Florida Department of Environmental Protection

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

Rick Scott
Governor

Herschel T. Vinyard Jr.
Secretary

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

Ascend Performance Materials Operations LLC
3000 Old Chemstrand Road
Cantonment, Florida 32533

Authorized Representative:
Timothy N. Montgomery
Chemical & Utilities Plant Manager

Air Permit No. 0330040-038-AC
Permit Expires: Date

Pensacola Plant
Title V Air Construction Permit
HMD Expansion

This is the final air construction permit, which modifies permit 0330040-036-AC to authorize Ascend Performance Materials Operations LLC (Ascend) to increase hexamethylene diamine production 20% above the currently permitted rate. The proposed work will be conducted at the Ascend Pensacola Plant, which is an organic chemical and nylon plastics manufacturing facility (Standard Industrial Classification Nos. 2821, 2824 and 2869). The facility is located in Escambia County at 3000 Old Chemstrand Road south of Cantonment, Florida. The UTM coordinates are Zone 16, 476 km East and 3385 km North. As noted in the Final Determination provided with this final permit, (no changes / only minor changes and clarifications) 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.

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Executed in Pensacola, Florida

_____
J. Charles Harp
Program Administrator
Waste Management/Air Resources
Northwest District

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 _____ to the persons listed below.

Timothy N. Montgomery, Ascend Performance Materials Operations LLC, tnmont@ascendmaterials.com
Roy W. Nobles, Ascend Performance Materials Operations LLC, rwnobl@ascendmaterials.com
Kennard F. Kosky, P.E., Golder Associates, kkosky@golder.com
Ana Oquendo, EPA Region 4, oquendo.ana@epa.gov
Natasha Hazziez, U.S. EPA Region 4, hazziez.natasha@epa.gov

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.

_____ _____
Clerk Date

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FACILITY AND PROJECT DESCRIPTION

This air construction permit follows Title V renewal permit 0330040-037-AV, effective May 30, 2012, and modifies air construction permit 0330040-036-AC, which was issued June 9, 2011 to increase adipic acid production to 1080 MAR.

Existing Facility

Ascend owns and operates a nylon and intermediate chemical manufacturing facility located in Cantonment, Florida, approximately 20 kilometers north of Pensacola on the Escambia River. The facility manufactures various intermediate chemicals and products, including adipic acid, nylon fibers, nylon resins, hexamethylene diamine and maleic anhydride. This facility consists of several raw materials barge, train and truck offloading and storage operations; chemical process plants which make chemical feedstocks, intermediates and nylon resins; a yarn plant which makes finished yarn products; and boilers and a cogeneration unit which provide process steam and plant electricity. Ascend also operates a maleic anhydride facility, not part of the nylon process, which is owned by Huntsman Petrochemical Corporation.

The existing facility consists of the following emissions units:

EU No.	Brief Description
Regulated Emissions Units	
003	Boiler No. 8
004	Boiler No. 7
014	Boiler No. 4
015	Boiler No. 5
016	Boiler No. 6
099	Boiler No. 9
049	Hydrogen Generating Plant #1
060	Adipic Acid 485 BEPEX Dryer
061	Adipic Acid Dryer 405-A
062	Adipic Acid Dryer 405-B
063	Adipic Acid Dryer 465-A
064	Adipic Acid Dryer 465-B
079	Adipic Acid 485 NIRO Dryer
005	Vaporizer No.1
007	Vaporizer No.2
008	Vaporizer No.3
009	Vaporizer No.4
010	Vaporizer No.5
011	Vaporizer No.6
013	Vaporizer No.7

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075	Vaporizer No.8
020	Cyclohexane Oxidation Process
002	Adipic Acid Process
090	Adipic Acid Process- Fugitive Emissions
032	Cogeneration Plant
040	Hexamethylene Diamine Synthesis and Refining
041	B and C Hexamethylene Diamine Stripper Distillation Column
076	Maleic Anhydride Plant
081	Continuous Nylon Polymerization Lines
082	Batch Nylon Polymerization
042	Nitric Acid Plant
088	Area 480 KA Expansion
089	Area 480 KA Expansion- Fugitive Emissions
097	NSPS Storage Tanks
077	Dimethyl Ester Production Unit

Proposed Project

The production of hexamethylene diamine (HMD) involves the hydrogenation of Adiponitrile (ADN) in the Low Pressure Diamine (LPD) process. Adiponitrile is an organic compound with the formula $(CH_2)_4(CN)_2$. The Pensacola Plant receives ADN from the Ascend Decatur, AL plant and produces HMD onsite. The Crude HMD produced by the LPD process is then refined in emissions units EU040 and EU041.

This project modifies existing air construction permit No. 0330040-036-AC to authorize Ascend to increase production of hexamethylene diamine approximately 20% above the previously authorized production rate. A new 200 foot purge column will be installed to replace the existing A, B and C Stripper columns. The C-Stripper column will be changed to C-Foreshots service. The existing Foreshots #1, Purge and Intermediates columns, idled by this project, will have their service changed to recover and refine a by-product for sale rather than disposal. The project will increase dimethyl ester (DME) production through operational changes, including a reduction in batch processing time. Increased DME production will result in increased throughput at the Methanol Storage Tank.

The Permittee is authorized to perform the authorized changes in a phased approach. The Permittee is not required to shut down all HMD production while construction is in progress. Permit conditions of existing equipment will remain in effect until that equipment is idled or has its service changed.

Because the project will result in fewer components in VOC service, there will be no increase in fugitive emissions, and facility-wide emissions will not increase above the projected actual emissions from permit 0330050-036-AC.

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This project will modify or affect the following emissions units and/or activities.

Facility ID No. 0330040	
ID No.	**Emission Unit Description**
040	Hexamethylene Diamine (HMD) Refining
041	Hexamethylene Diamine (HMD) C-Foreshots and Purge Distillation Column
077	Dimethyl Ester (DME) Production Unit
097	NSPS Storage Tanks (Methanol)
	Low Pressure Diamine (LPD) Process (insignificant)
	Hexamethylene diamine (HMD) Process Tank Farm (insignificant)
	314 & 442 Building DME/HNO_3/BHMT/AGS/HMD Loading/Unloading (insignificant)

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

Regulated Air Pollutant	Baseline Actual Emissions	Baseline Actual Emissions plus Demand Growth	Projected Actual Emissions	Net Emissions Increase	Significant Emissions Rate	Subject to PSD
CO	424	501	548	47	100	NO
NO_X	1927	2,300	2337	37	40	NO
PM/PM_{10}	374	502	514	12	25/15	NO
PM2.5	265	353	361	8	10	NO
SO_2	3564	4,604	4,606	2	40	NO
VOC	233	328	341	13	40	NO

Note: Baseline actual emissions (BAE) reported for VOC has been corrected to include VOC emissions from the NSPS Storage Tanks (EU-097). VOC emissions from these storage tanks were inadvertently omitted from the actual emissions data reported in Application 0330040-036-AC. Also, the BAE values for NO_x and SO_2 were corrected. These corrected values represent average emissions in tons per year over *one* 24 month period. The BAE values for NO_x and SO_2 were reported in Application 0330040-036-AC as 1763 and 3413, respectively, and unintentionally represented average emissions in tons per year over an average of *two* 24 month periods.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. (See Appendices U-1 and U-2). This project affects the following insignificant emission units or activities:

1. Low Pressure Diamine Process (insignificant). The following changes will be made at the LPD process:
   - Install closed loop tempered water system.
   - Increase cooling surface area and increase tempered water circulation rate.
   - Install new Recycle Hydrogen Cooler.
   - Increase ADN feed rates at LPD.
   - Increase catalyst injection rates (Install new catalyst injection pumps).
   - Upgrade off-gas scrubber operation.
   - Modify Decanter for increased rates.
   - Install additional hydroclones/doxies.
   - Make miscellaneous pipe, valve and pump improvements.

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- Utility upgrades.
- Make instrumentation and control system improvements.

2. HMD Process Tank Farm (insignificant). The following changes will be made at the HMD tank farm:
   - Make miscellaneous piping and tank service changes.
   - Make instrumentation and control system improvements.

3. 314 & 442 Building DME/HNO_3/BHMT/AGS/HMD Loading/Unloading (insignificant). The following changes will be made at the loading/unloading facility:
   - Make improvements to loading/unloading facilities.
   - Make instrumentation and control system improvements.

Based on the construction permit application received June 21, 2013, this facility is a major source of hazardous air pollutants (HAP). The facility is considered a major stationary source with respect to PSD because it is a chemical process plant that has the potential to emit 100 tons per year or more of any regulated air pollutant.

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.

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SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northwest District Waste Management/Air Resources Program, Florida Department of Environmental Protection (Department). The District's mailing address is 160 West 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. Abbreviations, Acronyms, Citations and Identification Numbers

   b. Appendix B. General Conditions

   c. Appendix C. Common Conditions

   d. Appendix D. Common Testing Requirements

   e. Appendix I-1. List of Insignificant Emissions Units and/or Activities

   f. Appendix U-1. List of Unregulated Emissions Units and/or Activities

   g. Appendix SS-1. Stack Sampling Facilities

   h. Appendix PEI. Post Project Emissions Increase Report

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. Asbestos: This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

6. 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.]

7. Modifications: Permittee shall notify the Permitting and Compliance Authorities upon commencement of construction. Notification may be submitted by electronic mail to nwdair@dep.state.fl.us and copied to the permitting authority at epost_nwdwasteair@dep.state.fl.us. 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.]

8. 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,

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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.]

9. 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. You can obtain a permit application form or apply for permit renewal electronically at the following web address: http://www.dep.state.fl.us/air/emission/permitting.htm.

Project Milestones

(1) New Therminol vaporizer

(2) New Hydrogen generating plant

(3) Conversion of both nylon fiber lines to pellets

(4) Completion of the projects required to achieve 1080 MAR adipic

(5) Completion of projects required to achieve regulated HMD production rate

[Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]

10. 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 (12), 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 ten 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 ten-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

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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.

d. For this project, the Department requires the annual reporting of actual NO_X, CO, PM/PM10, PM2.5, VOC and SO_2 emissions for the following units:

EU ID No.	Emission Unit Description
040	Hexamethylene Diamine (HMD) Refining
041	Hexamethylene Diamine (HMD) C-Foreshots and Purge Distillation Column
077	Dimethyl Ester (DME) Production Unit
097	NSPS Storage Tanks (Methanol)
	Low Pressure Diamine (LPD) Process (insignificant)
	Hexamethylene diamine (HMD) Process Tank Farm (insignificant)
	314 & 442 Building DME/HNO_3/BHMT/AGS/HMD Loading/Unloading (insignificant)

[Application 0330040-038-AC; Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

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A. HMD Refining, HMD C-Foreshots and Purge Distillation (EU040 & EU041)

This section of the permit addresses the following emissions units.

ID No.	Emissions Unit Description
EU040	Hexamethylene Diamine (HMD) Refining
EU041	Hexamethylene Diamine (HMD) C-Foreshots and Purge Distillation Column

Adiponitrile is hydrogenated in the LPD process to yield crude HMD. The crude HMD is then refined by vacuum distillation. A vacuum is achieved by staged steam jets. The concentration of HMD in the non-condensable emissions is reduced in each stage. The water soluble HMD is discharged in the steam condensate to the wastewater system.

Emission unit EU041 is subject to applicable requirements of 40 CFR 60, Subpart A - General Provisions and Subpart NNN - Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry; and both EU040 & EU041 are subject to 40 CFR 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, adopted and incorporated by reference into this permit.

The permittee has selected the alternative means of compliance allowed by 40 CFR 60.660(d), which is compliance, with 40 CR 65, Subpart D, Consolidated Federal Air Rule for Process Vents. Under Subpart D, these columns are classified as Group 2B, subject only to recordkeeping and reporting requirements, and will only be required to maintain their Group 2B status in accordance with the performance requirements specified by 40 CR 65, Subpart D. No additional control will be required.

Ascend is also requesting removal of the maximum head pressure limit of 100 mm Hg (surrogate parameter) for the A-Stripper, B-Stripper and C-Stripper columns. This permit condition will be removed when that equipment is removed from service or has its service changed. Pursuant to 40 CFR 65, Subpart D, the C-Foreshots (converted C-Stripper) and the new Purge column will only be required to maintain their Group 2B status in accordance with the performance requirements specified by 40 CR 65, Subpart D, and no additional control will be required.

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

A.1. Previous Permits. This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

A.2. New Equipment. Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements, such as, but not limited to; emissions standards, recordkeeping, compliance testing and fuels limitations previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

A.3. The Permittee is authorized to perform the authorized changes in a phased approach. The Permittee is not required to shut down all HMD production while construction is in progress. Permit conditions of existing equipment will remain in effect until that equipment is idled or has its service changed. [Rules 62-4.070(3) and 62-210.300(1), F.A.C. and Application 0330040-038-AC]

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A. HMD Refining, HMD C-Foreshots and Purge Distillation (EU040 & EU041)

EQUIPMENT

A.4. Hexamethylene Diamine Refining (EU040). The permittee is authorized to make the following changes at this emission unit:

1. The Foreshots #2, A-Stripper and B-Stripper columns will be removed from service for this emissions unit.
2. Change Foreshots #1 column, purge column, and intermediates column to recover and refine a by-product
3. Perform miscellaneous piping and pump improvements
4. Perform Instrumentation and control system improvements

[Application 0330040-038-AC]

A.5. HMD C-Foreshots and Purge Distillation Column (EU041). The permittee is authorized to make the following changes at this emission unit::

1. Change C-Stripper to C-Foreshots service, including new or changed supporting equipment and packing
2. Install additional VOC Scrubber, including mass internals
3. Install new 200 foot Purge Column and miscellaneous equipment
4. Perform miscellaneous piping, valve and pumping additions and/or changes
5. Utility changes to support new and revised service
6. Perform Instrumentation and control system improvements

[Application 0330040-038-AC]

PERFORMANCE RESTRICTIONS

A.6. Permitted Capacity. The process/operation rate for the HMD Refining, EU040, and C-Foreshots and Purge Column, EU041, shall not exceed the maximum operating rate given in the Company Confidential Appendix in million pounds HMD per year based on a *12-month rolling total* basis.
[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(12), F.A.C., Requested by Permittee to avoid PSD Review, and Application 0330040-038-AC]

A.7. Stripper Columns Head Pressure. The maximum head pressure limit of 100 mm Hg (surrogate parameter) and the requirement to continuously monitor stripper columns head pressure for the A-Stripper, B-Stripper and C-Stripper columns are hereby removed when that equipment is idled or has its service changed. [Application 0330040-038-AC]

A.8. Methods of Operation. The modified C-Foreshots and the new Purge column shall maintain their Group 2B status as specified by 40 CFR 65, Subpart D.
[40 CFR 65, Subpart D, and Application 0330040-038-AC]

RECORDS AND REPORTS

A.9. PSD Avoidance - 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., this emissions unit is subject to the "Actual Emissions Reporting" provisions in Section 2, Administrative Requirements. [Rule 62-212.300(1)(e), F.A.C., Requested by Permittee to avoid PSD Review, and Application 0330040-038-AC]

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B. Dimethyl Ester Production Unit (EU077)

This section of the permit addresses the following emissions unit.

ID No.	Emissions Unit Description
077	Dimethyl Ester (DME) Production Unit

An adipic acid manufacturing by-product stream, consisting of adipic, glutaric and succinic acids (AGS), is reacted with methanol to produce dimethyl ester. Off-gases are pyrolyzed in the hydrogen plant reformer furnace. Air emissions occur only during unplanned shutdowns of the hydrogen plant reformer furnace or malfunctions of the DME production unit that prevent transfer of off gasses to the reformer furnace.

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, 40 CFR 63, Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process, 40 CFR 63, Subpart UU - National Emission Standards for Equipment Leaks - Control Level 2 Standards, 40 CFR 63, Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards, 40 CFR 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, all adopted and incorporated by reference in Rule 62-204.800, F.A.C.

This project does not make any physical changes at this emissions unit. The project will increase DME production through operational changes, including reduction of batch processing time. Increased DME production will result in increased throughput at the Methanol Storage Tank (EU097).

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

B.1. Previous Permits. This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

B.2. New Equipment. Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements, such as, but not limited to; emissions standards, recordkeeping, compliance testing and fuels limitations previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

EQUIPMENT

B.3. Dimethyl Ester Production. The permittee is authorized to increase DME production through operational changes including reduction of batch processing time. [Application 0330040-038-AC]

{Permitting note: Emissions increases in the dimethyl ester area result primarily from increased throughput at the methanol storage tank (486TA19) regulated by 40 CFR 60 subpart Kb and the MON.}

PERFORMANCE RESTRICTIONS

B.4. Capacity. The operating rate for the DME production unit shall not exceed the maximum operating rate given in the Company Confidential Appendix in million pounds per year of 100% AGS (dry basis). [Rules 62-210.200(PTE) and 62-4.160(2), F.A.C., and Application 0330040-038-AC]

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RECORDS AND REPORTS

B.5. PSD Avoidance - 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., this emissions unit is subject to the "Actual Emissions Reporting" provisions in Section 2, Administrative Requirements. [Rule 62-212.300(1)(e), F.A.C., Requested by Permittee to avoid PSD Review, and Application 0330040-038-AC]

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C. NSPS Storage Tanks (EU097)

This section of the permit addresses the following emissions unit.

ID No.	Emissions Unit Description
097	NSPS Storage Tanks

40 CFR 60, Subpart Kb Volatile Organic Liquid (VOL) Tanks Inventory - 5/23/2000				
[for tanks constructed, modified or reconstructed after July 23, 1984, with volumes over 10,600 gallons, which are subject to 40 CFR 60, Subpart Kb, VOL Tank regulations]				
Tank Number	**Facility ID Number**	**Tank Volume (Kgal)**	**Tank Contents**	**NSPS Applicability**
486TA19	77	35.8	Methanol	Subpart Kb requirements met by use of floating roof design.
480TA602	480	50	Off-Spec. Oil	Subject to Kb with emission controlled by the Area 480 primary or backup flare

Two storage tanks, Tank 486TA19 for methanol, and Tank 480TA602 for off-spec oil, with volumes of 35,800 gallons and 50,000 gallons, respectively. These tanks are regulated by 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).

This project does not make any physical changes at this emissions unit. However, methanol throughput will increase as a result of increased DME production (EU077).

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

C.1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

C.2. New Equipment. Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements, such as, but not limited to; emissions standards, recordkeeping, compliance testing and fuels limitations previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

EQUIPMENT

C.3. This permit authorizes increased throughput at the Methanol Storage Tank (486TA19) to meet the permitted demand for methanol at the DME production unit (EU077). [Application 0330040-038-AC]

RECORDS AND REPORTS

C.4. PSD Avoidance - 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., this emissions unit is subject to the "Actual Emissions Reporting" provisions in Section 2, Administrative Requirements. [Rule 62-212.300(1)(e), F.A.C., Requested by Permittee to avoid PSD Review, and permit Application 0330040-038-AC]

DRAFT / PROPOSED