Florida Department of Environmental Protection
Northwest District
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Pensacola, Florida 32502-5740

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Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

Taminco Inc.
4574 Highway 90 East
Pace, Florida 32571

Authorized Representative:
Mr. Robert Dwane Brumfield, Site Manager

Air Permit No. 1130004-019-AC
Permit Expires: March 7, 2013

Taminco Pace Plant
Title V Air Construction Permit
DIMLA Project

This is the final air construction permit, which authorizes construction of a new production unit to produce dimethyl laurylamine (DIMLA). The proposed work will be conducted at the existing Taminco Pace Plant, which is a Chemical Processing Plant (Standard Industrial Classification No. 2869). The facility will be located in Santa Rosa County at 4575 Highway 90 East in Pace, Florida. The UTM coordinates are Zone 16, 486.9 km East, and 3382.7 km North. As noted in the Final Determination provided with this final permit, only minor changes, clarifications and typographical corrections were made to the draft permit.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C., and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

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

Executed in Pensacola, Florida

/s/ 3/7/11

Rick Bradburn, Air Program Administrator (Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on March 7, 2011 to the persons listed below.

Robert Dwane Brumfield, Taminco Inc.: dwane.brumfield@taminco.com
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Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

/s/ 3/7/11

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

This construction permit follows 1130004-014-AV, effective August 22, 2005 (revised February 1, 2008). Construction permit 1130004-017-AC which consolidated 1130004-015-AC and 1130004-016-AC was relinquished. Title V renewal 1130004-018-AV is pending.

Taminco Inc., was formerly known as Taminco Methylamines. The name was changed January 2011.

Existing Facility

Taminco Inc., operates an amines production facility in Pace, Florida. 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. The No. 3 Plant consists of a 72-inch batch distillation column which processes higher amines and crude methanol. There are also two active boilers on site, the Riley Stoker and the B&W and a cogeneration facility which is operated by Taminco, but owned by Gulf Power. The existing facility consists of the following active emissions units.

Facility ID No. 1130004

ID No.	Regulated Emission Unit Description
EU001	Riley Stoker Boiler
EU003	B&W Boiler
EU005	Amines Plants Flare
EU006	Methylamines Plant No. 1 Gas Fired Heater
EU007	Higher Amines Plant Gas-Fired Heater
EU029	Methylamines Plants Nos. 1 and 4 Group 1 HON Storage Tanks: TK-53407, TK53405, TK53401B
EU033	Methylamines Plant No. 4 Process Vents
EU034	Methylamines Plant No.4 Wastewater
EU035	Methylamines Plant No. 4 HON Maintenance Wastewater
EU036	Methylamines Plant Nos. 1 and 4 HON Equipment Leaks
EU037	Methylamines Plant No. 4 VOC Equipment Leaks
EU046	Sitewide HON Heat Exchangers
EU047	Methanol Storage HON Maintenance Wastewater
EU048	Methanol Storage Sample Points
EU049	Methylamines Plant No. 1 Process Vents
EU050	Methylamines Plant No. 1 Wastewater
EU051	Methylamines Plant No. 1 HON Maintenance Wastewater
EU053	Methylamines Plant Nos. 1 & 4 HON Group 2 Storage Tanks
EU054	Methylamines Plant No. 1 NSPS Storage Tanks
EU055	72" Batch Column Process Vent
EU056	72" Batch Column MON Maintenance Wastewater
EU057	Higher Amines and 72" Batch Column MON Equipment leaks
EU058	Higher Amines and 72" Batch Column MON Group 2 Storage Tanks
EU059	72" Batch Column Wastewater
EU060	Methylamines Plant No. 4 Gas Fired Heater
EU066	Higher Amines and 72" Batch Column Group 2 MON Transfer Rack
EU070	Higher Amines Plant Process Vents

EU071	Higher Amines Plant MON Maintenance Wastewater
EU072	Higher Amines Plant MON Wastewater
EU073	Higher Amines and 72" Batch Column MON Group 1 Storage Tanks
EU074	Site-wide MON Heat Exchangers
ID No.	**Unregulated Emission Unit Description**
EU075	Waste Water Treatment Plant Fugitives
EU062	Facility-Wide Equipment Leak Fugitives
EU063	Cooling Towers (4) (that do not use chromium-based water treatment chemicals)

Proposed Project

A new production unit will be constructed for manufacturing dimethyl laurylamine (DIMLA) from either a C12 alcohol (lauryl alcohol) or a C14 alcohol (myristyl alcohol) or a mixture of the two. The alcohol feed (ROH) will be reacted with dimethylamine (DMA) in a catalyzed reaction with hydrogen present. A second methylation reaction using formalin and possibly formic acid completes the conversion of any partially reacted DIMLA. New equipment consists of reactors, separators, storage tanks and equipment such as pumps, compressors and piping for transporting materials from one vessel to another.

The new process area will be located on a curbed concrete pad. New raw material and product storage tanks will be constructed in a new diked concrete area. Product loading and raw material unloading facilities will also be added. The new production unit will use the existing utilities and wastewater treatment systems. This project will add or affect the following emissions units.

Facility ID No. 1130004	
ID No.	**Emission Unit Description**
EU001	Riley Stoker Boiler
EU003	B&W Boiler
EU005	Amines Plants Flare
EU077	DIMLA MON Equipment Leaks (New)
EU063	Cooling Towers (4) (not regulated)
EU076	DIMLA Storage Tanks and Loading (new, unregulated)
EU075	Wastewater Treatment Plant Fugitives
EU078	DIMLA VOC Equipment Leaks (New)
EU058	Higher Amines/72"Column/DIMLA MON Group 2 Storage Tanks
EU071	Higher Amines/DIMLA MON Maintenance Wastewater
EU072	Higher Amines/DIMLA MON Wastewater
EU074	Sitewide MON Heat Exchangers
EU079	DIMLA Scrubber (New)

Emissions Changes Due to Project: (Emissions listed in tons per year)

Regulated Air Pollutant	Baseline Actual Emissions	Projected Actual Emissions	Project Increase
CO	142.04	158.56	16.52
NOx	383.28	423.18	39.9
PM	20.67	21.85	1.18
PM10	20.66	21.84	1.18
SO2	13.72	14.71	0.99
VOC	107.4	141	33.6
Methanol (HAP)	50.38	67.38	17
Formaldehyde (HAP)	0	0.857	0.857

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northwest District Air Resource Management Program, Florida Department of Environmental Protection (Department). The District's mailing address is 160 W. Government Street, Suite 308, Pensacola, Florida 32502-5740. All documents related to applications for permits to operate an emissions unit shall be submitted to the District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the District Office at the above address or nwdair@dep.state.fl.us.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) 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.

   (b) 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 exceeding its projected actual emissions, 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.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing

operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

9. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (11), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

   a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

   b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

      1) The name, address and telephone number of the owner or operator of the major stationary source;

      2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

      3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

      4) Any other information that the owner or operator wishes to include in the report.

   c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

   For this project, the Department requires the annual reporting of actual CO, NOx, PM/PM10, SO2 and VOC emissions for the portion of the following emissions units that are related to DIMLA production. The method used to estimate emissions shall be the same method used to obtain post project emissions estimates for the construction permit application unless alternative methods are approved in writing by the Department.

Facility ID No. 1130004

ID No.	Emission Unit Description
EU001	Riley Stoker Boiler
EU003	B & W Boiler
EU005	Amines Plants Flare
EU077	DIMLA MON Equipment Leaks (new)
EU063	Cooling Towers (4) (unregulated in TV permit)
EU076	DIMLA Storage Tanks and Loading (new, unregulated)
EU075	Wastewater Treatment Plant Fugitives
EU078	DIMLA VOC Equipment Leaks (new)
EU058	Higher Amines/72"Column/DIMLA MON Group 2 Storage Tanks
EU071	Higher Amines/DIMLA MON Maintenance Wastewater

EU072	Higher Amines/DIMLA MON Wastewater
EU074	Sitewide MON Heat Exchangers
EU079	DIMLA Scrubber (new)
NA	Cogeneration units providing steam to DIMLA

[Application 1130004-019-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. Riley Stoker Boiler

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 001	**Riley Stoker Boiler**

The Riley Stoker Boiler produces up to 90,000 pounds per hour of 600 psig steam. This is equivalent to 128 MMBtu per hour heat input assuming 80% boiler efficiency. The boiler is fueled by natural gas, process off-gases, non-hazardous liquid process wastes, and used oil. Combustion gases are exhausted without controls.

EQUIPMENT

A.1. The permittee is authorized to install new nozzles in the existing Riley Stoker Boiler to allow for the burning of DIMLA Purification Residue. [Application No. 1130004-019-AC]

PERFORMANCE RESTRICTIONS

A.2. Permitted Capacity: The maximum allowable operating rate is unchanged from the existing Title V permit. The total amount of steam fed to the DIMLA process from the combined Riley Stoker Boiler (EU 001), B & W Boiler (EU 003), and three Cogen units owned by Gulf Power shall not exceed 29, 200 lb/hr. [Rules 62-210.200(PTE) and 62-212.300(3)(c), F.A.C., and Application No. 1130004-019-AC]

A.3. Authorized Fuel: In addition to the byproduct fuels allowed to be combusted in the existing Title V operating permit, this permit authorizes the burning of ROH Evaporation residue and no more than 5,356 gallons (37,500 lb) per year of DIMLA Purification residue. [Application 1130004-019-AC and Rules 62-210.200(PTE) and 62-212.300(3)(c), F.A.C.]

A.4. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

Same as existing Title V permit.

TESTING REQUIREMENTS

This permit does not impose any new testing requirements.

MONITORING REQUIREMENTS

A.5. Post Project Emissions Monitoring: The permittee shall monitor emissions of NOx, VOC, SO2 and PM10 and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rule 62-4.070(3) and 62-212.300(1)(e)1., F.A.C., and Application No. 1130004-019-AC]

RECORDS AND REPORTS

A.6. In addition to the recordkeeping and reporting requirements contained in the existing Title V permit, the permittee shall

a. Report to the Department within 60 days after the end of each year the information required under Administrative Requirements #9, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

b. Maintain records of the total amount of steam fed to the DIMLA process in pounds per hour. [Rules 62-210.200(PTE) and 62-212.300(3)(c), F.A.C.]

c. Maintain records of the total amount of DIMLA Purification Residue fed to the Riley Stoker Boiler in pounds per hour. [Rules 62-210.200(PTE) and 62-212.300(3)(c), F.A.C., and Application No. 1130004-019-AC]

B. B & W Boiler

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 003	B & W Boiler

The B&W boiler produces up to 90,000 pounds per hour of 600 psig steam. This is equivalent to 128 MMBtu/hr of heat input at 80% boiler efficiency. The boiler is fueled by natural gas and process off-gases**.** Combustion gases are exhausted without controls.

EQUIPMENT

No physical changes will be made to the existing B & W boiler.

PERFORMANCE RESTRICTIONS

B.1. Permitted Capacity: The maximum allowable operating rate is unchanged from the existing Title V permit. The total amount of steam fed to the DIMLA process from the combined Riley Stoker Boiler (EU 001), B & W Boiler (EU 003), and three Cogen units owned by Gulf Power shall not exceed 29, 200 lb/hr. [Rule 62-210.200(PTE) and 62-212.300(3)(c), F.A.C., and Application No. 1130004-019-AC]

B.2. Authorized Fuel: No changes from the existing Title V permit. [Application No. 1130004-019-AC and Rule 62-210.200(PTE), F.A.C.]

B.3. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

Same as existing Title V permit.

TESTING REQUIREMENTS

This permit does not impose any new testing requirements.

MONITORING REQUIREMENTS

B.4. Post Project Emissions Monitoring: The permittee shall monitor emissions of NOx, VOC, SO2 and PM10 and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rule 62-4.070(3) and 62-212.300(1)(e)1., F.A.C., and Application No. 1130004-019-AC]

RECORDS AND REPORTS

B.5. In addition to the recordkeeping and reporting requirements contained in the existing Title V permit, the permittee shall

a. Report to the Department within 60 days after the end of each year the information required under Administrative Requirements #9, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

b. Maintain records of the total amount of steam fed to the DIMLA process in pounds per hour. [Rules 62-210.200(PTE) and 62-212.300(3)(c), F.A.C., and Application No. 1130004-019-AC]

C. Amines Plant Flare

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 005	Amines Plants Flare

The amines plants flare is a non-assisted flare with a natural gas pilot. The presence of the pilot flame is monitored using a thermocouple. Natural gas is fed with process off-gases in a ratio of 0.33:1 to ensure that the minimum required heating value under NSPS and NESHAP requirements (200 Btu/scf) is maintained. A high flow alarm on the natural gas flow ensures that the maximum allowable flare exit velocity is not exceeded.

EQUIPMENT

C.1. This permit allows the routing of process vent streams from the DIMLA Amines Absorption Column, the DIMLA Methylation Reactor, and the DIMLA Amines Desorption Column to the Amines Plants Flare via the #1 Methylamines Low Pressure Absorber.

Compliance with NSPS subparts NNN (Distillation Vents) and RRR (Reactor Vents) will be met by compliance with 40 CFR 63 subpart FFFF (MON) as per the overlap provisions specified in 40 CFR 63.2535(h). [Application No. 1130004-019-AC and Rule 62-210.200(PTE), F.A.C.]

PERFORMANCE RESTRICTIONS

Same as existing Title V permit.

EMISSIONS STANDARDS

C.2. Process Vent Provisions: Continuous process vent streams from the DIMLA plant will be vented either directly or routed through recovery devices to the flare at all times when the DIMLA plant is operating, except as provided for in the startup, shutdown, and malfunction plan. [40 CFR 63.2455 incorporated by reference in Rule 62-204.800(11)(b), F.A.C.].

TESTING REQUIREMENTS

C.3. Initial Compliance Tests: An initial flare compliance assessment shall be conducted using EPA Method 22 with either Methylamines Plant No. 1 or No. 4 and the DIMLA plant operating at maximum capacity. The initial compliance test shall be conducted within 180 days of startup of the new DIMLA process. The period of observation shall be two hours. Notification shall be made to the Administrator at least 30 days prior to the compliance assessment to allow the Administrator the opportunity to have an observer present. [40 CFR 63.987(b) and 63.999(a)(1)(i), referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in Rules 62-204.800(8)(d), (11)(b) & (d); 62-297.310(7)(a)1., F.A.C.,]

C.4. Frequency of Compliance Tests: Specific Condition G.7 of the existing Title V permit is amended to include operation of the DIMLA plant, as follows: "**G.7.** Permittee shall conduct an EPA Method 22 test during operations at a time when Methylamines Plant No.1 or No. 4 *and the DIMLA plant* are operating at maximum production rates 12 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), (11)(b) & (d), and 62-297.310(7)(a)3., F.A.C., 40 CFR 63.11(b)(4), and 40 CFR 60.18(c)(1) and (f)(1)]"

MONITORING REQUIREMENTS

This permit adds the following monitoring requirements.

C.5. Post Project Emissions Monitoring: The permittee shall monitor emissions of NOx, VOC, SO2 and PM10 and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rule 62-4.070(3) and 62-212.300(1)(e)1., F.A.C., and Application No. 1130004-019-AC]

C.6. Bypass monitoring. Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the owner or operator shall comply with one of the following for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere:

(i) Properly install, maintain, and operate a flow indicator that is capable of taking readings at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line. [40 CFR 63.983(a)(3)(i) and (b)(4)(i), referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in 62-204.800(11)(b), F.A.C.]

(ii) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration and visually inspect the seal or closure mechanism at least monthly to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line. [40 CFR 63.983(a)(3)(ii) and (b)(4)(ii) referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in 62-204.800(11)(b), F.A.C.]

C.7. Leak Monitoring: Each closed vent system used to route vent streams to the flare shall be inspected in accordance with Method 21 of 40 CFR part 60, appendix A, initially, and then annually using sensory means as specified in 40 CFR 63.983(b) and (c). If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections, the leaks will be repaired and monitored as specified in 40 CFR 63.983(d). [40 CFR 63.982(b) referenced by 40 CFR 63.2450(e) incorporated by reference in 62-204.800(11)(b), F.A.C.]

C.8. Process Monitoring: Specific condition G.2.(b) of the existing title V permit is amended to specify that the required monitoring must be conducted at least hourly. [40 CFR 63.998(a)(ii) referenced by 63.987(b) referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in 62-204.800(11)(b), F.A.C.]

RECORDS AND REPORTS

This permit adds the following recordkeeping and reporting requirements.

C.9. Post Project Emissions Report: In addition to the recordkeeping and reporting requirements contained in the existing Title V permit, the permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements #9, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

C.10. Bypass Monitoring Records: Bypass monitoring records shall be maintained as specified in 40 CFR 63.998(d)(1)(ii)A. or B., as appropriate. [40 CFR 63.983(a)(3) referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in 62-204.800(11)(b), F.A.C.]

C.11. Flare Compliance Assessment Records: Flare compliance assessment records shall be kept as specified in 40 CFR 63.998(a)(1). [40 CFR 63.987(b) referenced by 40 CFR 63.2450(e) via 63.982(b) incorporated by reference in 62-204.800(11)(b), F.A.C.]

C. Amines Plant Flare

C.12. Flare Compliance Assessment Report: A flare compliance assessment report shall be submitted as specified in 63.999(a)(1) and (2). [40 CFR 63.987(b) referenced by 40 CFR 63.2450(e) via 63.982(b); 40 CFR 63.2520(d)(ii) incorporated by reference in 62-204.800(11)(b), F.A.C.]

C.13. Periodic/Semi-Annual Reports: In addition to the information already required by Specific Condition G.11 of the existing Title V Permit, the information required by 40 CFR 63.999(c)(2) pertaining to the monitoring of closed vent systems shall be included in the Periodic Report. [40 CFR 63.987(b) referenced by 40 CFR 63.2450(e) via 63.982(b) and 40 CFR 63.2520 incorporated by reference in 62-204.800(11)(b), F.A.C.]

D. DIMLA MON Equipment Leaks

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 077	DIMLA MON Equipment Leaks

EQUIPMENT

D.1. This emissions unit consists of fugitive equipment leaks from pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors and instrumentation systems in organic HAP service greater than 300 hours per year; and any control devices or systems used to comply with control standards under 40 CFR 63.2480 and located within the unit boundaries of the DIMLA process. [Application No. 1130004-019-AC, 40 CFR 63.2480 incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

D.2. Equipment contained within this emissions unit shall be identified as specified in the standard. [40 CFR 63.1022 referenced by 40 CFR 63.2480 incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

D.3. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

D.4. The permittee shall comply with the following emission standards as applicable:

a. Valves in gas and vapor service and in light liquid service standards**.** [40 CFR 63.1025 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

b. Pumps in light liquid service standards. [40 CFR 63.1026 and 63.1035 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

c. Connectors in gas and vapor service and in light liquid service standards. [40 CFR 63.1027 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

d. Agitators in gas and vapor service and in light liquid service standards. [40 CFR 63.1028 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

e. Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards. [40 CFR 63.1029 and 63.1035 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

f. Pressure relief devices in gas and vapor service standards. [40 CFR 63.1030 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

g. Compressors standards. [40 CFR 63.1031 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

h. Sampling connection systems standards. [40 CFR 63.1032 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

i. Open-ended valves or lines standards. [40 CFR 63.1033 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

j. Closed vent systems and control devices; or emissions routed to a fuel gas system or process standards. [40 CFR 63.1034 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

k. When a leak is detected, the leaking component shall be identified and repaired as soon as possible, but not later than allowed under the standard. [40 CFR 63.1024 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

TESTING REQUIREMENTS

D.5. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for HAP. The initial tests shall be conducted not later than 150 days after initial operation of the unit, except for connectors which must be monitored within 12 months after startup. [40 CFR 63.1039; 40 CFR 63.1027(a); 40 CFR 63.2520; Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

D.6. Routine Compliance Tests: Routine compliance tests shall be conducted using instruments or sensory methods as specified in the standards. [40 CFR 60.1023 referenced by 40 CFR 63.2480 adopted by reference in Rule 62-204.800(11)(b), F.A.C.]

D.7. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
21	Determination of Volatile Organic Compound Leaks
Sensory	Determination of Volatile Organic Compound Leaks

Monitoring shall comply with Method 21 of 40 CFR part 60, Appendix A, as specified by, and, except as otherwise provided in 40 CFR 63.1023.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rules 62-204.800 and 62-297.401, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, 62-297.100 and 62-297.401, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

D.8. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

D.9. The permittee shall monitor the equipment comprising this emissions unit routinely as follows:

a. Valves in gas and vapor service and in light liquid service. [40 CFR 63.1025(b)-(e) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

b. Pumps in light liquid service. [40 CFR 63.1026(b)-(e) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

c. Connectors in gas and vapor service and in light liquid service. [40 CFR 63.1027(b)-(e) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

d. Agitators in gas and vapor service and in light liquid service. [40 CFR 63.1028(c)-(e) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

e. Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems. [40 CFR 63.1029(b), (c) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

f. Pressure relief devices in gas and vapor service standards. [40 CFR 63.1030(c)-(e) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

g. Compressors. [40 CFR 63.1031(c)-(f) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

RECORDS AND REPORTS

D.10. Test Reports: The permittee shall submit the following reports:

a. Initial Compliance Status Report: An initial compliance status report will be submitted within 150 days of initial startup. [40 CFR 63.1039(a) referenced by 40 CFR 63.2480 and 63.2520(d)(2)(vii) incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

b. Semiannual Reports: Semiannual reports shall be submitted according to the schedule specified in 40 CFR 63.2520(b). [40 CFR 63.1039(b) referenced by 40 CFR 63.2480 and incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

D.11. Post Project Emission Reporting: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements #9, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

D.12. Operational Records: The permittee shall maintain the following operational records:

a. Equipment identification and documentation of unsafe-to-monitor or repair and special equipment designations. [40 CFR 63.1022, 63.1023(e) and 63.1038(b) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

b. Leak Monitoring Records. [40 CFR 63.1024(d), (f); 63.1038(c) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

c. Valves Subject to Subgrouping (If applicable). [40 CFR 63.1025(b)(4)(iv) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

d. Dual mechanical seal design criteria for exempt pumps (If applicable). [40CFR 63.1026(e)(1)(i) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

e. Monitoring Periods for Connectors. [40 CFR 63.1027(b)(3)(v) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

f. Dual mechanical seal design criteria for exempt agitators (If applicable). [40 CFR 63.1028(e)(1)(vi)(B) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

g. Pressure Relief Device Demands. [40 CFR 63.1030(c)(3) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

h. Compressor seal design criteria (If applicable). [40 CFR 63.1031(d)(2) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

i. Pumps Subject to a Quality Improvement Program (If applicable). [40 CFR 63.1035(d)(2), (6)(iii), 6(iv), (7) and (e)(1)-(6) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

j. Alternative Means of Compliance (If applicable). [40 CFR 63.1036(d) referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

k. General Recordkeeping Requirements. [40 CFR 63.1038 referenced by 40 CFR 63.2480, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

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

E. Cooling Towers

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 063	Cooling Towers (4)

This unregulated emissions unit consists of four open recirculating induced draft cooling towers which use non-chromium based corrosion inhibitors as well as oxidizing and non-oxidizing biocides to control algae and bacterial growth in the recirculating water. Particulate emissions are controlled using drift eliminators.

EQUIPMENT

This project does not make any physical changes to the cooling towers. However, emission increases due to incremental cooling water use in CT-67102 were included in the PSD analysis for this project. This emissions unit is unregulated except for the notification requirement in 40 CFR 63.405, the NESHAP for Industrial Process Cooling Towers.

MONITORING REQUIREMENTS

E.1. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and PM10 and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

RECORDS AND REPORTS

E.2. Post Project Emissions Reporting: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

F. DIMLA Product and Residue Storage Tanks

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 076	DIMLA Storage Tanks and Loading (New/Unregulated)

This emissions unit consists of the fixed-roof tanks listed in Specific Condition F.1. All of the materials except formic acid have low vapor pressures (<0.001 psia). Formic acid has a vapor pressure of 0.78 psia; however, the formic acid tank volume is less than 10,000 gal. All the tanks vent to atmosphere with annual emissions estimated to be 0.066 TPY of VOC.

EQUIPMENT

F.1. Equipment Name: The permittee is authorized to install storage tanks and loading racks as follows:

a. ROH Storage (TK-62101, TK-62102)

b. DIMLA Check Tanks (TK-62090, TK-62091)

c. DIMLA Storage Tanks (TK-62190, TK-62191, TK-62192, TK-62193)

d. DIMLA Residue Storage (TK-62068)

e. DIMLA Wastewater Storage (TK-62099, TK-62057)

f. Formic Acid Storage (TK- 62148)

g. DIMLA Product and Residue Loading Racks

Vapors from loading product and residue are routed to atmosphere, so emissions from loading are added to the breathing and working losses for the associated tanks listed in c. and d., above. The loading racks are unregulated (Group 2) under 40 CFR Part 63 subpart FFFF because the product and residue contain HAPs only as impurities and the rack weighted vapor pressure of the materials is below the 1.5 psia regulatory threshold.

The storage tanks are unregulated except for the record keeping requirements in 40 CFR Part 60 subpart Kb by virtue of their size and/or vapor pressure being below the regulatory thresholds (either less than 19,800 gal or vapor pressure less than 0.5 psia). [Application No. 1130004-019-AC]

MONITORING REQUIREMENTS

F.2. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

RECORDS AND REPORTS

F.3. Operational Records: The owner or operator of each storage vessel as specified in 40 CFR §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

F.4. Post Project Emissions Monitoring: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

G. Wastewater Treatment Plant Fugitives

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 075	Wastewater Treatment Plant Fugitives

The wastewater treatment system consists of a series of ponds encompassing several acres. A combination of neutralization, equalization, and naturally occurring biological oxidation processes using indigenous bacteria are used to convert organic contaminants in the wastewater to CO2 and water. Emissions result from evaporation from the surface of the ponds and are not controlled.

EQUIPMENT

G.1. The permittee is authorized to create tie-ins for wastewater from the DIMLA process to the existing wastewater treatment system. [Application No. 1130004-019-AC]

PERFORMANCE RESTRICTIONS

This permit does not impose new performance restrictions on this emission unit.

EMISSIONS STANDARDS

There are no air emission standards associated with this emissions unit.

TESTING REQUIREMENTS

This permit does not impose any testing requirements on this emissions unit.

MONITORING REQUIREMENTS

G.2. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

RECORDS AND REPORTS

G.3. Post Project Emissions Reporting: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

H. DIMLA Plant VOC Equipment Leaks

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 078	DIMLA VOC Equipment Leaks

EQUIPMENT

H.1. Equipment Name: This new emissions unit consists of fugitive equipment leaks from pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, and connectors in VOC service but not also in HAP service (which are regulated as EU077), and located within the unit boundaries of the DIMLA process. [Application No. 1130004-019-AC and 40 CFR 60 subpart VVa incorporated by reference in Rule 62-204.800(8)(b), F.A.C]

H.2. Equipment shall be identified as either subject to monitoring or exempt from monitoring. [40 CFR 60.486a(e)(1)-(6) and (f), (i) and (j) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

PERFORMANCE RESTRICTIONS

H.3. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

H.4. The permittee shall comply with the following emission standards as applicable:

a. Standards: Pumps in light liquid service. [40 CFR 60.482-2a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

b. Standards: Compressors**.** [40 CFR 60.482-3a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

c. Standards: Pressure relief devices in gas/vapor service. [40 CFR 60.482-4a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

d. Standards: Sampling connection systems. [40 CFR 60.482-5a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

e. Standards: Open-ended valves or lines. [40 CFR 60.482-6a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

f. Standards: Valves in gas/vapor service and in light liquid service. [40 CFR 60.482-7a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

g. Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service. [40 CFR 60.482-8a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

h. Standards: Delay of repair. [40 CFR 60.482-9a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

i. Standards: Closed vent systems and control devices. [40 CFR 60.482-10a incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

j. Standards: Connectors in gas/vapor service and in light liquid service. [40 CFR 60.482-11a (currently stayed) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

H.5. When a leak is detected, as defined by the applicable standard in Specific Condition H.4, it shall be flagged in the field. [40 CFR 60.486a(b), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

TESTING REQUIREMENTS

H.6. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for VOC. The initial test shall be conducted not later than 180 days after initial operation of the unit, except for connectors, which must be monitored within 12 months of startup. [40 CFR 60.482-1a(a) and 60.482-11a(a), incorporated by reference in Rule 62-204.800(8)(b), F.A.C., and Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

H.7. Routine Compliance Tests: Routine compliance tests shall be conducted as specified below under Monitoring Requirements. [40 CFR 60 Subpart VVa, incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

H.8. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
21*	Determination of Volatile Organic Compound Leaks

*Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A, except as otherwise provided in 40 CFR 60.485a.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rules 62-204.800 and 62-297.401, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, 62-297.100 and 62-297.401, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

H.9. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rule 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

H.10. Leak Monitoring: Except where equipment has been designated exempt from monitoring under Specific Condition H.2, the permittee shall comply with the following routine monitoring requirements in the standards referenced:

a. Pumps in light liquid service. [40 CFR 60.482-2a(a), (b)(2) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

b. Compressors**.** [40 CFR 60.482-3a(e)(1) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

c. Pressure relief devices in gas/vapor service. [40 CFR 60.482-4a(b) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

d. Valves in gas/vapor service and in light liquid service. [40 CFR 60.482-7a(a) and (c) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

e. Standards: Connectors in gas/vapor service and in light liquid service. [40 CFR 60.482-11a(a) and (b)(3) (currently stayed) incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

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

RECORDS AND REPORTS

H.11. Test Reports: The permittee shall submit the following reports:

a. Semiannual reports. [40 CFR 60.487a(a)-(c), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

b. Notification of compliance with alternative standards, if applicable. [40 CFR 60.487(d), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

c. Performance test reports, if applicable. [40 CFR 60.487(e), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

H.12. Post Project Emissions Reporting: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

H.13. Operational Records: The following records shall be kept to demonstrate compliance with the leak detection and repair standards.

a. For each monitoring event the following information shall be recorded: (1) monitoring instrument identification, (2) operator identification, (3) equipment identification, (4) date of monitoring, and (5) instrument reading. [40 CFR 60.486a(a)(3), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

b. When each leak is detected, the following information shall be recorded in a log and shall be kept for two years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak,

(2) The date the leak was detected and the dates of each attempt to repair the leak,

(3) Repair methods applied in each attempt to repair the leak,

(4) Maximum instrument reading measured by Method 21 of Appendix A to 40 CFR part 60 at the time the leak is successfully repaired or determined to be nonrepairable (except when a pump is repaired by eliminating indications of liquids dripping),

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery,

(6) The signature of the owner or operator (or designee) whose decision it was that repair could not be effected without a process shutdown,

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days,

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired,

(9) The date of successful repair of the leak. [40 CFR 60.486a(b), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

c. If applicable, information pertaining to the design of closed vent systems and control devices used to control equipment leaks. [40 CFR 60.486a(d), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

d. Documentation for each compliance test performed to designate equipment operating with no detectable emissions in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f). [40 CFR 60486a(e)(4), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

e. The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service. [40 CFR 60.486a(e)(7), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

f. Calibration records for monitoring instruments. [40 CFR 60.486a(e)(8), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

g. The connector monitoring schedule (if applicable). [40 CFR 60.486(e)(9), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

h. Records of each release from a pressure relief device subject to monitoring. [40CFR 60.486a(e)(10), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

i. Documentation required for compliance with the alternative monitoring frequency for valves described in 40 CFR 60.483-2a, if applicable. [40 CFR 60.486a(g), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

j. Design criteria for pump or compressor seal systems equipped with leak detectors as described in 40 CFR 60.482-2a(d)(5) and/or 60.482-3a(e)(2), if applicable. [40 CFR 60.486a(h), incorporated by reference in Rule 62-204.800(8)(b), F.A.C.]

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

I. Higher Amines/72" Column/DIMLA MON Group 2 Storage Tanks

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 058	Higher Amines/72"Column/DIMLA MON Group 2 Storage Tanks

This emissions unit consists of a fixed roof atmospheric tank. The vapor pressure of formalin is approximately 0.78 psia and the tank volume is less than 10,000 gallons. HAP emissions are estimated at 0.02 TPY methanol and 0.04 TPY formaldehyde.

EQUIPMENT

I.1. This permit allows the installation of TK-62141, Formalin Storage Tank. This storage tank meets the MON definition of a Group 2 storage tank because it has a capacity less than 10,000 gallons. This tank is stainless steel and vents to the atmosphere. [Application No. 1130004-019-AC]

PERFORMANCE RESTRICTIONS

I.2. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

MONITORING REQUIREMENTS

I.3. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

REPORTING REQUIREMENTS

I.4. Post Project Emissions Reporting: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirements, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

J. Higher Amines/DIMLA MON Maintenance Wastewater

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 071	Higher Amines/DIMLA MON Maintenance Wastewater

EQUIPMENT

J.1. This permit requires management of HAP-containing wastewater generated while preparing equipment for maintenance work in the DIMLA plant. [Application No. 1130004-019-AC and 40 CFR 63 subpart FFFF]

PERFORMANCE RESTRICTIONS

J.2. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

J.3. Emissions Standards: Specific Condition BB.2 in the existing Title V permit is replaced by the following:

"For each maintenance wastewater stream containing organic HAP listed in Table 8 or Table 9 of 40 CFR Part 63 subpart FFFF the permittee shall

(1) prepare a description of maintenance procedures for management of wastewaters 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 to 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.

[40 CFR 63.105(b) referenced by 40 CFR 63.2485(a) and (b), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

J.4. Specific Condition BB.3 of the existing Title V permit is replaced by the following:

"The permittee shall modify and update the information required by Specific Condition BB.2 as needed following each maintenance procedure based on the actions taken and the wastewaters generated. [40 CFR 63.105(c) referenced by 40 CFR 63.2485(a) and (b), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

RECORDS AND REPORTS

J.5. Operational Records: The following specific condition replaces Specific Conditions BB.4 and BB.5 in the existing Title V Permit:

"The permittee shall incorporate the procedures described in Specific Conditions BB.2 and BB.3 as part of the startup, shutdown and malfunction plan required under 40 CFR 63.6(e)(3). [40CFR 63.105(d) referenced by 40 CFR 63.2485(a) and (b), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

J.6. Specific Condition BB.6 of the existing Title V permit is replaced by the following:
"The permittee shall maintain a record of the information required by Specific Conditions BB.2 and BB.3 as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). A current plan shall be maintained at the facility and each revision to the plan shall be kept for five years. [40 CFR 63.105(d) referenced by 40 CFR 63.2485(a) and (b) and 63.6(e)(3)(v), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

K. Higher Amines/DIMLA MON Wastewater

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 072	Higher Amines/DIMLA MON Wastewater

This emissions unit consists of water, generated either as a byproduct of the DIMLA reactions or as a result of DIMLA purification (which includes washing). Wastewater exits the process from tank TK-62099 and is treated in the existing wastewater treatment system (EU 075).

EQUIPMENT

K.1. The permittee is authorized to discharge Group 2 wastewater as defined in 40 CFR 63.2550 and 63.2485(c) to the existing wastewater treatment system. [Application No. 1130004-019-AC]

{Permitting note: The following specific conditions assume, based on the information provided in the application, that there are no compounds in Table 8 of 40 CFR Part 63 subpart G or of subpart FFFF (partially soluble HAP) present.}

K.2. Specific Condition CC.2 of the existing Title V permit is replaced with the following:

"The permittee shall determine whether each wastewater stream requires control for compounds listed in Tables 8 and 9 of 40 CFR Part 63 subpart FFFF by applying the criteria in 40 CFR 63.2485(c)(1)-(3). [40 CFR 63.132(a)(1)(i) and (b)(2) and 63.144 referenced by 40 CFR 63.2485(a)-(c), incorporated by reference in Rule 62-204.800(11)(b) F.A.C]"

K.3. The permittee shall not discard liquid or solid organic materials with a concentration of greater than 30,000 ppmw of total partially soluble HAP and soluble HAP or greater than 10,000 ppmw partially soluble HAP as defined in Tables 8 and 9 of 40 CFR Part 63 subpart FFFF (as determined by analysis of the stream composition, engineering calculations or process knowledge according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from (1) Equipment leaks; (2) Activities included in maintenance or startup/shutdown/malfunction plans; (3) Spills; or (4) Samples of a size not greater than reasonably necessary for the method of analysis that is used. [40 CFR 63.132(f) referenced by 40 CFR 63.2485(a)-(c) and (m), incorporated by reference in Rule 62-204.800(11)(b) F.A.C]

PERFORMANCE RESTRICTIONS

K.4. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

RECORDS AND REPORTS

K.5. Reports: Specific Condition CC.4 of the existing Title v permit is replaced with the following:

"The permittee shall submit the information specified in Table 15 of 40 CFR 63 subpart G for all compounds listed in Tables 8 and 9 of 40 CFR 63 subpart FFFF and contained in wastewater streams as part of the Notification of Compliance Status. [40 CFR 63.146(b)(2) referenced by 40 CFR 63.2485(a)-(c) and 63.2520(d)(i) incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

K.6. Operational Records: Specific Condition CC.5 of the existing Title V permit is replaced with the following:

K. Higher Amines/DIMLA MON Wastewater

"If process knowledge is used to determine the annual average concentration of a wastewater stream as defined in 40 CFR63.144(b)(3) and/or uses process knowledge to determine the annual average flowrate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the 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 flowrate of the wastewater stream. [40 CFR 63.147(f) and 63.144 referenced by 40 CFR 63.2485(a)-(c), incorporated by reference in Rule 62-204.800(11)(b), F.A.C]"

L. Site-wide MON Heat Exchangers

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 074	Sitewide MON Heat Exchangers

This emissions unit consists of the following shell-and-tube water cooled heat exchanger which may contain greater than 5% HAP on the process side and which may have a pressure 35 kPA higher on the process side than on the cooling water side: E-69101 (#3 Amines Plant).

EQUIPMENT

L.1. This permit adds the following heat exchange system in the DIMLA plant, which may contain process fluids that are 5% or more HAP and is, thus, subject to monitoring under 40 CFR 63 subpart FFFF: E-62048 (Methylation Vent Cooler). [Application No. 1130004-019-AC]

PERFORMANCE RESTRICTIONS

L.2. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS/MONITORING REQUIREMENTS

L.3. Emissions Standards: Specific Conditions EE.2, EE.3, EE.4 and EE.5 are replaced by the following:

"The heat exchange systems listed in this emissions unit shall be monitored according to either the requirements of 40 CFR 63.104(b)(1)-(6) or 40 CFR 63.104(c)(1)-(3). The monitoring frequency shall be monthly for the first six months and quarterly thereafter. [40 CFR 63.104 referenced by 40 CFR 63.2490, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

L.4. Specific Condition EE.6 of the existing Title V permit is incorporated by reference in this permit.

L.5. Specific Condition EE.7 of the existing Title V permit is incorporated by reference in this permit.

RECORDS AND REPORTS

L.6. Operational Records: Specific Condition EE.8 in the existing Title V permit is replaced with the following:

"The permittee shall retain the following records:

a. All monitoring data indicating a leak and the date that the leak was detected, and, if demonstrated not to be a leak, the basis for that determination;

b. Records of any leaks detected pursuant to 40 CFR 63.104(c)(2) and the date the leak was discovered;

c. The dates of efforts to repair leaks;

d. The method or procedure used to confirm repair of a leak and the date repair was confirmed.

Records will be maintained for five years with the most recent 6 months' worth kept on site and readily accessible within two hours. [40 CFR 63.104(f)(1) referenced by 40 CFR 63.2490, incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]"

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

L.7. Reports: If the permittee invokes the delay of repair provisions, the following information shall be submitted in the next semi-annual periodic report. The information shall be submitted in each subsequent periodic report until repair of the leak is reported:

a. The location of and date that the leak was detected;

b. Whether or not the leak has been repaired;

c. The reason(s) for delay of repair. If delay of repair is invoked pursuant to 40 CFR 63.104(e)(2)(i), documentation of the emission estimates described therein;

d. If the leak remains unrepaired, the permittee shall report the expected date of repair;

e. If the leak is repaired, the permittee shall report the date the leak was successfully repaired. [40 CFR 63.104(f)(2) and (e)(2) referenced by 40 CFR 63.2490 and 40 CFR 63.2520(e)(5), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.]

M. DIMLA Scrubber

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU 079	DIMLA Scrubber

This emissions unit is a packed column that uses water to scrub amines and methanol out of the DIMLA Purification Tower overhead vacuum system. The recovered amines are fed to the #4 Methylamines plant via the new DIMLA Amines Absorption and Desorption Columns with the methanol going through tank TK-62099 to the wastewater treatment system.

EQUIPMENT

M.1. The permittee is authorized to install the DIMLA scrubber, T-62028, which recovers methanol (which is a HAP) and methylamines from the DIMLA Purification Tower overhead vacuum system. Compliance with 40 CFR 63 subpart FFFF constitutes compliance with 40 CFR 60 subpart NNN. [Application No. 1130004-019-AC, 40 CFR 63.2535(h)]

PERFORMANCE RESTRICTIONS

M.2. Collection of Emissions: The DIMLA scrubber shall be operated with a minimum water flow of 75% of the ROH feedrate, in gallons per minute, at all times when emissions are vented to it. [40 CFR 63.983(a)(2) referenced by 40 CFR 63.2450(e) via 63.982(c), incorporated by reference in Rule 62-204.800(11)(b), F.A.C.; Rules 62-210.200PTE and 62-4.070(3), F.A.C.]

M.3. Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

There are no unit specific emissions standards associated with this emissions unit.

TESTING REQUIREMENTS

There are no testing requirements associated with this emissions unit.

MONITORING REQUIREMENTS

M.4. Bypass monitoring: Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the owner or operator shall comply with one of the following for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere:

(i) Properly install, maintain, and operate a flow indicator that is capable of taking readings at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line. [40 CFR 63.983(a)(3)(i) and (b)(4)(i), referenced by 40 CFR 63.2450(e) via 63.982(c)]

(ii) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration and visually inspect the seal or closure mechanism at least monthly to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line. [40 CFR 63.983(a)(3)(ii) and (b)(4)(ii), referenced by 40 CFR 63.2450(e) via 63.982(c)]

M.5. Leak Monitoring: The piping from the DIMLA Purification Tower overhead vacuum system to the DIMLA Scrubber shall be inspected in accordance with Method 21 of 40 CFR part 60, appendix A,

initially, and then annually using sensory means as specified in 40 CFR 63.983(b) and (c). If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections, the leaks will be repaired and monitored as specified in 40 CFR 63.983(d). [40 CFR 63.982(c), referenced by 40 CFR 63.2450(e)]

M.6. Post Project Emissions Monitoring: The permittee shall monitor emissions of VOC, and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following startup of the DIMLA Process. [Rules 62-4.070(3) and 62-212.300(1)(e)1., F.A.C.]

M.7. Process Monitoring: The permittee shall install a flow meter capable of providing a continuous record (block average values recorded at least every 15 minutes) of the absorber influent water flow. [40 CFR 63.996(b), superseded by 40 CFR 63.2450(k)(5), and 40 CFR 63.998(b), referenced by 40 CFR 63.2450(e) via 63.982(c), incorporated by reference in Rule 62-204.800(11)(c), F.A.C]

RECORDS AND REPORTS

M.8. Post Project Monitoring: The permittee shall report to the Department within 60 days after the end of each year the information required under Administrative Requirement #9, Actual Emissions Reporting. [Rule 62-212.300(1)(e)2., F.A.C.]

M.9. Bypass Monitoring Records: The permittee shall maintain the records specified in 40 CFR 63.998(d)(1)(ii)A. or B., as appropriate to document that the DIMLA scrubber is not bypassed. [40 CFR 63.983(a)(3), referenced by 40 CFR 63.2450(e) via 63.982(c)]

M.10. Leak Repair Records: The permittee shall maintain leak detection and repair records for the piping connecting the DIMLA Purification Tower overhead vacuum system discharge to the DIMLA Scrubber as specified in 40 CFR 63.998(d)(1)(iii)(A)-(F). These records shall be maintained for five years. [40CFR 63.983(a)(3), referenced by 40 CFR 63.2450(e) via 63.982(c)]

M.11. Periodic/Semiannual Report: Information required by 40 CFR 63.999(c)(2) pertaining to the monitoring of closed vent systems shall be included in the Periodic Report. [40 CFR 63.982(c) referenced by 40 CFR 63.2450(e) and 40 CFR 63.2520(e)(5), incorporated by reference in Rule 62-204.800(11)(b)]