Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

DRAFT PERMIT

Roberta.Molignaro@Hydro.com
Electronically sent – Received Receipt requested

PERMITTEE

Hydro Aluminum Precision Tubing NA, LLC
100 Gus Hipp Blvd.
Rockledge, FL 32955

Authorized Representative:
Keith Jones, Vice President Operations

Air Permit No. 0090078-005-AC
Permit Expires: November 30, 2010

Hydro Aluminum Rockledge
Minor Source Air Construction Permit
Additional (Second) Coating Line

This is the **draft** air construction permit, which authorizes for the construction of an additional (second) coating line. The coating line will apply a silicon brazing flux paint to aluminum extrusions using roll coaters. Emissions from the roll coating application room and the drying ovens are exhausted to the thermal oxidizer, the primary control equipment. The proposed work will be conducted at the Hydro Aluminum Rockledge (Standard Industrial Classification No. 3354). The facility is located in Brevard County at 100 Gus Hipp Blvd. in Rockledge, Florida. The UTM coordinates are Zone 17, 528.61 km East, and 3131.0 km North.

This **draft** permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 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 Orlando, Florida

_____
Caroline Shine
Program Administrator
Air Resource Management

_____
Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Draft Air Permit package was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on _____ to the persons listed below.

Keith Jones, Vice President Operations, **(Roberta.Molignaro@Hydro.com)**
Thomas Cozzie, Pres., T. Cozzie Consulting Inc., **(tcozzie@tcozzie.com)**
Keith Cole, P.E., Pres., KC Environmental & Engineering, **(KEITH.COLE@MINDSPRING.COM)**
Ana M. Oquendo, EPA, (oquendo.ana@epa.gov)

Clerk Stamp

FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

_____ _____
Clerk Date

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The facility is Hydro Aluminum Rockledge. It is a FESOP permitted facility. It has an existing surface coating line; and a mineral spirits mist spray and recycling system. The coating line may apply Nocolok Flux coating or zinc flux coating. The exhaust gas from the coating line is treated using a thermal oxidizer with a destruction efficiency of 98 percent or greater. Emissions from solvent cleaning activities are vented through a carbon filtration system. The existing facility consists of the following emissions units.

Facility ID No. 0090078	
ID No.	**Emission Unit Description**
006	**Mineral Spirits Mist Spray and Recycling System (Degreasing)**
007	**Surface Coating Line with thermal oxidizer (control device)**

Proposed Project

Hydro Aluminum Rockledge proposes to install a second coating line for its multi-port extrusions (MPE) process. The proposed coating line will apply a silicon brazing flux (Silflux) paint to aluminum extrusions using roll coaters. Exhaust gases from the roll coater room and the curing oven will be treated in a thermal oxidizer manufactured by Epcon Industrial Systems, LP, equipped with a 1.5 million Btu/hr. Maxon Ovenpak burner. This project will add the following emissions unit.

Facility ID No. 0090078	
ID No.	**Emission Unit Description**
008	**Surface Coating Line (additional) with thermal oxidizer (control device)**

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection, Central District Office. The Central District Office's mailing address is 3319 Maguire Blvd., Suite 232, Orlando, Florida 32803-3767. All documents related to applications for permits to operate an emissions unit shall be submitted to the Central District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Central District Office. The mailing address and phone number of the Central District Office is: 3319 Maguire Blvd., Suite 232, Orlando, Florida 32803-3767 (407-894-7555).

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. Permit Application

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: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS

A. Surface Coating Lines and Miscellaneous Activities

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
006	**Mineral Spirits Mist Spray and Recycling System (Degreasing)**
007	**Surface Coating Line with thermal oxidizer (control device)**
008	**Surface Coating Line (additional) with thermal oxidizer (control device)**

EQUIPMENT

1. Equipment Name: The permittee is authorized to install an additional coating line equipped with a thermal oxidizer. [Application No. 0090078-005-AC]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The permitted capacity for **Emission Unit 007** is 300 pounds per day of coating mix applied and the permit capacity for **Emission Unit 008** is 693 pounds per day of coating mixture applied. [Application No. 0090078-004-AF, Application No. 0090078-005-AC, and 62-210.200(PTE), F.A.C.]

3. Authorized Fuel: The permittee is authorized to fire the coating oven heaters and thermal oxidizers using natural gas only. [Application No. 0090078-004-AF, Application No. 0090078-005-AC, and Rule 62-210.200(PTE), F.A.C.]

4. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Restricted Operation: Each coating line shall operate only when the thermal oxidizer (control equipment) is operating. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS LIMITS AND STANDARDS

6. Emissions Limits: The maximum Hydro Aluminum Rockledge, Inc. facility-wide volatile organic compound (VOC) emission rate is limited to less than 50.0 tons per consecutive twelve months, total HAP emissions are limited to less than 25.0 tons per consecutive twelve months, and each HAP emission is limited to less than 10.0 tons per consecutive twelve months. [Rule 62-210.200, (PTE), F.A.C.]

7. Emissions Standards: Visible emissions are limited to less than 20 percent opacity. See Condition No. 8 of Appendix C. [Application No. 0090078-005-AC and Rule 62-296.320(4)(b)1, F.A.C.]

TESTING REQUIREMENTS

8. Initial Compliance Tests: At least 90 days prior to the expiration date of this permit, the destruction efficiency of each thermal oxidizer (there will be two thermal oxidizers at the facility after installation of the second coating line) shall be demonstrated by determining the inlet and outlet VOC emissions. For each thermal oxidizer, the testing shall consist of three (3) runs of one (1) hour duration each. The inlet VOC quantity and outlet VOC quantity shall be measured **simultaneously**. The following values shall be determined as specified:

   a) The inlet VOC quantity shall be determined using EPA Method 25A, EPA Method 1, and EPA Method 2.

b) The outlet VOC quantity shall be determined by using EPA Method 25A, EPA Method 1, and EPA Method 2.
c) The destruction efficiency (percentage) of the oxidizer shall be determined.
e) The oxidizer temperature shall be reported.
f) Visible emissions opacity shall be determined by DEP Method 9. This is the initial performance test. Visible emission testing shall be conducted during all 3 runs of 1 hour duration each as specified in this permit condition (visible emission testing conducted simultaneously with the VOC quantity testing). [Rule 62-4.070(3), F.A.C.]

9. Test Requirements: The destruction efficiency (percentage) of each oxidizer shall be at least 90 percent.

10. Test Requirements: At least 90 days prior to the expiration date of this permit, the capture efficiency of each coating line enclosure shall be determined. Measurement of capture efficiency shall be determined by the procedures contained in EPA technical guidance document "Guidelines for Determining Capture Efficiency", January 9, 1995; and procedures listed in Rule 62-297.450, F.A.C (EPA VOC Capture Efficiency Test Procedures). One or more of the following methods shall be used as deemed appropriate: EPA Method 204, EPA Method 204A, EPA Method 204B, EPA Method 204C, EPA Method 204D, EPA Method 204E, EPA Method 204F.
[Rule 62-4.070, F.A.C.]

11. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

12. Test Requirements: There is no test requirement for the mineral spray mists spray and recycling system unless the Department, after investigation, has good reason to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

13. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
EPA 1	Sample and Velocity Traverses for Stationary Sources
EPA 2	Determination of Stack Gas Velocity and Volumetric Flow Rate
DEP 9	Visual Determination of the Opacity of Emissions from Stationary Sources
EPA 25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
EPA 204	Permanent or Temporary Total Enclosure (TTE) for Determining Capture Efficiency
EPA 204A	VOCs in Liquid Input Stream
EPA 204B	VOCs in Captured Stream
EPA 204C	VOCs in Captured Stream (Dilution Technique)
EPA 204D	Fugitive VOCs from Temporary Total Enclosures
EPA 204E	Fugitive VOCs from Building Enclosure
EPA 204F	VOCs in Liquid Input Stream (Distillation)

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

14. The thermal oxidizers shall be operated at a minimum temperature of 1400 degrees Fahrenheit and a minimum residence time of 1.0 second in the combustion chamber. The permittee shall visually inspect the temperature monitoring/alarm system at least once a day for each operational day the coating lines are operational to ensure that the monitoring/alarm system and the coating line are operating properly. The permittee (Hydro Aluminum Precision Tubing NA, LLC) shall monitor and record the temperature in the thermal oxidizer (each thermal oxidizer at the facility) near the combustion chamber outlet on a continuous basis, in a manner and with instrumentation acceptable to the Florida Department of Environmental Protection. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

15. In order to demonstrate compliance with specific condition number 6, and pursuant to Rule 62-4.070(3), F.A.C., the permittee shall maintain a monthly log at the facility for a period of at least five years from the date the data is recorded. The log, at a minimum, shall contain the following:

    Monthly

    a) Designation of the month and year of operation for which the records are being tabulated;
    b) Consecutive 12-month total of total VOC, total HAPs, and each HAP emissions rates.
    c) One month total of total VOC, total HAPs, and each HAP emissions rates.
    [Rule 62-4.070(3), F.A.C.]

    Note: A consecutive 12-month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12-month totals using whatever number of months of data is available until such a time as a consecutive 12-month total can be maintained each month. The monthly logs shall be completed by the end of the following month.
    [Rule 62-4.070(3), F.A.C.]

16. Supporting documentation (chemical usage tracking logs, MSDS sheets, purchase orders, EPA "As Supplied" data sheets, EPA Method 24, etc.) shall be kept for each chemical and associated products which includes sufficient information to determine usage rates and emissions. These records shall be made available to the Department upon request. Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle). The log and documents shall be kept at the facility for at least five years and made available to the Department. The monthly logs shall be completed by the end of the following month.
    [Rule 62-4.070(3), F.A.C.]

17. Logs must document the method, calculations, and formulas used in determining the usage rate and the emission rate. This includes, but is not limited to, the product name, density, individual and total HAP contents, and individual and total VOC content. All calculations, including those used to derive emission credits for mass balance, must be clearly documented, and may be presented in the form of a template of sample calculations, which is filed with the logs required in this specific condition and available for review on site by regulatory inspectors.

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

18. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the information listed in Rules 62-297.310(8)(c)6., 12., 18., and 19., F.A.C. [Rule 62-297.310(8), F.A.C.]