Florida Department of Environmental Protection

Memorandum

TO: Charles Harp
THROUGH: Armando I. Sarasua, P.E.
FROM: Angelia Jackson
DATE: January 8, 2013
SUBJECT: Evaluation Summary for Reichhold, Inc., Pensacola Plant; 0330043-008-AF; Escambia County

We recommend issuing a renewal Federally Enforceable State Operating Permit (FESOP) to Reichhold, Inc., to operate their Pensacola Plant. This renewal permit follows permit 0330043-006-AF, effective March 18, 2008, and incorporates construction permit 0330043-007-AC, effective May 24, 2007 which authorized the installation of a 300 HP natural gas fired boiler, Boiler No. 10.

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

Pollution Control Equipment.
Boiler Nos. 10, 11 and 12 - Particulate matter, SO_2 and NO_X emissions are controlled by use of natural gas and proper combustion. EU I.D. 047 - Chemical Reactors - 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.

Environmental Impact.
*Total potential air emissions from the facility are as follows:

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

*Potential emissions have increased from the initial Title V Permit levels due to changes in EPA emission factors/guidance.
**Fugitive emissions include process leaks, filter press, microwave dryer, product loading, and storage tanks.

Applicable Rules & Regulations.
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. The emissions from the reactors are regulated in accordance with Rule 62.296.320(1), F.A.C., which requires control of VOC emissions as deemed necessary by the Department.

Compliance Monitoring.
VE testing and recordkeeping for all boilers. **EU 047** (Chemical Reactors) –Records of throughput, VOC, HAP and xylene emissions, each reactor batch, and nitrogen control valves, conservation vents and pumps. **EU 049** (Hot Oil Furnace and R-7 Burner) - VE testing and records of natural gas usage. **EU 051** (Fugitive Emissions) – VOC, HAP and xylene emissions, tank temperatures, resin filter pressings, microwave drying limit, and loading rate limits of ethyl benzene, phenol, toluene, and xylene to the WWTP. **EU 052** (Raw Material and Finished Product Storage Tanks) - VOC, HAP and xylene emissions, records of tank temperatures and throughput. **EU 053** (Bonding Paste Process) - records of throughput, equipment cleanings, dedicated storage tanks throughput, and HAP and xylene emissions.

Compliance History.
2008 – 2012 Compliance inspections noted the facility "In-Compliance" status.

Fee Summary.
This is an AF2B ($1,000 fee (x4) = $4,000) minor source with no stack test.
This is also an AF2A ($1,500 fee (x1) = $1,500) minor source with stack test and an AF2C ($750 fee (x3) = $2,250) minor source no sample. All = $7,750.

AJ/c