Reichhold, Inc.
Pensacola Plant
Facility ID No.: 0330043
Escambia County

Federally Enforceable State Operating Permit
Permit No.: 0330043-008-AF

Permitting and Compliance Authority:
Department of Environmental Protection
Northwest District Office
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740
Telephone: 850.595.8300
Fax: 850.595.8096

[Electronic file name: 0330043-008-AF.doc]

Federally Enforceable State Operating Permit
Permit No.: 0330043-008-AF

Table of Contents

Section	Page Number
Placard Page	1
I. Facility Information	2
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents.	
II. Facility-wide Conditions	4
III. Emissions Unit(s) and Conditions	
A. EU 016 and 017 Boilers No. 11 and No. 12	6
B. EU 047 Chemical Reactor Train Process	8
C. EU 049 Heater/Furnace	10
D. EU 051 Facility-Wide Fugitive	11
E. EU 052 Raw Materials and Finished Product Storage Tanks	13
F. EU 053 Bonding Paste Process	15
G. EU 054 Boiler No. 10	17
H. Common Conditions	19
Appendices	
Appendix G-1, General Conditions	
Appendix SS-1, Stack Sampling Facilities	
40 CFR Part 60 Subpart A	
40 CFR Part 60 Subpart Dc	

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Northwest District
160 W Government St., Suite 308
Pensacola, Florida 32502-5740

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Permittee:
Reichhold, Inc.

Permit No.: 0330043-008-AF
Facility ID No.: 0330043
SIC No(s).: 28, 2812
Project: Federally Enforceable State Operating Permit

This renewal permit is for the operation of Reichhold Inc., facility located at 425 South Pace Boulevard in Pensacola, Escambia County; UTM Coordinates: Zone 16, 476.4 km East and 3363.9 km North; Latitude: 30° 24' 23" North and Longitude: 87° 14' 38" West.

STATEMENT OF BASIS: This Federally Enforceable State Operating Permit (FESOP) is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Effective Date: January 11, 2013
Renewal Application Due Date: November 12, 2017
Expiration Date: January 11, 2018

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

/s/

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

JCH/aj/c

Section I. Facility Information.

This renewal permit follows permit 0330043-006-AF, effective March 18, 2008, and incorporates construction permit 0330043-007-AC which authorized the installation of a 300 HP natural gas fired boiler (Boiler No. 10), manufactured by GBT Green Boiler Technologies, Model No. 300HP-105E-8102, with a maximum usage of 12.3 million Btu per hour.

Subsection A. Facility Description.

Glycols, oils, solvents, anhydrides and amines are processed in batch chemical reactors to produce synthetic resins used by the coating and ink industries.

Raw materials are primarily received at the site in bulk via rail cars, tank trucks and trailer and stored in aboveground storage tanks (ASTs), drums, bags and totes. The raw materials are pumped via aboveground lines to buildings in which batch resins are prepared in ten reactors. The raw materials are heated and agitated in the reactors t sustain the reaction. The reactors are heated using Dowtherm, or steam as a heat-transfer fluid. Once the desired stage of reaction is reached, the product is drummed directly from the reactor or transferred to thinning tanks for the addition of solvents. The finished products are transferred to ASTs for temporary storage or directly to tankers, totes or drums for shipment off-site. Some products are prepared and stored on-site as intermediates for use in a subsequent manufacturing process.

There is also an on-site activated sludge wastewater treatment plant which treats wastewater generated from the Reichhold process, groundwater remediation systems and the neighboring chemical facility (Arizona Chemical – Facility ID# 0330126).

EU I.D.\POLLUTANT	VOC	PM	SO2	NOX	CO	Xylene	HAP
016 - Boiler No. 11	0.81	1.12	0.09	14.67	12.33		
017 - Boiler No. 12	0.81	1.12	0.09	14.67	12.33		
047 - Reactors	25.49					2.50	8.96
049 – Heater/Furnace	0.51	0.70	0.06	9.20	7.73		
051 - Fugitive Emissions	19.81					5.09	10.42
052 - Raw Material and Finished Product Storage Tanks	11.11					2.27	4.96
053 - Bonding Paste Process	0.39						0.39
054 – Boiler No. 10	0.30	0.41	0.03	5.39	4.53		
TOTAL	59.23	3.35	0.27	43.93	36.92	9.86	24.73

The facility is classified as an area source and may be subject to 40 CFR Part 63 Subpart VVVVVV (6V), Chemical Manufacturing Areas Sources (CMAS). The Department has not adopted this federal standard as of December 21, 2012.

Based on the permit application received November 9, 2012, this facility is not a major source of hazardous air pollutants (HAP).

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

E.U. ID No.	Brief Description
016	Boiler No. 11
017	Boiler No. 12
047	Chemical Reactor Train Process
049	Hot Oil Heater & R-7 Furnace
051	Fugitive Emissions
052	Raw Material & Finished Product Storage Tanks
053	Bonding Paste Process
054	Boiler No. 10

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

Subsection C. Relevant Documents.

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

This document is on file with the permitting authority:
Permit Application received November 9, 2012

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX G-1, GENERAL CONDITIONS, is a part of this permit.

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants that cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

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

4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standards contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests that identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us. [Rule 62-297.310(7)(b), F.A.C.]

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. An Annual Operating Report for Air Pollutant Emitting Facility, DEP Form 62-210.900(5), shall be submitted for each year by April 1 of the following year. A copy of the form and instructions may be obtained from the Department's Northwest District office or electronically at http://www.dep.state.fl.us/Air/rules/forms/aor.htm. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. [Rule 62-210.370(3)(c), F.A.C.]

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

a. Maintain tightly fitting covers, lids, etc., on all VOC containers;
b. Where possible and practical, cover any open trough, basin, bath, etc. when not in use;
c. Properly maintain fittings, valves and conveyance lines;

d. Prevent excessive turbulence across exposed VOC sources;
e. VOC spills shall be immediately cleaned up and properly disposed of or recycled.
[Rule 62-296.320(1), F.A.C.; Permit No. AC17-216840]

8. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a) Paving and maintenance of roads, parking areas and yards.
b) Application of water or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
c) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
d) Landscaping or planting of vegetation.
e) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.; Permit No. 0330043-007-AC]

9. Sixty days prior to the expiration date of this operation permit, the Permittee shall submit a permit renewal application using the current version of the renewal form along with the processing fee established in Rule 62-4.050(4), F.A.C., to the Northwest District office of the Department. [Rule 62-4.090, F.A.C.]

10. Permittee shall install and maintain permanent stack sampling facilities, including sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet requirements of Rule 62-297.310(6), F.A.C., and any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, subparts D and E. [Rule 62-297.310(6), F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required by this permit to the Department's Northwest District office.

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

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

12. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is 850.595.0578, day or night, and for emergencies involving a significant threat to human health or the environment is 800.320.0519. For routine business, telephone 850.595.8300 during normal working hours. [Rules 62-210.700 and 62-4.130, F.A.C.]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
016	Boiler No. 11
017	Boiler No. 12

Each of these boilers is fired on natural gas and has a maximum rated capacity of 33.5 million Btu per hour. Only one boiler is allowed to operate at a time. In case of heavy demand, both boilers are allowed to operate concurrently but are limited to no more than 400 hours per year of concurrent operation. The emissions from the boilers are regulated in accordance with Rule 62.296.406, F.A.C., fossil fuel steam generator less than 250 million Btu per hour heat input. Particulate matter, SO_2 and NO_X emissions are controlled by use of natural gas and proper combustion. Boilers 11 and 12 began operation in November 1986 and January 1989 respectively. NSPS requirements do not apply to these boilers because of their limited size and beginning date of operation.

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input for each boiler is 33.5 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permits AC17-119127 and AC17-14904]

A.2. Methods of Operation - (i.e., Fuels)
The maximum annual fuel limitation for each boiler is 293.5 million standard cubic feet of natural gas per twelve-month rolling period. [Rules 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

A.3. Methods of Operation
These boilers shall be fired on natural gas only. Under normal operating conditions, only one boiler may be operated at a time. In case of heavy demand both boilers may be operated concurrently, but in no case shall both boilers be operated at the same time for more than 400 hours per year [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

A.4. Hours of Operation
This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards
{Permitting Note: Unless otherwise specified, the averaging time is based on the specified averaging time of the applicable test method.}

A.5. Visible emissions shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

A.6. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

A.7. This emissions unit is subject to Common Condition **Emissions Tests**, contained in **Subsection [H]. Common Conditions.**

Monitoring of Operations

A.8. This emissions unit is subject to Common Condition **Determination of Process Variables**, contained in **Subsection [H]. Common Conditions.**

A.9. This emissions unit is subject to Common Condition **Excess Emissions** contained in **Subsection [H]. Common Conditions.**

Recordkeeping and Reporting Requirements

A.10. Records of the firing rate and hours of operation for each boiler shall be kept for inspection by the Department and maintained for a minimum of five years. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Subsection B. This section addresses the following emissions unit

EU I.D.	Brief Description
047	Chemical Reactor Train Process

This emissions unit consists of 10 chemical reactors and 10 thin tanks all operating in the batch mode. Each of the reactors is equipped with a process water-cooled shell and tube condenser. Vapor from the reactor enters the condenser from the bottom; condensed liquid leaves from the bottom and uncondensed vapor from the top. All condenser vapor outlets go to one of four water spray scrubbers (R-1, R-2, Main and Venturi scrubbers). The R-1, R-2 and Main scrubbers vent to the atmosphere and the Venturi scrubber vents to the Main scrubber. The water scrubbers on the chemical reactors are utilized for odor control purposes only.

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

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The production rate of this facility shall not exceed 95,000,000 pounds of resin per year. [Rules 62-4.160(2), and 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

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

Emission Limitations and Standards

B.3. Volatile Organic Compounds. Total VOC emissions from the chemical reactor train process shall not exceed 25.49 tons per year based on a 12-month rolling total. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

B.4. Hazardous Air Pollutants (HAP). HAP emissions from the chemical reactor train process shall not exceed 8.96 tons per year based on a 12-month rolling total. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

B.5. Xylene. Xylene emissions from the chemical reactor train process shall not exceed 2.5 tons per year based on a 12-month rolling total. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Test Methods and Procedures

B.6. Volatile Organic Compounds. The test method for volatile organic compounds shall be EPA Method 25A, incorporated and adopted by reference in Chapter 62-297, F.A.C. Compliance testing shall be performed under worst case scenario (products with highest VOC content). Testing shall include the emissions from the Chemical Reactor Train Process. [Rule 62-297.401, F.A.C.; Permit No. AC17-216840]

B.7. This emissions unit is subject to Common Condition **Emissions Tests**, contained in **Subsection [H]. Common Conditions.**

Monitoring of Operations

B.8. VOC - Surrogate Parameters. Compliance with the VOC emission limits shall be demonstrated by emission calculations based on records and emission factors. Emissions calculations shall be conducted monthly to demonstrate compliance with the VOC limit. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

B.9. Operating Instructions. Written operating instructions for each batch formula shall be maintained. The operating instructions shall include control parameters such as minimum scrubber water flow rate and scrubber exit temperature for each formula, and a contingency plan in case of an exceedance of a maximum or minimum control limit. Operator logs or continuous chart records of the critical water flow and vapor temperatures shall be maintained and made available for inspection by the Department. Records of the type of product (formula) made and estimated emissions shall be maintained on a monthly basis. [Rule 62-4.070, F.A.C.; Permit No. AC17-216840]

B.10. This emissions unit is subject to Common Condition **Determination of Process Variables**, contained in **Subsection [H]. Common Conditions.**

B.11. This emissions unit is subject to Common Condition **Excess Emissions** contained in **Subsection [H]. Common Conditions.**

Recordkeeping and Reporting Requirements

B.12. The following records shall be kept for inspection by the Department and maintained for a minimum of five years:

a. Records of production rates and types of products made
b. Volatile Organic Compounds. Calculations of monthly and rolling 12-month totals of VOC emissions.
c. Hazardous Air Pollutants. Calculations of monthly and rolling 12-month totals of HAP emissions.
d. Xylene. Calculations of monthly and rolling 12-month totals of Xylene emissions.
e. Nitrogen Control Valves, Conservation Vents and Pumps. Records of proper maintenance and operation of all thin tank nitrogen control valves and conservation vents along with reactor pressout pumps

[Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Subsection C. This section addresses the following emissions unit

EU - I.D.	Brief Description
049	Hot Oil Heater and R-7 Furnace

The Hot Oil Furnace is used for heating a system containing circulating heat transfer fluids to five reactors when they need to be heated. The Hot Oil Furnace uses natural gas and has a maximum heat input of 15 million Btu per hour. A natural gas fired heater, located below Reactor 7 (R-7), heats this reactor when needed. The R-7 furnace has a maximum heat input of 6 million Btu per hour.

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum allowable heat input is 15 million Btu per hour for the Hot Oil Heater (Main Dowtherm Heater), and 6 million Btu per hour for the Reactor No.7 (R-7) Furnace. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

C.2. Methods of Operation - (i.e., Fuels). The maximum annual fuel limitation for the Hot Oil Heater and R-7 Furnace, combined, is 131.4 million standard cubic feet of natural gas per 12-month rolling period of natural gas. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

C.3. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

Emission Limitations and Standards

C.4. Visible Emissions. Visible emissions shall not exceed 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Test Methods and Procedures

C.5. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

C.6. This emissions unit is subject to Common Condition **Emissions Tests**, contained in **Subsection [H]. Common Conditions.**

Monitoring of Operations

C.7. This emissions unit is subject to Common Condition **Determination of Process Variables**, contained in **Subsection [H]. Common Conditions.**

C.8. This emissions unit is subject to Common Condition **Excess Emissions**, contained in **Subsection [H]. Common Conditions.**

Recordkeeping and Reporting Requirements

C.9. The following records shall be kept for inspection by the Department and maintained for a minimum of five years:

a. Hot Oil Heater. The permittee shall maintain records of natural gas combusted each month and on a 12-month rolling total.
b. R-7 Furnace. The permittee shall maintain records of natural gas combusted each month and on a 12-month rolling total.

[Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

{Permitting Note: natural gas combusted may be estimated by using engineering calculations if meters are not available.}

Subsection D. This section addresses the following emissions unit

EU - I.D.	Brief Description
051	Fugitive Emissions

There are miscellaneous fugitive air emissions from the manufacturing operations. These include:

Finished Product Loading
During loading of finished goods into drums, trucks or railcars, fugitive emissions are generated. VOC and HAP potential emissions from loading are 11.0 tons per year and 5.31 tons per year, respectively.

Pipeline Components
Fugitive emissions from pipeline components, which include valves, pumps, connectors, flanges, agitators and other miscellaneous devices on process equipment, occur from leaks. VOC and HAP potential emissions from pipelines are 5.79 tons per year and 2.96 tons per year, respectively.

Microwave Dryer and Filtering
A microwave dryer is used to extract solvent from resin filters. Resin filters remove impurities in resins. Fugitive emissions are generated. Recovered solvent is used for process equipment cleaning (reactors and thin tanks). VOC and HAP potential emissions from drying and filtering are 1.56 tons per year and 0.69 tons per year, respectively.

Wastewater Treatment Plant (WWTP)
An on-site wastewater treatment plant treats water from an active groundwater/soil remediation system, the facility's wastewater, and Arizona Chemical's wastewater. The wastewater treatment process includes two separators, an equalization basin, neutralization basin, two aeration basins, clarifier and clean water diversion structure that recycle clean water back to the process and/or to the sewer.

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

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

Emission Limitations and Standards

D.2. Volatile Organic Compounds. Total VOC emissions from fugitive emissions shall not exceed 19.81 tons per year based on a 12-month rolling total. [Rule 62-296.320(1), F.A.C.; Permit No. AC17-216840; updated EPA emission factors/guidance.]

D.3. Hazardous Air Pollutants (HAP). HAP emissions from fugitive emissions shall not exceed 10.42 tons per year based on a 12-month rolling total. [Rules 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

D.4. Xylene. Xylene emissions from fugitive emissions shall not exceed 5.09 tons per year based on a 12-month rolling total. [Rules 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

D.5. Finished Product Storage Tank Heating Temperatures. During loading to tank trucks, drums and railcars, all finished products storage tanks shall limit tank heating to a maximum average temperature of less than or equal to 70ºC. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

D.6. Resin Filter Pressing – Thin Tank Room. Resin filter pressings in the Thin Tank Room are limited to 2880 hours per year. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

D.7. Microwave Dryer Solvent Recovered. Solvent recovered from the microwave dryer shall not exceed 15,000 pounds per year. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

D.8. Waste Water Treatment Plant Load from Remediation System. The remediation system loading rates to the Wastewater Treatment Plant shall not exceed the following:

Ethyl Benzene	701 pounds per year
Phenol	32,892 pounds per year
Toluene	567 pounds per year
Xylene	1,394 pounds per year

[Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

Recordkeeping and Reporting Requirements

D.9. The following records shall be kept and made available for inspection by the Department for a minimum of five years:

a. Volatile Organic Compounds. Calculations of monthly and rolling 12-month total VOC emissions. [Rule 62-296.320(1), F.A.C.; Permit No. AC17-216840; updated EPA emission factors/guidance.]
b. Hazardous Air Pollutants. Calculations of monthly and rolling 12-month total combined HAP emissions. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]
c. Xylene. Calculations of monthly and rolling 12-month total Xylene emissions. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]
d. Finished Product Storage Tank Heating Temperatures. Records of finished product storage tank heating temperatures. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]
e. Resin Filter Pressing – Thin Tank Room. Records of resin filter pressings times. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]
f. Microwave Dryer Solvent Recovered. Records of pounds of solvent recovered from microwave drying. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]
g. Waste Water Treatment Plant Load from Remediation System. Records of ethyl benzene, phenol, toluene and xylene loading to the remediation system. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

Subsection E. This section addresses the following emissions unit

EU - I.D.	Brief Description
052	Raw Material and Finished Products Storage Tanks

Storage tanks are used throughout the facility for storing bulk raw materials, and products made at the site. Bulk raw materials are delivered to the facility via railcars and tank trucks and off-loaded into aboveground storage tanks. The bulk raw materials are pumped from the storage tanks to the reactors and/or other process vessels. Bulk finished products are pumped to storage tanks until packaged into drums, trucks or railcars as needed. Some products are pumped to the production building for blending to produce a finished product.

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

Essential Potential to Emit (PTE) Parameters

E.1. Tank Liquid Throughput (Annual). The maximum liquid throughput for all tanks shall not exceed 22,581 thousand gallons per year of input raw material and finished product. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

E.2. Tank Storage Capacity. The total storage capacity for all raw materials and finished product storage tanks combined shall not exceed 1053.8 thousand gallons. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

E.3. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

Emission Limitations and Standards

E.4. Volatile Organic Compounds. Total VOC emissions from the Raw Material and Finished Products Storage Tanks shall not exceed 11.11 tons per year based on a 12-month rolling total. [Rule 62-296.320(1)(a), F.A.C.; Permit No. AC17-216840; updated EPA emission factors/guidance.]

E.5. Hazardous Air Pollutants (HAP). HAP emissions from the Raw Material and Finished Products Storage Tanks shall not exceed 4.96 tons per year based on a 12-month rolling total. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

E.6. Xylene. Xylene emissions from the Raw Material and Finished Products Storage Tanks shall not exceed 2.27 tons per year based on a 12-month rolling total. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Monitoring of Operations

E.7. Storage Tank Temperatures. Storage tanks shall be maintained to the following maximum average temperatures:

All Finished Goods Storage Tanks	less than or equal to 70ºC
Tank Nos. 208 and 209	less than or equal to 60ºC

Tank No. 119 less than or equal to 50ºC
[Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

E.8. This emissions unit is subject to Common Condition **Excess Emissions**, contained in **Subsection [H]. Common Conditions.**

Recordkeeping and Reporting Requirements

E.9. An inventory of the individual capacities and total storage capacity for all raw materials and finished product storage tanks combined shall be kept and made available for inspection by the Department. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

E.10. The following records shall be kept and made available for inspection by the Department for a minimum of five years:

a. Volatile Organic Compounds Calculations of monthly and rolling 12-month total VOC emissions. [Rule 62-296.320(1)(a), F.A.C.; Permit No. AC17-216840; updated EPA emission factors/guidance.]
b. Hazardous Air Pollutants. Calculations of monthly and rolling 12-month total combined HAP emissions. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]
c. Xylene. Calculations of monthly and rolling 12-month total Xylene emissions. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Subsection F. This section addresses the following emissions unit.

EU I.D.	Brief Description
053	Bonding Paste Process

The manufacturing process that produces bonding paste resin is located in the main production (reactor) building. The storage tanks for the base vinyl ester resin are located in Tank Farm 100. The mixing vessel is located in the production building in the area called the "cooling shed."

To produce Bonding Paste Resin, a vinyl ester resin is pumped to the mix vessel from two aboveground storage tanks. Fillers are then added to the vessel. Styrene and other small quantity raw materials may also be added if required by the formulation. The material is mixed using a high shear mixer, a scraper mixer and a paddle mixer. A sample is pulled from the vessel and analyzed. Pending the results of the analysis, additional raw materials may be added to bring the material into specification. Once in specification, the bottom valve is opened sending the material to the pump, through a filter and to the semi-automatic drumming station.

This process will operate at ambient temperature without the need for any external heat, but with three high speed agitators, some heat will be generated due to friction created from the agitation. To maintain the temperature of this material when mixing, cooling water will be circulated through a chiller and the vessel. It is expected that this will easily be able to keep the temperature of the material in the bonding paste mixer below 45 degrees Celsius. Storage Tank Nos. 1 and 2 are used to supply raw materials for the bonding paste process.

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

Essential Potential to Emit (PTE) Parameters
{Permitting Note: These tanks are not subject to any emissions unit-specific regulatory requirement but are limited for FESOP purposes.}

F.1. Permitted Capacity. The production rate of the Bonding Paste Process shall not exceed 7,000,000 pounds per year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

F.2. Hours of Operation. The Bonding Paste Process is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

F.3. Methods of Operation. Cleaning of the Bonding Paste Process machinery shall not exceed 104 times per year. [Rules 62-4.160(2), 62-210.200(PTE), F.A.C.; Permit No. 0330043-006-AF]

F.4. Storage Tanks Throughput. The maximum 12-month rolling average throughputs for Tank Nos. 1 and 2, used for the bonding paste process raw materials, are 355,635 gallons per month and 251,639 gallons per month, respectively. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-006-AF]

Emission Limitations and Standards

F.5. Hazardous Air Pollutants (HAP). HAP emissions from the bonding paste process shall not exceed 0.39 tons per year based on a 12-month rolling total. HAP emission calculations shall be conducted monthly to demonstrate compliance with the individual HAP limit. [Rule 62-4.070, F.A.C.; Permit No. 0330043-006-AF]

Recordkeeping and Reporting Requirements

F.6. The following records shall be kept for inspection by the Department and maintained for a minimum of five years:

a. Records of cleaning for the bond paste process equipment.
b. Calculations of monthly quantities and rolling 12-month total of the HAP emissions from the bonding paste process.
c. Records of production rates and types of products made.
d. Records of the monthly throughput and 12-month rolling averages for Tank Nos. 1 and 2.

[Rules 62-4.070, 62-4.160(2), and 62-210.200(PTE) F.A.C.; Permit No. 0330043-006-AF]

Subsection G. This section addresses the following emissions unit

EU I.D.	Brief Description
054	Boiler No. 10

This is a 300 HP natural gas fired boiler (Boiler No. 10), manufactured by GBT Green Boiler Technologies, Model No. 300HP-105E-8102, with a maximum usage of 12.3 million Btu per hour. The boiler was installed on June 18, 2012

This boiler is subject to the requirements of 40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which applies to boilers constructed after June 9, 1989 with a heat input between 10 and 100 MMBtu/hr and produces steam or heats water or any other heat transfer medium. Subpart Dc does not require performance testing for boilers burning only natural gas but requires recordkeeping of natural gas.

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

G.1. Permitted Capacity. The maximum allowable heat input is 12.3 million Btu per hour. [Rule 62-4.160(2), F.A.C.; Permit No. 0330043-007-AC]

G.2. Methods of Operation. The boiler shall be fueled only by natural gas. [Rules 62-4.160(2), 62-296.406(2)&(3) and 62-210.200(PTE), F.A.C.; Permit No. 0330043-007-AC]
{Permit Note: Maximum annual fuel usage in the permit application is stated at 107.7 million standard cubic feet per year of natural gas, but was not in the construction permit.}

G.3. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards
{Permitting Note: Unless otherwise specified, the averaging time is based on the specified averaging time of the applicable test method.}

G.4. Visible Emissions. Visible emissions shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.; Permit No. 0330043-007-AC]

Test Methods and Procedures

G.5. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

G.6. This emissions unit is subject to Common Condition **Emissions Tests**, contained in **Subsection [H]. Common Conditions.**

Recordkeeping and Reporting Requirements

G.6. Notification requirements: The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 40 CFR 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) N/A

[Rule 62-204.800(8)(b)4., F.A.C. and 40 CFR 60.48c(a)]

G.7. Records of Fuel Amounts: Except as provided below, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(a) As an alternative to recording and maintaining records of the amount of each fuel combusted during each operating day, the owner or operator of an affected facility that combusts only natural gas may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(b) As an alternative to recording and maintaining records of the amount of each fuel combusted during each operating day, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO_2standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

[Rule 62-204.800(8)(b)4., F.A.C., and 40 CFR 60.48c(g)]

G.8. Records Retention. Permittee shall submit reports to the Department, postmarked by the 30th day following each six-month period during which natural gas is used. [Rule 62-204.800(8)(b)4, F.A.C., and 40 CFR 60.48c(j)]

Subsection H. Common Conditions

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

Test Methods and Procedures

H.1. Emissions Tests

a. Emissions tests are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. **Tests shall be conducted once per permit cycle (once every five years), within 90 days prior to submission of the permit renewal application**. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing. Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us. [Rules 62-4.070, 62-297.310(7), and 62-297.401(9), F.A.C.]

b. The test reports shall comply with applicable portions of Rule 62-297.310, F.A.C., Test Reports. The Department can require special compliance tests in accordance with Rule 62-297.310(7), F.A.C. Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing. [Rules 62-297.310(7) and 62-297.620(1), F.A.C.]

c. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, sources may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. [Rules 62-297.310(2) and 62-4.070, F.A.C.]

H.2. Determination of Process Variables

The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

H.3. Excess Emissions

(1). Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

(2). Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

(3). Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed three hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.
A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
Visible emissions above 60 percent opacity shall be allowed for not more than four, six-minute periods, during the three-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors.
Particulate matter emissions shall not exceed an average of 0.3 lbs. per million Btu heat input during the three-hour period of excess emissions allowed by this subparagraph.

(4). Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

(5). Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

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

{Permitting Note: The requirements of this rule do not vary any requirement of a NSPS, NESHAP or Acid Rain program provision.}

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions", and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of:

a. Have access to and copy any records that must be kept under conditions of this permit;
b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of noncompliance; and
b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages that may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the Department approves the transfer.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:
- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.