

Executed in Hillsborough County, Florida

Cindy Zhang-Torres November 30, 2011  
Cindy Zhang-Torres, P.E. Effective Date  
Air Permitting Manager  
Southwest District

### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including 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 11/30/2011 to the persons listed below.

Ms. Jacalyn McCarthy, EHS Director  
ArrMaz Custom Chemicals, Inc.  
jmccarthy@am-cc.com

Mr. Steve Basarab, EHS Manager  
ArrMaz Custom Chemicals, Inc.  
sbasarab@am-cc.com

Mr. Lawrence Maron, P.E., Principal Consultant  
S&ME, Inc.  
lmaron@smeinc.com

Mr. Jim Estler, President  
Clean Air Consulting, Inc.  
estlerj@aol.com

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.

Carol S. Moore 11/30/2011  
(Clerk) (Date)

## SECTION 1. GENERAL INFORMATION (FINAL)

### FACILITY AND PROJECT DESCRIPTION

#### ArrMaz Custom Chemicals, Inc.

This is a chemical manufacturing facility that stores, handles, and processes primarily tall oils, tall oil fractions, tall oil derivatives, animal or vegetable fatty acids, organic acids, amines, petroleum distillates or derivatives, and mixtures thereof.

The existing facility consists of the following emissions units.

Facility ID No. 1050097	
ID No.	Emission Unit Description
001	Sulfonation Unit
003	500 HP Steam Boiler (NSPS)
006	Reaction Kettles

#### Project Description and Affected Emissions Units

The following changes authorized by construction permit 1050097-024-AC are incorporated into this operation permit: increase in size of reaction kettle Nos. 4 and 5 (Emissions Unit 006); increase of the maximum permitted sulfur input rate to the sulfonation unit (Emissions Unit 001) to 350 lb/hr; elimination of the requirement to record scrubber pressure drop for reaction kettle Nos. 2, 4, and 5 (condenser outlet temperature will be recorded instead); and elimination of the annual visible emissions testing requirement for the sulfonation unit.

This project will modify the following emissions units.

Facility ID No. 1050097	
ID No.	Emission Unit Description
001	Sulfonation Unit
006	Reaction Kettles

**NOTE:** Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.

#### Exempt Emissions Units/Activities

- Liquid Phase Heaters (4) (Emissions Unit 002) and 300 HP Steam Boiler (Emissions Unit 005), exempt from permitting pursuant to Rule 62-210.300(3)(a)34., F.A.C.  
Emissions Unit 002 consists of four hot oil heaters serving the reaction kettles in a hot oil system loop. Three of the heaters are Heatec HCS-175, each rated at 2.0 mmBtu/hr, while one heater is Heatec HC-200, rated at 2.0 mmBtu/hr. Heaters are fired with natural gas as the primary fuel and No. 2 oil with a maximum sulfur content of 0.5% by weight as a standby.  
Emissions Unit 005 consists of a Clark 300 HP process steam boiler with a maximum design heat input rate of 12.6 mmBtu/hour, equivalent to 90 gallons/hour of new No. 2 fuel oil or 12,500 ft<sup>3</sup>/hour of natural gas usage. Natural gas is the primary fuel and new No. 2 fuel oil with a maximum sulfur content of 0.5% by weight is the backup fuel.  
In accordance with Rule 62-210.300(3)(a)34.g., F.A.C., the collective annual amount of fuel burned by the boiler and heaters listed above shall not exceed 375 million standard cubic feet of natural gas or 290,000 gallons of fuel oil (if burning only one type of fuel); if burning more than one type