are generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdown (i.e., routine maintenance). The descriptions shall:

(a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities,
(b) Specify procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere, and
(c) Specify the procedures to be followed when clearing materials from process equipment.

Permittee shall modify and update the maintenance procedures as needed. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(b) and (c), and 40 CFR 63 Subpart G - Table 9]

Recordkeeping and Reporting Requirements

X.3. Permittee shall maintain a record of the required information as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). Plans shall be maintained and kept readily available for inspection for the life of the source, or until 40 CFR 63 standards no longer apply to the source. Previous versions of Plans shall also be maintained for a period of five years following revision. No notification or periodic reporting of maintenance wastewater activities is required. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 63.105(d)]

X.4. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G

Subsection Y. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
036	Methylamines Plants Nos. 1 and 4 HON Equipment Leaks

HON Equipment Leaks (Methanol Storage leaks) from Plant Nos. 1 (previously EU 052) and Plant No. 4 (previously EU 031) are being consolidated under this emissions unit. Equipment Leaks comprise fugitive emissions from the pump seals, pressure relief valves, open-ended valves or lines, valves, connectors, and sampling points in organic hazardous air pollutant service. This emissions unit is regulated by 40 CFR 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, (attached).
{Permitting Note: EUs for equipment leaks are for regulatory purposes only and emissions are reported under EU#62 (Facility-wide Equipment Leak Fugitives).

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

Essential Potential to Emit (PTE) Parameters

Y.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

Y.2. Pumps: Permittee shall meet the criteria set forth in 40 CFR 63.163 for pumps in light liquid service that have been designated by Permittee to be in organic hazardous air pollutant light liquid service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.163].

Y.3. Pressure relief devices: Permittee shall comply with the requirements set forth in 40 CFR 63.165 for pressure relief devices in gas/vapor service that have been designated by Permittee to be in organic hazardous air pollutant gas/vapor service for 300 or more hours per year. Pressure relief devices that are routed to a process or fuel gas system are exempt. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.165]

Y.4. Open-ended valves or lines: Permittee shall comply with requirements set forth in 40 CFR 63.167 for open-ended lines that have been designated by Permittee to be in organic hazardous air pollutant service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.167]

Y.5. Valves: Permittee shall comply with Phase III leak detection and repair criteria set forth in 40 CFR 63.168 for valves in light liquid and gas service that have been designated by Permittee to be in organic hazardous air pollutant light liquid/gas service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.168]

Y.6. Connectors: Permittee shall comply with Phase III leak detection and repair criteria set forth in 40 CFR 63.174 for connectors in light liquid and gas service that have been designated by Permittee to be in organic hazardous air pollutant light liquid/gas service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.174]

Y.7. Sampling Points: Permittee shall meet the criteria set forth in 40 CFR 63.166 for sampling points in organic hazardous service that have been designated by Permittee to be in organic hazardous air pollutant service for 300 or more hours per year. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.166]

Compliance Methods and Procedures

Y.8. Pumps: In order to comply with the requirements of 40 CFR 63.163, Permittee shall either comply with the Phase III leak detection and repair requirements specified in 40 CFR 63.163 or comply by using methods specified in 40 CFR 63.163(e), (f), or (g). [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.163]

Y.9. Pressure relief devices: After pressure releases from pressure relief valves that are not equipped with upstream rupture disks, the pressure relief device shall be returned to less than 500 ppmv above background, as confirmed by the method specified in 40 CFR 63.180(c), as soon as practicable, but no later than five days after the release. Any pressure relief device with an upstream rupture disk is exempt from monitoring, provided that in the event that a release ruptures the disk, the disk is replaced as soon as practicable, but no later than five days after the release. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.165, and 40 CFR 63.180]

Y.10. Open-ended valves or lines: Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for open-ended valves specified in 40 CFR 63.167(d) and (e), which are exempt. Permittee shall also comply with work and operating practices specified in 40 CFR 63.167(a)(2), (b), and (c). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.167]

Y.11. Valves: Permittee shall inspect and repair valves according to the criteria specified in 40 CFR 63.168. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.168, and 40 CFR 63.180]

Y.12. Connectors: Permittee shall inspect and repair connectors according to the criteria specified in 40 CFR 63.174. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.174]

Y.13. Sampling Points: Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured. Each sampling system shall meet one of the specifications specified in 40 CFR 63.166(b). [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.166]

Recordkeeping and Reporting Requirements

Y.14. Pumps: If Permittee elects to demonstrate compliance with the requirements of 40 CFR 63.163 by implementing a leak detection and repair program, records shall be maintained in accordance with 40 CFR 63.181 (b)(1)(i), (b)(7), (c), (d), and if a quality improvement plan is implemented, records required under paragraph (h) shall also be maintained. If the Permittee elects to demonstrate compliance using methods specified in 40 CFR 63.163(e), (f), or (g), other relevant records specified in 40 CFR 63.163 shall be maintained. Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181 and 63.182]

Y.15. Pressure relief devices: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i), (b)(3), and (f). Periodic reports meeting the specifications of 40 CFR 63.182(d)(xiv) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181 and 63.182]

Y.16. Open-ended valves or lines: Permittee shall maintain records specified in 40 CFR 63.181 (b)(1)(i) and no periodic reporting shall be required under 40 CFR 63.182. Notwithstanding, Title V semi-annual progress reports shall be submitted that identify any instances of non-compliance and annual Title V compliance certification reports must certify whether or not compliance with applicable requirements has been achieved. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181 and 63.182]

Y.17. Valves: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i) and (ii), (b)(7), (d), and if a quality improvement plan is implemented, records required under paragraph (i) shall also be required. Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181 and 63.182]

Y.18. Connectors: Records shall be maintained in accordance with 40 CFR 63.181(b)(1)(i) and (ii), (b)(5), (b)(7), and (d). Periodic reports containing relevant information specified in 40 CFR 63.182(d) shall be submitted to the Department. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181 and 63.182]

Y.19. Sampling Points: Permittee shall maintain records specified in 40 CFR 63.181(b)(1)(i) and no periodic reporting shall be required. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.181]

Y.20. This emissions unit is subject to the recordkeeping and reporting requirements contained in Common Condition - Schedule of Reporting for 40 CFR 63 Subparts F, G, and H, located in Subsection FF - Common Conditions.

Subsection Z. This section addresses the following emissions unit.

EU I.D. No.	Brief Description
037	Methylamines Plant No. 4 VOC Equipment Leaks

Methylamines Plant No. 4 VOC Equipment Leaks comprise fugitive emissions from the pressure relief valves, open-ended valves or lines, valves, connectors, and sampling points in VOC service. Components are considered in VOC service when the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. These equipment leaks are subject to the NSPS requirements of 40 CFR 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, (attached).
{Permitting note: EUs for equipment leaks are for regulatory purposes only and emissions are reported under EU#62 (Facility-wide Equipment Leak Fugitives).}

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

Essential Potential to Emit (PTE) Parameters

Z.1. Hours of Operation: This emissions unit is allowed to operate on an as-needed basis. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

Z.2. Pumps: This emissions unit is equipped with sealless pumps and is therefore exempt from the requirements of 40 CFR 482-2. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 60.482-1(d)]

Z.3. Pressure relief devices: Permittee shall comply with the requirements set forth in 40 CFR 60.482-4 for pressure relief devices in gas/vapor service. Permittee shall comply with the requirements set forth in 40 CFR 60.482-8 for pressure relief devices in light liquid service. Pressure relief devices that are routed to a process or fuel gas system are exempt. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-4 and 482-8]

Z.4. Open-ended valves or lines: Permittee shall comply with requirements set forth in 40 CFR 60.482-6 for open-ended lines that have been designated by Permittee to be in organic hazardous air pollutant service for 300 or more hours per year. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-6]

Z.5. Valves: Permittee shall comply with the requirements set forth in 40 CFR 60.482-7 for valves in light liquid or gas/vapor service. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-7]

Z.6. Flanges and Connectors: Permittee shall comply with the requirements set forth in 40 CFR 60.482-8 for flanges and connectors. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-8]

Z.7. Sampling Points: Permittee shall meet the criteria set forth in 40 CFR 60.482-5 for sampling points. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-5]

Test Methods and Procedures

Z.8. Test Methods: Permittee shall determine compliance with the standards using the methods specified in 40 CFR 60.485. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C., and 40 CFR 60.485]

Z.9. Pumps: This emissions unit is equipped with sealless pumps and is therefore exempt from the requirements of 40 CFR 482-2. [Rule 62-204.800(11)(b) and (8)(d), F.A.C., and 40 CFR 60.482-1(d)]

Z.10. Pressure relief devices: After pressure releases from pressure relief valves, the pressure relief device shall be returned to less than 500 ppmv above background, as confirmed by the method specified in 40 CFR 60.485(c), as soon as practicable, but no later than five days after the release. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C., and 40 CFR 60.482-4 and 60.485]

Z.11. Open-ended valves or lines: Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Permittee shall also comply with work and operating practices specified in 40 CFR 60.482-6(a)(2), (b), and (c). [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C., and 40 CFR 60.482-6]

Z.12. Valves: Permittee shall inspect and repair valves in light liquid or gas/vapor service according to the criteria specified in 40 CFR 60.482-7. Permittee may elect to reduce the frequency of inspection in accordance with 40 CFR 60.483-2(b) after providing the Department with the appropriate notification as defined in 40 CFR 60.483-2(a) and 487(b). Permittee shall inspect and repair valves in heavy liquid service according to the criteria specified in 40 CFR 60.482-8. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.482-7, 60.482-8 and 60.483-2]

Z.13. Connectors: Permittee shall inspect and repair connectors according to the criteria specified in 40 CFR 60.482-8. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR60.482-8]

Z.14. Sampling Points: Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Each sampling system shall meet one of the specifications specified in 40 CFR 60.482-5(b). [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR60.482-5]

Recordkeeping and Reporting Requirements

Z.15. Pumps: This emissions unit is equipped with sealless pumps and is therefore exempt from the requirements of 40 CFR 482-2. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 60.482-1(d)]

Z.16. Pressure Relief Devices: Records shall be maintained in accordance with 40 CFR 60.486(b)(1) and (c). Periodic reports containing relevant information specified in 40 CFR 60.487(c) shall be submitted to the Department. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.486]

Z.17. Valves: Records shall be maintained in accordance with 40 CFR 60.486(b)(1) and (c). Records shall also be maintained in accordance with 40 CFR 60.486(f) for every valve subject to

the requirements of 40 CFR 60.482-7(g) and (h). Periodic reports containing relevant information specified in 40 CFR 60.487(c) shall be submitted to the Department. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.486]

Z.18. Connectors: Records shall be maintained in accordance with 40 CFR 60.486(b)(1) and (c). Semiannual reports containing relevant information specified in 40 CFR 60.487(c) shall be submitted to the Department. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.486]

Z.19. Recordkeeping Requirements for All Equipment in VOC Service: Records shall be maintained for all equipment subject to 40 CFR 60.482-1 to 482-10 in accordance with the requirements of 40 CFR 60.486(e). [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.486]

Z.20. Components Not in VOC Service: Permittee shall maintain records specified in 40 CFR 60.486(j) for any equipment considered not in VOC service. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.486]

Z.21. Semiannual Reporting: Permittee shall submit reports on a semi-annual basis to the Department in accordance with the requirements of 40 CFR 60.487. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.487]

Z.22. Performance Test Reporting: Permittee shall report the results of all performance tests in accordance with 40 CFR 60.8. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [Rule 62-204.800(8)(b)(51) and (8)(d), F.A.C. and 40 CFR 60.487]

Subsection AA. This section addresses the following emissions unit(s).

EU I.D. No.	Brief Description
070	Higher Amines Plant Process Vents

At the Higher Amines Plant, alcohols, ammonia, ethers, aldehydes, ketones, and other amines are reacted to yield various diamylamines and amylamines. A natural gas-fired preheater is used to bring the mixture to reaction temperature. Process vents include: Plant #2 Low Pressure Absorber Vent, and Plant #2 High Pressure Absorber Vent. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached). Ammonia column is sent to high pressure absorber. All other columns sent to low pressure absorber then boilers. Vents from the high pressure absorber are sent to the flare or boilers for destruction. Vents from the high and low pressure absorbers are routed to the flare for control.

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

Essential Potential to Emit (PTE) Parameters

AA.1. Hours of Operation: This emissions unit is allowed to operate intermittently (open during startup, shutdown, and malfunction only). [Rule 62-213.440(1), F.A.C., permit application 1130004-018-AV]

Emission/Equipment Limitations and Standards

AA.2. Permittee shall determine the total resource effectiveness (TRE) index value as specified in 40 CFR 63.115(d) for each continuous process vent. When a TRE index value of 4.0 is referred to in 40 CFR 63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply. The Higher Amines Process vents shall maintain TRE index greater than five for Group 2 status per 63.2455(b). [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.115(d), 40 CFR 63.2455(b), and permit application 1130004-018-AV]

AA.3. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

AA.4. Permittee shall recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. Process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based. [Rule 62-204.800(11)(b), F.A.C. and 40 CFR 63.115(e)]

AA.5. This emissions unit is subject to the test methods and procedures contained in Common Condition - Closed Vent System Inspections, located in Subsection FF, Common Conditions.

Recordkeeping and Reporting Requirements

AA.6. Permittee shall keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e) of this subpart; and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). [40 CFR 63.118(c)]

AA.7. Permittee shall maintain records specified in 40 CFR 63.2525(a) and submit periodic reports in accordance with 63.2520. [40 CFR 63.2520 and 63.2525(a)]

AA.8. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following permit conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection BB. This section addresses the following emissions unit(s).

EU I.D. No.	Brief Description
071	Higher Amines Plant MON Maintenance Wastewater

At the Higher Amines Plant, maintenance wastewater is sent to the plant sewer system. Operation and Maintenance Plan includes procedures for minimizing emissions to the air while clearing equipment for maintenance work. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached).

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

Essential Potential to Emit (PTE) Parameters

BB.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

BB.2. Per Table 7 in subpart FFFF, Permittee shall comply with the requirements in 63.105 and the requirements referenced therein, except as specified in 63.2485. Permittee shall prepare a description of maintenance procedures for management of wastewaters containing those HAPS listed in Table 9 of 40 CFR subpart G which are generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:

(a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
(b) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and
(c) Specify the procedures to be followed when clearing materials from process equipment.

[Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(b), and 40 CFR 63.2485, and 40 CFR 63 Subpart G - Table 9]

Test Methods and Procedures

BB.3. Permittee shall modify and update the information required in the maintenance procedures for management of wastewaters as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(c), and 40 CFR 63.2485]

BB.4. Permittee shall incorporate the maintenance procedures for management of wastewaters as part of a start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(d), and 40 CFR 63.2485]

BB.5. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans

Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Recordkeeping and Reporting Requirements

BB.6. Permittee shall maintain a record of the information required by maintenance procedures for management of wastewaters as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). Plans shall be maintained and kept readily available for inspection for the life of the source, or until 40 CFR Part 63 standards no longer apply to the source. No notification or periodic reporting of maintenance wastewater activities is required. [Rule 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.105(d)]

BB.7. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following permit conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection CC. This section addresses the following emissions unit(s).

EU I.D. No.	Brief Description
072	Higher Amines Plant MON Wastewater (Dehydration Column Bottoms)

The Higher Amines Plant is subject to MON. This is a Group 2 wastewater stream. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached). *{Permitting Note: The emissions unit for individual plant wastewater are for regulatory purposes only and emissions from all wastewater have been included under EU 075, Wastewater Treatment Plant Fugitives.}*

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

Essential Potential to Emit (PTE) Parameters

CC.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

CC.2. Permittee shall comply with the requirements in 63.132 through 63.148 and the requirements referenced therein, except as specified in 63.2485. The compounds in table 8 and 9 of subpart FFFF apply. Permittee shall comply with the requirements in 40 CFR 63.132(a)(1) through (a)(3), which requires that Permittee determine whether each wastewater stream is Group 1 or Group 2 stream. For Group 2 streams, Permittee shall comply with recordkeeping requirements of 40 CFR 63.146.

(1) A wastewater stream is a Group 1 wastewater stream for Table 9 compounds if:

  (i) The total annual average concentration of Table 9 compounds is greater than or equal to 10,000 parts per million by weight at any flow rate; or

  (ii) The total annual average concentration of Table 9 compounds is greater than or equal to 1,000 parts per million by weight and the annual average flow rate is greater than or equal to 10 liters per minute.

(2) A wastewater stream is a Group 2 wastewater stream for Table 9 compounds if it is not a Group 1 wastewater stream for Table 9 compounds.

(3) Re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. Process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based.

[Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.132(a) and (c), and 40 CFR 63.2485]

CC.3. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

CC.4. Permittee shall submit the information specified in 40 CFR 63.146 (b)(1) through (b)(9) as part of the Notification of Compliance Status required by 40 CFR 63.152(b). [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.146(b), 40 CFR 63.152(b), and 40 CFR 63.2485]

Recordkeeping and Reporting Requirements

CC.5. Permittee shall maintain records of all Group 1/Group 2 determinations, and the Notification of Compliance Status available for Department inspection. If Permittee uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, Permittee shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.105(e), and 40 CFR 63.2485]

CC.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following permit conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection DD. This section addresses the following emissions unit(s).

EU I.D. No.	Brief Description
073	Higher Amines and 72" Batch Column Group 1 MON Storage Tanks

This emissions unit contains the storage tanks identified as D-67116K, D-68102, D-68103, D-68106A, D-68106B, D-68109, D-68113, D-69101A, D-69101B, D-69101C, D-69101D and D-69102. Tanks are routed through knockout pot to flare.

This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached).

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

Essential Potential to Emit (PTE) Parameters

DD.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

DD.2. Permittee shall reduce total organic HAP emissions by venting emissions through a closed vent system to a flare for all Group 1 MON storage tanks. [Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.132(a) and (c), and 40 CFR 63.2470, 40 CFR 63 Subpart FFFF Table 4(1)(b)(iii)]

DD.3. Flare(s)

(1) Permittee shall monitor the flare(s) to assure that it is operated and maintained in conformance with its design.

(2) Flare(s) shall be steam-assisted, air-assisted, or non-assisted.

(3) Flare(s) shall be operated at all times when emissions may be vented to them.

(4) Flare(s) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in Appendix A of Part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flare(s) shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) Flare(s) design shall adhere to the specifications of 40 CFR 63.11(b)(6) - (8). [Rule 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.11(b)(1)-(6), 40 CFR Subpart FFFF Table 4(1)(b)(iii), and 40 CFR 63.2470]

DD.4. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans

Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

DD.5. Test Method 22 in Appendix A of Part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22. [Rule 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.11(b)(4), 40 CFR Subpart FFFF Table 4(1)(b)(iii), and 40 CFR 63.2470]

Recordkeeping and Reporting Requirements

DD.6. This emissions unit is subject to the recordkeeping and reporting requirements contained in the following permit conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions
General Recordkeeping Requirements
General Reporting Requirements for 40 CFR 63 Subpart G
Schedule of Reporting for 40 CFR 63 Subparts F, G, and H

Subsection EE. This section addresses the following emissions unit(s).

EU I.D. No.	Brief Description
074	Sitewide MON Heat Exchangers

The heat exchanger identified as E-69101 could have 5% or more HAP. This emissions unit is regulated by 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, (attached).

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

Essential Potential to Emit (PTE) Parameters

EE.1. Hours of Operation: This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-213.440(1), F.A.C.]

Emission/Equipment Limitations and Standards

EE.2. Permittee shall comply with the following heat exchanger requirements:

(1) The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

(2) There is an intervening cooling fluid, containing less than 5 percent by weight of total hazardous air pollutants listed in 40 CFR 63 Subpart FFFF Table 4, between the process and the cooling water. This intervening fluid serves to isolate the cooling water from the process fluid and the intervening fluid is not sent through a cooling tower or discharged. Discharge does not include emptying for maintenance purposes.

(3) The once-through heat exchange system is subject to a National Pollution Discharge Elimination System (NPDES) permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration, whichever is greater.

(4) The once-through heat exchange system is subject to an NPDES permit that:

(i) Requires monitoring of a parameter(s) or condition(s) to detect a leak of process fluids into cooling water;

(ii) Specifies or includes the normal range of the parameter or condition;

(iii) Requires monitoring for the parameters selected as leak indicators no less frequently than monthly for the first six months and quarterly thereafter; and

(iv) Requires the owner or operator to report and correct leaks to the cooling water when the parameter or condition exceeds the normal range.

(5) The recirculating heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutants listed in 40 CFR 63 Subpart FFFF Table 4.

(6) The once-through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutants listed in Table 9 of 40 CFR 63 Subpart G.

[Rule 62-204.800(11)(b), F.A.C., 40 CFR 63.104(a), 40 CFR 63.2490, 40 CFR 63 Subpart FFFF Table 4(1)(b)(iii), and 40 CFR 63 Subpart G Table 9]

EE.3. This emissions unit is subject to the emission limitations and standards contained in the following Common Conditions, which are located in Subsection FF - Common Conditions.

Startup, Shutdown, and Malfunction Plans
Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions

Test Methods and Procedures

EE.4. All sitewide heat exchange systems not meeting the conditions specified in 40 CFR 63.104(a)(1) through (6), shall be monitored by inspecting the cooling water for the presence of one or more organic HAPs or other representative substance whose presence in cooling water indicates a leak as specified in 40 CFR 63.104(b)(1) through (6), or by using a surrogate indicator of heat exchanger system leaks as specified in 40 CFR 63.104(c)(1) through (3). [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.104(a), (b), and (c)]

EE.5. Any leaks that are detected shall be repaired as soon as practical but not later than 45 days after Permittee receives results of monitoring tests indicating a leak. After repair, Permittee shall confirm that the heat exchange system has been repaired within seven calendar days of the repair or startup, whichever is later. Repairs may be delayed beyond 45 days if the criteria specified in 40 CFR 63.104(e) are met. [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.104(d) and (e)]

Recordkeeping and Reporting Requirements

EE.6. Permittee shall maintain records of required monitoring, leaks detected, the date when leak was detected, (if demonstrated not to be a leak, the basis for that determination), the dates of efforts to repair leaks, and the method or procedures used to confirm repair of a leak and the date the repair was confirmed. Periodic reports are required only if Permittee invokes the delay of repair. Periodic reports shall include information required by 40 CFR 63.104(f)(2). [Rule 62-204.800(11)(b), F.A.C., and 40 CFR 63.104(f)]

EE.7. This emissions unit is subject to the limitations and standards contained in Common Conditions; General Recordkeeping Requirements, and General Reporting Requirements for 40 CFR 63 subpart G, which are located in Subsection FF - Common Conditions.

Subsection FF. This section addresses Common Conditions

FF.1. Notification of Testing: Permittee shall notify the Department at least 15 days prior to the date on which each compliance test for emission limiting standards is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

FF.2. Test Methods - Visible Emissions: Compliance with the emissions limitation shall be determined by using EPA Method 9 adopted by reference in Chapter 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling, and reporting shall be in accordance with Chapter 62-297, F.A.C. [Rules 62-296.320(4)(a)3.b.(ii) and 62-296.320(4)(b)4, F.A.C.]

FF.3. Operation Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at maximum capacity. Maximum capacity is defined as 90 to 100 percent of the permitted capacity of the unit, as specified in this permit, or otherwise is defined as 90 to 100 percent of the rated capacity of the unit, if no permit condition specifying capacity is contained in this permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than permitted capacity; however, a compliance test submitted at an operating rate less than 90 percent of the permitted rate will automatically constitute an amended permit which limits the process rate to 110 percent of the test load until another test, showing compliance at a higher rate, is submitted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

FF.4. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but not later than 45 days after the last sampling run of each test is completed or at the time of the next Title V progress report submittal. The test report shall provide, at minimum, the information required in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.]

FF.5. 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 may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

FF.6. Compliance Monitoring: In addition to specific control device parameter monitoring requirements previously specific, Permittee must maintain minimum daily monitoring data availability in accordance with criteria specified in 40 CFR 63.152(c)(2)(A). Each day in which the average daily value of a control device parameter is not maintained within its required ranges or minimum data availability is not achieved is considered a single excursion. The maximum number of allowable excursions during any semiannual reporting period is specified in 40 CFR 63.152(c)(4)(B). If a monitored parameter is outside its established range or monitoring data are not collected during periods of start-up, shutdown, or malfunction (and the source is operated during such periods in

accordance with the source's start-up, shutdown, and malfunction plan as required by 40 CFR 63.6(e)(3) or Subpart A of this part) or during periods of nonoperation of the chemical manufacturing process unit or portion thereof (resulting in cessation of the emissions to which the monitoring applies), then the excursion is not a violation and, in cases where continuous monitoring is required, the excursion does not count toward the number of excused excursions for determining compliance. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 63.152(c)]

FF.7. Startup, Shutdown, and Malfunction Plans (SSMP): Permittee shall prepare a startup/shutdown/malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. The plan shall identify all routine or otherwise predictable continuous monitoring system malfunctions. The plan shall be developed by the compliance date for that relevant standard. Each plan prepared is incorporated by reference into this Title V permit. Actions taken that are consistent with the startup/shutdown/malfunction plan must be reported on a semi-annual basis within 30 days after each calendar half year (January 31 and July 31). [Rule 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.6(e)(3)(i) & (ii), and 40 CFR 63.103 (c.)(2)(i.)(ii.)]

FF.8. Recordkeeping and Reporting of Startups, Shutdowns, and Malfunctions: When actions during startup/shutdown/malfunction are taken consistent with the SSMP, records shall be maintained indicating that recommended procedures were followed. A Periodic Startup, Shutdown, and Malfunction Report shall be submitted semiannually for actions that were taken that were consistent with the Plans in accordance with the requirements of 40 CFR 63.10(d)(5)(i). Actions taken that are inconsistent with a startup/shutdown/malfunction plan must be reported within 2 working days with written follow-up provided within 7 working days. [Rule 62-204.800(11)(b) and (8)(d), F.A.C. and 40 CFR 63.10(d)(5)]

FF.9. Excess Emissions and Data Obtained During Startups, Shutdowns, and Malfunctions: Excess emissions resulting from startup, shutdown, and malfunction shall be permitted provided the following conditions are met:

- Best operational practices to minimize emissions are adhered to;
- The duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour time period unless specifically authorized by the Department for longer duration; and,
- Malfunctions are repaired in compliance with the relevant regulations/rules or as soon as practicable, whichever is sooner.

Furthermore, during permitted periods of startup, shutdown, and malfunctions; monitoring system breakdowns, and repairs; scheduled maintenance; and periods of process non-operation shall not be included in any emissions or parametric averaging period required under any applicable requirement specified in this Title V permit.

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. For emission units also subject to emission limiting standards under 40 CFR Subparts F or G, a start-up, shutdown, malfunction or period of non-operation of one portion of a chemical manufacturing unit does not affect the ability of a particular emission point to comply with the permit conditions to which it is subject, then that emission point shall still be required to comply with the applicable provisions of Subparts F and

G during the startup, shutdown or malfunction. [Rules 62-210-700 and 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.6(f)(1), 40 CFR 63.102(a)(1), and 40 CFR 63.152(c)(4)(c)]

FF.10. General Recordkeeping Requirements: In addition to recordkeeping requirements specified in Specific Conditions, Permittee shall maintain files of information (including performance reports and initial notifications) required under 40 CFR 63. Required information includes information specified in the following sections:

- 40 CFR 63.10(b) and (c) ("general provisions");
- 40 CFR 63.117 and/or 63.118 ("process vents")
- 40 CFR 63.123 ("storage vessels")
- 40 CFR 63.130 ("transfer operations")
- 40 CFR 63.147 ("process wastewater")
- 40 CFR 63.152 ("general reporting and continuous records")

[Rule 62-204.800(11)(b) and (8)(d), F.A.C.]

FF.11. General Reporting Requirements for Specific Emission Units Subject to 40 CFR 63 Subpart G: Periodic reports shall be submitted to the Department semiannually no later than 60 calendar days after the end of each 6-month period. In addition to any reporting required under Specific Conditions of this permit, Periodic Reports shall include information specified in the following sections:

- 40 CFR 63.10(d) ("general provisions");
- 40 CFR 63.117 and/or 63.118 ("process vents")
- 40 CFR 63.122 ("storage vessels")
- 40 CFR 63.129 and/or 63.130 ("transfer operations")
- 40 CFR 63.146 ("process wastewater")
- 40 CFR 63.152(c)(2), (c)(3), (c)(4) ("general reporting and continuous records")

[Rule 62-204.800(11)(b) and (8)(d), F.A.C., 40 CFR 63.10(d), and 40 CFR 63.152(c)(1)]

FF.12. Additional Reporting Requirements for Sources with Continuous Monitoring Systems (CMS): Sources required by a relevant standard under 40 CFR 63 to install a CMS shall submit semiannual reports summarizing information specified in 40 CFR 63.10(e)(3). [Rule 62-204.800(11)(b) and (8)(d), F.A.C., and 40 CFR 63.10(e)(3)]

FF.13. Schedule of Reporting for Specific Sources Subject to 40 CFR 63 Subparts F, G, and H. Periodic reporting required under Common Conditions FF.8, FF.11, and FF.12 shall be submitted with Title V semiannual Progress Reports unless a mutual agreement to change the schedule of reporting is reached between Permittee and the Department. Notwithstanding, the Department may reduce the frequency of periodic reporting at the request of Permittee provided that the conditions specified in 40 CFR 63.10(e)(3)(ii) are met. [Rule 62-204.800(11)(b) and (8)(d), F.A.C., and 40 CFR 63.10(e)(3)(ii)]

FF.14. Closed Vent System Inspections: Each closed vent system shall be inspected and maintained on an annual basis according to the criteria specified in 40 CFR 63.148. [Rule 62-204.800(11)(b) and (8)(d), F.A.C., and 40 CFR 63.120(d)(6)]