FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

DRAFT PERMIT

PERMITTEE
AOC, LLC
4620 North Galloway Road
Lakeland, FL 33810

Authorized Representative:
Mr. Michael Diehl, Plant Manager

Air Permit No. 1050099-016-AC
Permit Expires: 12/31/2015
Lakeland Facility
Minor Air Construction Permit
Construction of Raw Material Storage Tanks

This is the final air construction permit for the installation of a new raw material storage tank and for the replacement of three styrene raw material storage tanks. The proposed work will be conducted at the AOC, LLC Lakeland Facility (Standard Industrial Classification No. 2821). The facility is located in Polk County at 4620 North Galloway Road in Lakeland, Florida. The UTM coordinates are Zone 17, 400.99 km East, and 3108.85 km North. As noted in the Final Determination provided with this final permit, no changes or 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 and Facility-wide Specific Conditions

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Due to 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 permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to 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 Hillsborough County, Florida
DRAFT

_____ _____
Kelley M. Boatwright Effective Date
District Air Program Administrator

Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) 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 the date indicated below to the persons listed below.

Mr. Mike Diehl, Plant Manager, AOC, LLC (mdiehl@aoc-resins.com)

Ms. Catherine Sprigg, AOC, LLC (csprigg@aoc-resins.com)

Mr. Barry Westmark, P.E., Environmental Consulting & Technology, Inc. (bwestmark@ectinc.com)

Mr. Erin DiBacco, FDEP Southwest District (erin.dibacco@dep.state.fl.us)

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.

DRAFT

_____ _____

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The facility produces styrene and non-styrene based polyester resins and vinyl ester resins. The existing facility consists of the following emissions units (EUs).

Facility ID No. 1050099

EU ID No.	Emissions Unit Description
001	28 non-NSPS Storage Tanks *{Note: This emissions unit will have a total of 30 non-NSPS Storage Tanks after the 2 new tanks authorized in Construction Permit No. 1050099-014-AC have been installed.}*
002	4 Reactors, 4 Thinning Tanks, 1 Mixing Tank, 2 non-NSPS Finish Product Tanks, Product Filter Processing Area, and Thermal Oxidizer *{Note: This emissions unit will have a total of 5 reactors after the new reactor authorized in Construction Permit No. 1050099-014-AC has been installed.}*
005	7 Mixing Tanks
006	Phthalic Anhydride Storage Tank & Maleic Anhydride Storage Tank
008	8 Miscellaneous Fugitive VOC/HAP Sources
009	3 Miscellaneous Fugitive Particulate Matter Sources

Project Description and Affected Units

This project is for the installation of a new raw material storage tank and for the replacement of three styrene raw material storage tanks in EU ID No. 001. The new raw material storage tank (Raw Material Storage Tank No. 16) will be used to store di-cyclohexanedimethanol and will have a storage capacity of 20,000 gallons. Three existing styrene raw material storage tanks (Raw Material Storage Tank Nos. 10, 11, and 12) will be replaced with larger tanks resulting in an increase in styrene storage capacity from 64,000 to 83,475 gallons. The existing and new capacities of styrene raw material storage tanks are summarized in the table below.

Raw Material Storage Tank No.	Existing Capacity	New Capacity
10	24,000	27,825
11	24,000	27,825
12	16,000	27,825

The addition of the new di-cyclohexanedimethanol raw material storage tank in EU No. 001 will affect the fugitive VOC emissions sources in EU No. 008. The addition of the new tank will affect fugitive emissions generated from the raw material transfers into receiving tanks and from the facility piping system.

Additionally, the language in EU Nos. 008 & 009 associated with the specific condition titled “Permitted Capacity and Emissions Unit Restrictions” in the previous permits (Construction Permit Nos. 1050099-012-AC and 1050099-014-AC) will be revised.

This project will modify the following emissions units (EUs).

EU ID No.	Emissions Unit Description
001	31 non-NSPS Storage Tanks *{Note: 31 non-NSPS Storage Tanks includes the new storage tank authorized in this construction permit and the 2 new storage tanks authorized in Construction Permit No. 1050099-014-AC.}*
008	8 Miscellaneous Fugitive VOC/HAP Sources
009	3 Miscellaneous Fugitive Particulate Matter Sources

NOTE: *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc. The number of "non-NSPS Storage Tanks" included in the above descriptions of EU ID No. 001 reflects numbers that include tanks covered in Construction Permit No. 1050099-014-AC.*

Exempt Emission Sources/Activities

- Two Caterpillar Type 3512 engine-generator units with integral fuel tanks, each fired with diesel fuel oil and manufactured in December of 2000 are exempt pursuant to Rule 62-210.300(a)35., F.A.C. The generators are considered "existing stationary emergency" engines subject to 40 CFR 63, Subpart ZZZZ and the owner or operator shall comply with all limitations as requirements of Subpart ZZZZ that apply to the engines.
- Two fire pumps each fired with diesel fuel and manufactured in 1989 are exempt pursuant to Rules 62-210.300(3)(a)15. and 62-210.300(a)35., F.A.C. The fire pumps are considered "existing" engines subject to 40 CFR 63, Subpart ZZZZ and the owner or operator shall comply with all limitations as requirements of Subpart ZZZZ that apply to the engines.
- A standby boiler fired with only natural gas at a maximum heat input rate of 5.3 MMBTU/hr is exempt pursuant to Rule 62-210.300(3)(a)33., F.A.C.
- Three fixed roof storage tanks used to store No. 2 fuel oil for the diesel powered fire pumps, yard equipment, and utility vehicles are exempt pursuant to Rule 62-210.300(3)(b)1., F.A.C. Two of the tanks have a capacity of 550 gallons and the third tank has a 500 gallon capacity. The annual throughput of the 500 gallon tank is expected to be approximately 3,500 gals./yr. and each of the 550 gallon tanks is expected to be approximately 7,000 gal./yr.
- Heater/Burner No. 1, which provides heat for Reactor No. 1, is fired with only natural gas at a maximum heat input rate of 3.15 MMBTU/hour and is exempt pursuant to Rule 62-210.300(3)(a)34., F.A.C. Emissions from this heater are exhausted through a common stack shared with Heater/Burner No. 2.
- Heater/Burner No. 2, which provides heat for Reactor No. 2, is fired with only natural gas at a maximum heat input rate of 4.0 MMBTU/hour and is exempt pursuant to Rule 62-210.300(3)(a)34., F.A.C. Emissions from this heater are exhausted through a common stack shared with Heater/Burner No. 1.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAPs).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.

- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for the pollutants volatile organic compounds (VOC) and hazardous air pollutants (HAPS). The restrictions on hours of operation and restrictions on the type or amount of material processed in this permit will ensure that the facility's emissions will be below the thresholds for a Title V source.

PERMIT HISTORY/AFFECTED PERMITS

This permit modifies Construction Permit No. 1050099-012-AC. Reference Operation Permit No. 1050099-013-AO. and Construction Permit 1050099-014-AC.

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Air Permitting Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Air Permitting Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority - The compliance authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance Assurance Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Compliance Assurance Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the above address.

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.

e. Appendix E. Tank Contents and Capacities

f. Appendix F. Container Materials and Capacities

g. Appendix G. Annual Operating Report Emissions Calculations Information, Grove Scientific & Engineering Company letter dated April 18, 2000

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 - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report - On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

8. Application for Non-Title V Air Operation Permit - This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules. A Non-Title V air operation permit is required for continued operation of the permitted emissions units. The permittee shall apply for a Non-Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air operation permit, the applicant shall submit the following:

a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;

b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.;

d. copies of the most recent month of records/logs specified in Specific Condition No(s). A.3. and B.3.

The application shall be submitted to the Permitting Authority.
[Rules 62-4.030, 62-4.050 and 62-4.220, F.A.C.]

FACILITY-WIDE SPECIFIC CONDITIONS

PERFORMANCE RESTRICTIONS

9. Permitted Capacity - The maximum production rate of this facility is 250,000,000 lbs of styrene and non-styrene based resin per any consecutive 12-month period of which up to 40,000,000 lbs may be non-styrene based resin.

{Permitting Note: The above production rate limitations limit the facility's potential emissions. For emission calculation purposes, it is assumed that non-styrene based resin is 100% methylmethacrylate (MMA). So long as any other non-styrene resin monomer does not have physical parameters which make the material less dense than MMA, require more material to be processed or more volatile than MMA, i.e. a higher vapor pressure at the average liquid surface temperature (more volatile), the facility should be able to be substitute for MMA without requiring additional permitting action.}

[Rule 62-210.200(PTE), F.A.C.; Construction Permit No. 1050099-012-AC]

10. Hours of Operation - The hours of operation for the facility are not limited (8,760 hours per year). [Construction Permit No. 1050099-012-AC]

11. Work Practice Requirement - In order to control fugitive emissions of volatile organic compounds (VOC) and organic solvents (OSs), all equipment, pipes, hoses, lids, fittings, etc. shall be operated and maintained in such a manner as to minimize leaks, fugitive emissions, and spills of solvents.
[Rule 62-296.320(1), F.A.C.; Construction Permit No. 1050099-012-AC]

RECORDKEEPING REQUIREMENTS

12. Monthly Log - A monthly log shall be kept to document compliance with the limitations of Specific Condition No. 9. The monthly log shall contain at a minimum the following:

a. The total amount of styrene based resin produced for the month, in MMlbs.

b. The cumulative total amount of styrene based resin produced for the most recent consecutive 12-month period, in MMlbs.

c. The total amount of non-styrene based resin produced for the month, in MMlbs.

d. The cumulative total amount of non-styrene based resin produced for the most recent consecutive 12-month period, in MMlbs.

e. The combined cumulative total amount of styrene and non-styrene based resin produced for the most recent consecutive 12-month period, in MMlbs.

The log shall be kept at the facility for at least 3 years and made available to the Department upon request. The monthly logs shall be completed by the end of the following month. Supporting documentation, such as logs, records, MSD sheets, purchase orders, etc., shall be kept which includes sufficient information to determine the styrene and non-styrene based resin production rates.

{Permitting Note: The facility's potential emissions were calculated with the worst case operating scenarios. The facility's potential to emit is further limited by establishing facility resin production rate limitations, tank throughput limitations as shown in Section 4. Appendix E and Appendix F., and having a minimum operating time limitation for the thermal oxidizer associated with Emission Unit No. 002.}

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1050099-012-AC]

A. EU No. 001 - 31 non-NSPS Storage Tanks; EU No. 005 - 7 Mix Tanks; and EU No. 006 – Phthalic Anhydride Storage Tank & Maleic Anhydride Storage Tank

This section of the permit addresses the following emissions units (EUs).

EU ID No.	Emissions Unit Description
001	31 non-NSPS Storage Tanks - After the completion of this construction permit (and completion of Construction Permit No. 1050099-014-AC) the total number of storage tanks in this emissions unit will increase from 28 to 31. Tank ID Nos., Names, Contents and capacities are listed in Section 4. Appendix E. A brief summary of the 31 tanks is listed below: • 20 Finished Product Storage Tanks (FPSTs), which are interconnected by the facility's piping systems through a series of transfer bullpens, • 3 styrene storage tanks, • 4 single tanks for storing the various glycols, • 1 tank for storing refined dicyclopentadiene (DCPD) which are also interconnected by piping systems. • 1 glacial methacrylic acid (GMAA) raw material storage tank *(Construction Permit No. 1050099-014-AC)* • 1 epoxy resin raw material storage tank *(Construction Permit No. 1050099-014-AC)* • 1 di-cyclohexanedimethanol raw material storage tank *(Construction Permit No. 1050099-016-AC)* All of the FPSTs are interconnected via a series of piping bullpens in the facility's piping system. The three styrene storage tanks are interconnected directly together via the filling and emptying piping system as well as by a tank leveling piping system. Any finished product may be stored in any FPST. Note, FPST Tank Nos. 21 and 22 are part of Emission Unit No. 002, since their emissions are controlled by a thermal oxidizer at least 3,744 hours in any consecutive 12-month period. The three (3) inter-connected styrene storage tanks have a 100% nitrogen blanket. All the storage tanks receive product by railcar or truck and are not subject to 40 CFR 60, Subpart Kb – Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), since the tanks were either constructed on or before the applicability date of July 23, 1984 or meet the exemption criteria of 40 CFR 60.110b(b). *Notes:* *(1) This permit (Construction Permit No. 1050099-016-AC) will add Raw Material Storage Tank No. 16 for the storage of the raw material di-cyclohexanedimethanol and will replace three existing styrene raw material storage tanks (Raw Material Storage Tank Nos. 10, 11, and 12) with larger tanks resulting in an increase in styrene storage capacity from 64,000 to 83,475 gallons. The dicyclohexanedimethanol will be used (as a substitute for glycols presently used) to create alkyd used in polyester resin production.* *(2) Construction Permit No. 1050099-014-AC permit will add Raw Material Storage Tank Nos. 14 and 15 for the storage of Glacial Methacrylic Acid (GMAA) and Epoxy Resin, respectively. The two (2) new tanks transfer their contents to the new Vinyl Ester Reactor No. 1 (VER1), which is part of Emission Unit No. 002.*

A. EU No. 001 - 31 non-NSPS Storage Tanks; EU No. 005 - 7 Mix Tanks; and EU No. 006 – Phthalic Anhydride Storage Tank & Maleic Anhydride Storage Tank

005	7 Mixing Tanks - This emissions unit consists of 7 Mix Tank Nos. 1, 2, 3, 4, 6, 7, and 8 as listed in Section 4. Appendix E. Note, Mix Tank No. 5 is part of Emission Unit No. 002. The mix tanks are used to mix the base polyester resin produced in the thin tanks and stored in the FPSTs with other formulation-specific additives which may include styrene, glycols, methanol, dibasic ester, methylmethacrylate (MMA), vinyl toluene, and numerous other micro-additive ingredients, which act as promoters and inhibitors to make formulated polyester resin prior to shipping. The tanks are used interchangeably to produce formulated polyester resin from the base resin manufactured in the thin tanks permitted under Emission Unit No. 002 and which may be processed through the FPSTs permitted under Emission Unit Nos. 001 and 002, although typically 18% of the base resin produced in the thin tanks is transferred directly to a mix tank for final processing. Mix Tank Nos. 1, 2, 3, and 4 vent to the inside of the building and produce fugitive emissions. Mixing Tank Nos. 6, 7, and 8 vent through the roof. Fumed silica powder and/or powdered talc are added to the tanks, causing fugitive PM emissions, which are further described in Emission Unit No. 009. An inert gas blanket is maintained on all the tanks. There is no difference in the use or function between these mix tanks and the tanks are used interchangeably. Mix Tank No. 8 may also be used with the non-styrene based resin production process.
006	Phthalic Anhydride Storage Tank & Maleic Anhydride Storage Tank - The Phthalic Anhydride Storage Tank stores molten phthalic anhydride. The tank is insulated and heated by steam to maintain a temperature of approximately 270 ^{0}F. The tank receives phthalic anhydride by truck or railcar and an inert gas blanket is maintained on the tank. Phthalic anhydride is defined as a HAP and is a solid at ambient temperature. Emissions from the storage tank are vented through a ColdBox, which is maintained at ambient temperature, before being exhausted to the atmosphere through a vent stack with a cone-style vent cap. Thus, the emissions are particulate matter. Maleic Anhydride Storage Tank, which holds molten maleic anhydride. The tank is insulated and heated by steam to maintain a temperature of approximately 160 ^{0}F. The tank receives maleic anhydride by truck or railcar. Maleic anhydride is defined as a hazardous air pollutant (HAP) and is a solid at ambient temperature, and thus the emissions are particulate matter.

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity - The emission units shall comply with the associated maximum allowable throughput rate, in gallons or pounds, for each group of tanks or containers shown in the table below.

EU ID No.	**AOC, L.L.C. Tank ID No.**	**Storage Tank or Container**	**Contents**	**Maximum Tank(s) Throughput Rate** (per any consecutive 12-month period)
001	RMST 4, 5, 6, 8	Glycol Storage Tank Nos. 4, 5, 6, 8	Glycols	58,004,460 gallons
001	RMST 10,11, 12	Styrene Tank 1 Styrene Tank 2 Styrene Tank 3	Styrene	11,061,799 gallons

A. EU No. 001 - 31 non-NSPS Storage Tanks; EU No. 005 - 7 Mix Tanks; and EU No. 006 – Phthalic Anhydride Storage Tank & Maleic Anhydride Storage Tank

001	RMST 7	Dicyclopentadiene	Dicyclopentadiene (DCPD)	3,063,004 gallons
001	RMST 16	di-cyclohexanedimethanol	di-cyclohexanedimethanol (di-CHDM)	14,637,000 gallons
001	Container	MMA Container	Methyl methacrylate (MMA)	40,000,000 lbs
001	FPST 1-20	Finished Product Storage Tank Nos. 1-20	Resin	208,111,977 lbs(1), (2)
002	FPST 21-22	Finished Product Storage Tank Nos. 21-22	Resin	
005	Mix Tanks 1-8	Mix Tank Nos. 1-8	M.A.N.	265,003,027 lbs(3)
006	RMST 2	Maleic Anhydride	Maleic Anhydride	5,310,000 gallons
006	RMST 3	Phthalic Anhydride	Phthalic Anhydride	4,273,000 gallons

(1) Includes material throughput due to tank rinsing with styrene.
(2) FPST 21 and 22 are permitted under EU No. 002 because they vent to the thermal oxidizer; however, the tank throughputs are accounted for in EU No. 001.
(3) Mix tank No. 5 is permitted under EU No. 002 because it vents to the thermal oxidizers however, the tank throughputs are accounted for in EU No. 005.

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.]

A.2. Work Practice Requirement: Regarding only Emission Unit No. 006, the Phthalic Anhydride Storage Tank shall be vented to a ColdBox to control emissions of unconfined particulate matter.
[Rules 62-4.070(3) and 62-296.320(4)(c), F.A.C.]

RECORDKEEPING AND REPORTING REQUIREMENTS

A.3. Monthly Log - A monthly log shall be kept to document compliance with the limitations of Specific Condition Nos. A.1. and A.2. The monthly log shall contain at a minimum the following:

a. Facility ID No. 1050099 and the Emission Unit No.

b. Month and Year.

c. The calculated total throughput in gallons or pounds (as appropriate) for each group of tanks listed in Specific Condition A.1. for the month.

d. The calculated most recent consecutive 12-month period throughput rate, in gallons or pounds (as appropriate) for each group of tanks listed in Specific Condition A.1..

e. The calculated throughput in pounds of MMA for Emission Unit No. 001

f. The calculated most recent consecutive 12-month period throughput rate of MMA, in pounds.

The log shall be kept at the facility for at least 3 years and made available to the Department upon request. The monthly logs shall be completed by the end of the following month. Supporting

documentation, such as logs, records, MSD sheets, purchase orders, etc., shall be kept which includes sufficient information to determine the liquid throughput rate.
[Rule 62-4.070(3), F.A.C.]

B. EU No. 008 - 8 Miscellaneous Fugitive VOC/HAP Sources

This section of the permit addresses the following emissions unit (EU).

EU ID No.	Emissions Unit Description
008	8 Miscellaneous Fugitive VOC/HAP Sources – This emissions unit includes eight (8) miscellaneous fugitive volatile organic compound (VOC)/HAP emission sources. The sources are as follows: 1. Fugitive emissions generated from general maintenance and cleaning solutions. These emissions do not contain styrene, but may be cleaning materials containing VOC and possibly HAPs. These emissions are not expected to change with production rate. 2. Fugitive emissions generated from the receipt of raw materials such as styrene, MMA, DCPD, GMAA, epoxy resin, and various glycols during tanker/railcar unloading and the associated piping and equipment through which the material is transferred to the receiving storage tanks. 3. Fugitive emissions from all facility process equipment piping (valves, flanges, fittings, seals, open lines) that are part of the facility's systems. 4. Fugitive emissions from the Micro-Additives Mixing Area. Additives, which are added to the resin in small amounts, vary from batch to batch and control manufacturing and structural properties of the resin. Many additives are non-volatile compounds thinned with mineral spirits by the manufacturer/supplier, while others are very volatile. The additives, or solvents used in them, may evaporate as they are mixed with styrene before addition to the resin. Some of the additives are solids and are weighed manually. 5. Fugitive emissions from the finished product loading operations, which include: a. Drum and Tote Loading Areas - 2 stations. b. Tanker-truck Loading Areas - 1 station with 4 bays. c. Railcar Loading Areas - 2 pumping stations and ancillary piping. d. Twelve (12) On-site Product Storage Tanker Trucks – Tank wagons used for the storage of either base or formulated resin. The product loading lines in these areas are periodically purged with inert gas, which causes emissions that include styrene. 6. Filter bags are used during product loading to filter resin. The filter bags are replaceable units and are saturated with resin and emit some styrene during the handling and removal from the filter holder. The filter bags are placed in a sealed container usually within 5 minutes. The sealed container, when filled with used filters, is then moved to the product filter processing area (see Emission Unit ID No. 002). 7. Fugitive emissions from the Tanker Truck Clean-out Activities. Resin in the product transfer lines of the tanker trucks is removed by rinsing or flushing with styrene. The styrene/resin mixture is drained into a pan, from which styrene evaporates prior to containerization. The styrene/resin mixture is typically 10 gallons. The mixture is recycled into the product resin. 8. Fugitive emissions generated from the temporary storage of the styrene/resin mixture generated by cleaning mix tanks and tanker trucks on-site. The mixture is stored temporarily and then recycled into the product resin.

	Notes: *(1) This permit (Construction Permit No. 1050099-016-AC) authorizes the fugitive emissions associated with RMST No. 16 from raw material receiving and piping activities. These activities are described in Items Nos. 2 and 3 above* *(2) Construction Permit No. 1050099-014-AC authorized the fugitive emissions associated with RMST Nos. 14 and 15 from raw material receiving and piping activities. These activities are described in Items Nos. 2 and 3 above.*

PERFORMANCE RESTRICTIONS

B.1. Permitted Capacity - This emission unit shall comply with the following:

a. The throughput rate of Powdered Micro-Additives shall not exceed 1,250,000 pounds per any consecutive 12-month period.

b. The throughput rate of Methanol shall not exceed 12,500,000 pounds per any consecutive 12-month period.

[Rule 62-210.200 (definition of Potential to Emit), F.A.C.]

B.2. Permitted Capacity and Emission Restrictions - The potential emissions from the activities associated with this emission unit are also controlled by the facility's resin throughput (production) limitations specific in EU No. 002; tanks and containers throughput limitations specified in EU Nos. 001, 005, and 006; and by other operational requirements.
[Rule 62-210.200 (definition of Potential to Emit), F.A.C.]

B.3. Recordkeeping Requirements - The permittee shall keep the following monthly records/logs:

a. Record the amount of Powered Micro-Additives used in pounds.

b. Record the most recent consecutive 12-month period usage of Powered Micro-Additives in pounds.

c. Record the amount of Methanol used in pounds.

d. Record the most recent consecutive 12-month period usage of Methanol in pounds.

Monthly logs/records shall be completed by the end of the following month. These records shall be kept at the facility for at least 3 years and shall be available for inspection by the Department.

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

This section of the permit addresses the following emission unit.

ID No.	Emission Unit Description
009	3 Miscellaneous Fugitive Particulate Matter Sources - This emission unit consists of the following 3 miscellaneous fugitive particulate matter sources: 1. Fugitive emissions from the Powder Additive Handling operations in which fumed silica powder is added to and blended with resin in the mix tanks. The powder particle size is sub-micron, so all emissions are PM_{10}. 2. Fugitive emissions from the addition of powdered talc to blend with resin in the mixing tanks. The powder particle size is sub-micron, so all emissions are considered PM_{10}. 3. Fugitive emissions from the addition of powder additives in the reactors. Powdered raw materials are introduced into the reactors at various points during the alkyd batch process. Sealed super sacks or other containers are manually transported to the reactor head deck where the material is manually loaded into the top of the reactor by gravity flow. Vinyl Ester Reactor No. 1 (VER1) may also receive Bisphenol A (flake, 2,000 lb super sacks). Fugitive PM and PM_{10} emissions are generated from these processes. Permitting Note: The Annual Operating Report (AOR) emissions shall be calculated in accordance with the letter dated April 18, 2000, from the permittee's consultant, Grove Scientific & Engineering designated as Appendix G. *Note: The above description includes changes incorporated in Construction Permit No. 1050099-014-AC which authorizes the Vinyl Ester Reactor No. 1 (VER1) to also receive Bisphenol A. See Item No. 3 Above.*

Performance & Emission Restrictions

C.1. Permitted Capacity: Powdered additives in the reactors shall not exceed the throughput rate of 23,280,000 pounds per any consecutive 12-month period.
[Rule 62-210.200 (definition of Potential to Emit), F.A.C.]

C.2. Permitted Capacity and Emission Restrictions: The potential emissions from the activities associated with this emissions unit are also controlled by the facility's resin throughput (production) limitations specific in EU No. 002, tanks throughput limitations specified in EU No. 005, and by other operational requirements.
[Rule 62-210.200(PTE), F.A.C.]

C.3. Work Practice Requirement: The addition of all powder additives used in the manufacturing process shall be conducted indoors.
[Rule 62-296.320(4)(c), F.A.C.]

RECORDS

C.4. Recordkeeping Requirements: The permittee shall keep the following monthly records/logs:

a. Record the amount of powered additives used in the reactors in pounds.

b. Record the most recent consecutive 12-month period usage of powered additives used in the reactors in pounds.

Monthly logs/records shall be completed by the end of the following month. These records shall be kept at the facility for at least 3 years and shall be available for inspection by the Department.
[Rule 62-4.070(3), F.A.C.]