

**Hydro Aluminum of North America, Inc.**

St. Augustine Facility  
Facility ID No.: 1090447  
St. Johns County

**Title V Air Operation Permit Revision**

FINAL Permit No.: 1090447-010-AV

Permitting & Compliance Authority:  
Florida Department of Environmental Protection  
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32056-7590  
Telephone: 904-256-1700  
Fax: 904-448-4363

# Title V Air Operation Permit Revision

FINAL Permit No.: 1090447-010-AV

## Table of Contents

<b>Section</b>	<b>Page Number</b>
Placard Page .....	1
<b>I. Facility Information</b> .....	2 - 3
A. Facility Description.	
B. Summary of Emissions Unit ID No(s) and Brief Description (s).	
C. Relevant Documents.	
<b>II. Facility-wide Conditions</b> .....	4 - 9
<b>III. Emissions Unit(s) and Conditions</b>	
A. EU 001 - Surface Coating Operations .....	10 - 12
B. EU 003 - Holding Furnace .....	13 - 23
C. EU 004 - Remelt Furnace .....	24 - 51
EU 010 - In-line Fluxer	
D. EU 006 - OPC Solvent Tank .....	52 - 53
E. EU 009 - GDT Solvent Tank .....	54 - 55



# Florida Department of Environmental Protection

Northeast District  
7825 Baymeadows Way, Suite B200  
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Rick Scott  
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Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

**Permittee:**

Hydro Aluminum North America, Inc.  
200 Riviera Boulevard  
St. Augustine, Florida 32086

**FINAL Permit No.:** 1090447-010-AV

**Facility ID No.:** 1090447

**SIC No(s).:** 33

**Project:** Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of air construction permit Nos. 1090447-008-AC and 1090447-009-AC. This facility is located at 200 Riviera Boulevard, St. Augustine, St. Johns County; UTM Coordinates: Zone 17, 470.98 km East and 3296.85 km North; and, Latitude: 29°48'13" North and Longitude: 81°18'01" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to 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.

**Referenced attachments made a part of this permit:**

<u>Appendix</u>	<u>Description</u>
Appendix U-1	List of Unregulated Emissions Units and/or Activities
Appendix I-1	List of Insignificant Emissions Units and/or Activities
Appendix TV-6	TITLE V CONDITIONS
Appendix GP	Subpart A – General Provisions of 40 CFR 63
Appendix GP-1	Appendix A to Subpart RRR of Part 63 – General Provisions Applicability to Subpart RRR
NESHAP	40 CFR 63 Subpart RRR
Appendix SS-1	Stack Sampling Facilities
TABLE 297.310-1	CALIBRATION SCHEDULE (version dated 10/07/96)

**Effective Date:**

**December 12, 2011**

**Renewal Application Due Date:**

January 23, 2011

**Expiration Date:**

September 5, 2011

Christopher L. Kirts, P.E.  
District Air Program Administrator

CLK/rfs

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
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I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
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## **SECTION I. FACILITY INFORMATION.**

### **Subsection A. Facility Description**

Hydro Aluminum of America, Inc. is a secondary aluminum production facility. The standard industrial classification (SIC) codes for the facility's activity are 3354 (extrude aluminum products) and 3341 (secondary smelting and refining of non-ferrous metals). The facility consists of an aluminum melting furnace, a holding furnace, two homogenizing ovens, aluminum extrusion operations, wet and powder paint operations, and ancillary operations.

The remelt facility or cast house contains natural gas fired melting and holding furnaces, an in-line argon fluxer/degasser, casting pit and homogenizing ovens. Clean and painted scrap aluminum mixed with prime (ingot, sows) is loaded into the melting furnace in pre-determined ratios.

Hot dross is skimmed from the molten aluminum and cooled prior to stockpiling in the dross room pending transport to an off-site facility for metal recovery. Molten aluminum is fed from the melting furnace to the holding furnace. Alloying materials may be added during this transfer and while the metals is being stirred in the holder. The metal is transferred from the holding furnace to the casting table for vertical, direct-chill casting into logs. During the transfer from the holder to the casting process, the in-line fluxer or degassing unit injects argon gas into the molten metal.

Degassing removes hydrogen, oxides and other impurities that can lead to formation of porosity/inclusions in the solidified metal. The cast aluminum logs are placed in a homogenizer for heat treatment to achieve uniform grain size in the metal prior to saw cut for shipment to an extrusion plant.

Extrusion operations occur via three aluminum press operations and two drawn tube operation. Aluminum billets are heated and extruded through various dies to form various shaped products. Aluminum tubes and shapes are further processed in age ovens and drawn tubing and OPC departments age ovens for heat treating. In some areas (GDT and OPC), aluminum tubes are dipped into a solvent tank to remove drawing oils.

The facility also operates two paint lines. One of the lines is a wet paint operation including a vertical paint booth with dry filter controls. The second paint line consists of a horizontal electrostatic powder coat operation. The paint lines include ancillary equipment, including pre-treatment acid wash, an acid wash process heat boiler, bake oven, two dry off ovens and a pyrolysis oven for the removal of overspray paint from the paint line equipment (parts and conveyor hooks).

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

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

The facility consists of the following regulated emissions units.

Facility ID No. 1090447	
ID No.	Emission Unit Description
001	Surface Coating Operations
003	Holding Furnace
004	Remelt Furnace
006	OPC Solvent Tank
009	GDT Solvent Tank
010	In-line Fluxer

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Revision application received March 12, 2010, this facility is not a major source of hazardous air pollutants (HAPs).

*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.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1: Permit History

Statement of Basis

These documents are on file with the permitting authority:

Application for Title V Air Operation Permit Revision received March 12, 2010

Application for Air Construction Permit received March 12, 2010. (Concurrent processing)

Additional Information received April 21, 2010

Comments from applicant received June 18, 28, 29, 2010

Comments from applicant received September 16, 2010

Comments from applicant received November 8, 2010

Comments from applicant received November 11, 2010

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## **SECTION II. FACILITY-WIDE CONDITIONS.**

**The following conditions apply facility-wide:**

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall 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. Prevention of Accidental Releases (Section 112(r) of CAA).

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, Maryland 20703-1515  
Telephone: 301-429-5018

and,

b. The permittee shall submit to the permitting authority Title VI certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.

[Rule 62-213.440(1), F.A.C.]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**6. Insignificant Emissions Units and/or Activities.** Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), 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. Nothing was deemed necessary and ordered at this time.

[Rule 62-296.320(1), F.A.C.]

**8. Emissions of Unconfined Particulate Matter.** Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-6, TITLE V CONDITIONS)<sup>1</sup>:

The following requirements are “not federally enforceable”:

- a. Maintenance of paved areas as needed, including street sweeping.
- b. Regular mowing of grass and care of vegetation.
- c. Limiting unnecessary vehicle access to plant property.

<sup>1</sup> Proposed by the applicant in the Title V permit revision (project 010) received March 12, 2010

[Rule 62-296.320(4)(c)2., F.A.C.; Rule 62-213.440, F.A.C.]

#### Excess Emissions

*{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision}*

**9.** 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.

[Rule 62-210.700(1), F.A.C.]

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

[Rule 62-210.700(4), F.A.C.]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**11.** 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.

[Rule 62-210.700(5), F.A.C.]

**12.** 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(6), F.A.C.]

**13.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

**14. Monitoring Reports.** The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

[Rule 62-213.440(1)(b)3.a., F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(1)(b)3., F.A.C. (see Condition 43. of APPENDIX TV-6, TITLE V CONDITIONS.)}

**15. Statement of Compliance.** The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS.)}

**16.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northeast District, Air Section.

Department of Environmental Protection  
Northeast District Air Program  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7590  
Telephone: 904/807-3300; FAX: 904/448-4363

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**17.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Air and EPCRA Enforcement Branch  
Air Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303-8960  
Telephone: 404/562-9155; Fax: 404/562-9163

**18. Certification by Responsible Official (RO).** In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

**19. Annual Emissions Fee Form and Fee.** The annual Title V emissions fees are due (postmarked) by March 1<sup>st</sup> of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site:

<http://www.dep.state.fl.us/air/emission/tvfee.htm>.

[Rule 62-213.205, F.A.C.]

**20. 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.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

- (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.]

- 21. Actual Emissions Reporting:** This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
  - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
    - 1) The name, address and telephone number of the owner or operator of the major stationary source;
    - 2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C.;
    - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
    - 4) Any other information that the owner or operator wishes to include in the report.
  - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

**PERMITTEE:**

Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

For Construction Permit No. 1090447-009-AC, the Department requires the annual reporting of actual PM, PM<sub>10</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub> and VOC emissions for the following units: Remelt Furnace, Holding Furnace, No. 1 and No. 2 Homogenizing Furnaces.

[Permit No. 1090447-009-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

### **SECTION III. EMISSIONS UNIT(S) AND CONDITIONS.**

**Subsection A. This section of the permit addresses the following emissions unit/units.**

ID No.	Emission Unit Description
001	<p>Surface Coating Operations.</p> <p><i>This emissions unit consists of one vertical wet paint booth. The surface coating is conducted by the application of coating to the metal surface using an electrostatic rotating head. Surface coating also includes associated activities, such as cleaning, mixing, and paint/solvent storage. Surface preparation is not included in this EU since the facility uses acid wash pretreatment process and is not considered a volatile organic compounds (VOCs) emissions source.</i></p>

### **PERFORMANCE RESTRICTIONS**

1. Permitted Capacity: The maximum volatile organic compound (VOC) containing coatings usage rate shall not exceed 8,375 gallons per 12 consecutive months. The maximum volatile organic compound (VOC) containing solvent usage rate shall not exceed 440 gallons per 12 consecutive months.

*Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).*

[Permit No. 1090447-002-AC, Permit No. 1090447-009-AC, Rules 62-210.200(PTE), 62-210.200(definitions), 62-4.070, F.A.C.]

2. Method of Operation: The owner or operator shall not use HAP containing solvents. The owner or operator may use HAP or non-HAP containing coatings.

[Rules 62-210.200(PTE) & 62-4.070, F.A.C.]

3. Hours of Operation: The hours of operation are not limited (8760 hours/year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 1090447-009-AC]

### **WORK PRACTICE STANDARDS**

4. All VOC-containing coatings, solvent and waste materials shall be stored in closed containers, except when adding to, removing, or mixing the contents.

[Rules 62-296.320(1) and 62-4.070, F.A.C.; Permit No.1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## COMPLIANCE DEMONSTRATION

5. By the end of the following calendar month, the owner or operator shall determine the total coating and solvent usages for the month (i.e. – Permittee shall determine February usage by the end of March). The owner or operator shall also determine the 12 month rolling sum of coating and also solvent usage by summing the monthly coating and solvent usage for the previous 12 consecutive months. The 12 consecutive month sum of coating and solvent usage shall be used to demonstrate compliance with the coating and solvent usage rate limitation as stated in Condition No. 1 of this subsection.

[Rule 62-4.070, F.A.C.; Permit No.1090447-009-AC]

6. The owner or operator shall use the information from the supplier or manufacturer to demonstrate that each solvent used for the unit does not contain HAP.

[Rule 62-4.070, F.A.C.; Permit No.1090447-009-AC]

## RECORDS & REPORTING

7. Reporting: The owner or operator shall estimate the individual HAP and total HAPs emissions each year and report the emissions in Annual Operating Report (AOR).

[Rule 62-4.070, F.A.C. and Permit No.1090447-009-AC]

8. Recordkeeping: The owner or operator shall keep the following records:
  - a. The name and volume of each VOC containing coating & solvent used. The owner or operator shall keep the purchase records for each coating & solvent used to support the record of the volume used.
  - b. Information from the supplier or manufacturer demonstrates that each solvent used does not contain HAP.
  - c. Information from the supplier or manufacturer specifying the VOC and HAP content of each VOC containing coating.
  - d. Information from the supplier or manufacturer specifying the VOC content of each VOC containing solvent.
  - e. The total volume of VOC containing coating & solvent used each month.
  - f. The total volume of VOC containing coating & solvent used for 12-consecutive months.
  - g. The total volume of HAP containing coating used each month.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 8 Continued:**

h. The total volume of HAP containing coating used for 12-consecutive months

The owner or operator shall keep the records described above for a period of at least 5 years.

[Rules 62-4.070 and 62-213.440(1)(b), F.A.C.; Permit No.1090447-009-AC ]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
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St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Subsection B. This section of the permit addresses the following emissions unit/units.**

ID No.	Emission Unit Description
003	<p>Holding Furnace</p> <p><i>The Holding Furnace is used as a holding furnace for molten aluminum processed in the Remelt Furnace and alloying elements that are added directly to the Holding Furnace. The Holding Furnace or the "North furnace" is manufactured by Thorpe Technologies. It has one emissions point (stack 51' 4", inside diameter 67") and the emissions are uncontrolled.</i></p> <p><i>The holding furnace is a Group 2 furnace as defined in 40 CFR 63.1503. The unit is subject to 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.</i></p>

**PERFORMANCE RESTRICTIONS**

1. Maximum Heat Input Rate: The maximum heat input rate for this emissions unit is 36 MMBtu/hour. This emissions unit is permitted to use natural gas and liquefied propane gas (LPG) as fuels.

[Rule 62-210.200(PTE), F.A.C.; Permit No. 1090447-008-AC]

2. Permitted Capacity - Holding Furnace: The Holding Furnace operates in series with the Remelt Furnace and shall not operate independently (refer to Condition No. 3.). Therefore the feed/charge rate of the Holding Furnace is assumed to be the same or less than the Remelt Furnace.

<sup>1</sup>*Feed/charge* means, for a furnace or other process unit that operates in batch mode, the total weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, feed/charge means the weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the process unit within a specified time period ( e.g., a time period equal to the performance test period).

<sup>2</sup>*Operating cycle* means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying, and tapping of molten aluminum (the period from tap-to-tap).

**See/Refer to Subsection C, Condition 3**

[Rule 62-210.200(PTE), F.A.C., 40 CFR 63.1503 (definition: feed/charge and operating cycle), Rule 62-212.400(12), F.A.C., and Permit No.1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

3. Method of Operation – Holding Furnace: The Holding Furnace is only authorized to hold or process clean charge as defined by 40 CFR 63.1503 (molten aluminum received from the Remelt Furnace) and alloying elements added directly to the Holding Furnace.

*Pursuant to 40 CFR 63.1503, Clean charge means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.*

[Rule 62-210.200(PTE), F.A.C., Permit No. 1090447-002-AC; Permit No. 1090447-009-AC]

4. Hours of Operation: The hours of operation of this emissions unit are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Permit No. 1090447-001-AC, Permit No. 1090447-009-AC]

## **EMISSIONS STANDARDS**

5. Visible Emissions Limit: Visible emissions from this emissions unit shall not exceed 20% opacity.

[Rule 62-4.070(3), F.A.C., Permit No. 1090447-001-AC, Permit No. 1090447-009-AC]

## **OPERATING REQUIREMENTS**

6. Labeling at Holding Furnace (Group 2 Furnace): The owner or operator shall provide and maintain easily visible labels posted at each group 2 furnace that identifies the applicable emission limits and means of compliance, including:

- (1) The type of affected source or emission unit (e.g., group 2 furnace).
- (2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

[40 CFR 63.1506(b)(1) and (2)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

7. Holding Furnace (Group 2 Furnace): The owner or operator of a group 2 furnace shall:

- (1) Operate each furnace using only clean charge as the feedstock.
- (2) Operate each furnace using no reactive flux.

[40 CFR 63.1506(o)]

## MONITORING REQUIREMENTS

8. Operation, Maintenance, and Monitoring (OM&M) Plan: The owner or operator shall prepare and implement for the Holding Furnace, a written operation, maintenance, and monitoring (OM&M) plan.

The owner or operator shall submit the OM&M plan to the responsible permitting authority no later than the compliance date (March 24, 2003, based on 40 CFR 63.1501(a)).

The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63.1510.

The owner or operator shall comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures.

If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63, Subpart RRR, the owner or operator shall promptly make all necessary revisions and resubmit the revised plan.

If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority.

[40 CFR 63.1510(b)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

9. Operation, Maintenance, and Monitoring (OM&M) Plan: Each OM&M plan shall contain the following information as described below:

- (1) Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process.
- (2) A monitoring schedule for each affected source and emission unit.
- (3) Procedures for the proper operation and maintenance of each process unit.
- (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - (ii) N/A – Continuous Emission or Opacity Monitoring Systems not at emissions unit.
- (5) Procedures for monitoring process parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (6) Corrective actions to be taken when process or operating parameters deviate from the value or range established in paragraph (1) of this condition, including:
  - (i) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (7) A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (8) N/A – Emissions unit is not a group 1 furnace.

[40 CFR 63.1510(b)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

10. Labeling at Holding Furnace (Group 2 Furnace): The owner or operator shall inspect the labels for each group 2 furnace at least once per calendar month to confirm that posted labels as required by the operational standard in Condition No. 6. are intact and legible.

[40 CFR 63.1510(c)]

11. Holding Furnace (Group 2 Furnace): These requirements apply to the group 2 furnace. The owner or operator shall:

- (1) Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.
- (2) Submit a certification of compliance with the applicable operational standard for charge materials in Condition No. 7. for each 6-month reporting period. Each certification must contain the information in Condition No. 17.(2)(v).

[40 CFR 63.1510(r)]

#### **PERFORMANCE TEST/COMPLIANCE DEMONSTRATION GENERAL REQUIREMENTS**

12. Labeling. The owner or operator shall submit the information described in Condition No. 15.(3) as part of the notification of compliance status report to document conformance with the operational standard in Condition No. 6.

[40 CFR 63.1512(r)]

#### **PERFORMANCE TEST REQUIREMENTS FOR VISIBLE EMISSIONS STANDARD**

13. Holding Furnace – Visible Emissions: The owner or operator shall conduct performance tests to demonstrate compliance with the visible emissions limit at least once during each federal fiscal year (October 1 – September 30). The test method shall be EPA Method 9. Compliance test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-297.310(7)(a)3., and 62-297.100, F.A.C.; Permit No. 1090447-001-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## NOTIFICATIONS, REPORTS AND RECORDS

### Notifications

14. Initial notifications. The owner or operator shall submit initial notifications to the applicable permitting authority as described in paragraphs (1) through (7) of this condition.
- (1) As required by 40 CFR 63.9(b)(1), the owner or operator shall provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.
  - (2) As required by 40 CFR 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of 40 CFR 63, Subpart RRR for which an application for approval of construction or reconstruction is not required under 40 CFR 63.5(d), must provide notification that the source is subject to the standard.
  - (3) As required by 40 CFR 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of 40 CFR 63, Subpart RRR and for which an application for approval of construction or reconstruction is required by 40 CFR 63.5(d) must provide the following notifications:
    - (i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;
    - (ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);
    - (iii) Anticipated date of startup; and
    - (iv) Actual date of startup.
  - (4) As required by 40 CFR 63.9(b)(5), after the effective date of 40 CFR 63, Subpart RRR, an owner or operator who intends to construct a new affected source or reconstruct an affected source, or reconstruct a source such that it becomes an affected source subject to 40 CFR 63, Subpart RRR, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 14. Continued:**

application for approval of construction or reconstruction as required by 40 CFR 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

- (i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or
  - (ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
- (5) As required by 40 CFR 63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.
- (6) As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled.
- (7) As required by 40 CFR 63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

[40 CFR 63.1515(a)]

15. Notification of Compliance Status Report. The owner or operator shall submit a notification of compliance status report within 60 days after the compliance date (May 24, 2003) established by 40 CFR 63.1501(a). The owner or operator shall submit a notification of compliance status report within 90 days after conducting the initial performance test. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (1) through (7) of this condition. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 15. Continued:**

- (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (3) Unit labeling as described in Condition No. 6., including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.*, lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c)
- (6) N/A/ emissions unit is not a group 1 furnace.
- (7) Startup, shutdown, and malfunction plan, with revisions.

[40 CFR 63.1515(b)]

**REPORTS**

16. Startup, Shutdown, and Malfunction Plan/Reports. The owner or operator shall develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
  - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 16. Continued:**

- (2) Corrective actions to be taken in the event of a malfunction of a process, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

[40 CFR 63.1516(a)]

- 17. Excess Emissions/Summary Report. The owner or operator shall submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the owner or operator shall submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period.

- (1) A report must be submitted if any of these conditions occur during a 6-month reporting period:
  - (i) N/A – applicable to bag leak detection system
  - (ii) N/A – applicable to COMS
  - (iii) N/A – applicable to aluminum scrap shredder
  - (iv) An excursion of a compliant process or operating parameter value or range ( *e.g.*, lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
  - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR.
  - (vii) N/A – emissions unit not a SAPU
- (2) Each report must include each of these certifications, as applicable:
  - (i) N/A- applicable to a thermal chip dryer
  - (ii) N/A – applicable to a dross-only furnace

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 17. Continued:**

- (iii) N/A – applicable to a sidewall group 1 furnace with add-on air pollution control devices
  - (iv) N/A – applicable to group 1 melting/holding furnace without add-on air pollution control devices
  - (v) For each group 2 furnace: “Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.”
  - (vi) N/A – emissions unit is not an in-line fluxer
- (3) The owner or operator shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

[40 CFR 63.1516(b)]

18. Annual Compliance Certifications. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator shall certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in paragraph (1) of Condition No. 17., that occurred during the year were reported as required by the conditions of this permit; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

[40 CFR 63.1516(c)]

RECORDS

19. As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and the requirements as stated below.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 19. Continued:**

- (1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

[40 CFR 63.1517(a)]

20. In addition to the general records required by 40 CFR 63.10(b), the owner or operator shall maintain records of:

- (1) Records of all charge materials and fluxing materials or agents for a group 2 furnace.
- (2) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (3) Records for any approved alternative monitoring or test procedure
- (4) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (i) Startup, shutdown, and malfunction plan;
  - (ii) OM&M plan.

[40 CFR 63.1517(b)(12), (13), (15), and (16)(i) and (ii)]

APPLICABILITY OF GENERAL PROVISIONS

21. The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

[40 CFR 63.1518]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Subsection C. This section of the permit addresses the following emissions unit/units.**

<b>ID No.</b>	<b>Emission Unit Description</b>
004	<p><i>The Remelt Furnace is a melting furnace authorized to process either clean charge or aluminum that contains paint, lubricants, coatings, or other foreign materials. The Remelt Furnace or the "South furnace" is manufactured by Thorpe Technologies. It has two emissions points. One of the emissions points (stack height: 55', inside diameter: 27") is equipped with a wet scrubber (Manufactured by Turner EnviroLogic, Inc.). The wet scrubber may be used as determined by plant personnel when clean charge is being processed. The second emissions point (51' 4", inside diameter: 67") is uncontrolled.</i></p> <p><i>The Remelt Furnace can operate as either a Group 1 or Group 2 furnace as defined by 40 CFR 63.1503. Such operation is defined as an Alternate Method of Operation in accordance with Rule 62-210.200(197), F.A.C.</i></p> <p><i>The unit is subject to 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.</i></p>
010	<p><i>The In-line fluxer processes molten aluminum from the Holding Furnace (Emissions Unit 003). The in-line fluxer uses only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.</i></p> <p><i>The unit is subject to 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.</i></p>

**1. < RESERVED>**

**PERFORMANCE RESTRICTIONS**

2. Maximum Heat Input Rate - Remelt Furnace: The maximum heat input rate for this emissions unit is 36 MMBtu/hour. This emissions unit is permitted to use natural gas and liquefied propane gas (LPG) as fuels.

[Rule 62-210.200(PTE), F.A.C.; Permit No. 1090447-008-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

3. Permitted Capacity- Remelt Furnace: The maximum feed/charge<sup>1</sup> shall not exceed 30 tons per operating cycle<sup>2</sup>. The maximum annual feed/charge shall not exceed 80,000 tons per 12 consecutive months.

<sup>1</sup>*Feed/charge* means, for a furnace or other process unit that operates in batch mode, the total weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, feed/charge means the weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the process unit within a specified time period ( e.g., a time period equal to the performance test period).

<sup>2</sup>*Operating cycle* means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying, and tapping of molten aluminum (the period from tap-to-tap).

[Rule 62-210.200(PTE), F.A.C., 40 CFR 63.1503 (definition: feed/charge and operating cycle), Rule 62-212.400(12), F.A.C., and Permit No.1090447-009-AC]

4. Method of Operation –Remelt Furnace: The Remelt Furnace is authorized to process either clean charge **OR** up to 35% (by weight of the total charge mixture), aluminum that contains paint, lubricants, coatings, or other foreign materials.

*Pursuant to 40 CFR 63.1503, Clean charge* means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

[Rule 62-210.200(PTE), F.A.C., Permit No. 1090447-002-AC; Permit No. 1090447-009-AC]

5. Remelt Furnace – Control Device-Wet Scrubber: The wet scrubber may be used as determined by plant personnel when clean charge is being processed in the Remelt Furnace.

The wet scrubber shall be in operation at all times when aluminum that contains paint, lubricants, coatings, or other foreign materials is being processed in the Remelt Furnace. Specifically, the wet-scrubber shall operate during the charging of aluminum that contains paint, lubricants, coatings, or other foreign materials, from the beginning of the charge for a minimum of 30 minutes after the charge door closes following the last push of charge material.

The intended purpose of facility operation of the wet scrubber as such is to comply with the requirements of Condition No. 7.

[Rule 62-4.070, F.A.C.; Permit No. 1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

6. Hours of Operation – Remelt Furnace: The hours of operation of this emissions unit are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Permit No. 1090447-009-AC]

## EMISSIONS STANDARDS

7. Remelt Furnace - Visible Emissions Limit: Visible emissions from this emissions unit shall not exceed 20% opacity.

[Rule 62-4.070(3), F.A.C., Permit No. 1090447-001-AC, Permit No. 1090447-009-AC]

8. Remelt Furnace (Group 1 Furnace) Dioxin/Furan Emissions Limit: The owner or operator of a Group 1 furnace shall use the limit specified below to determine the emission standards for a Secondary Aluminum Processing Unit (SAPU).

15 µg of D/F TEQ per Mg ( $2.1 \times 10^{-4}$ gr of D/F TEQ per ton) of feed/charge from a group 1 furnace.

This limit does not apply if the furnace processes only clean charge.

The owner or operator may determine the emission standards for a SAPU by applying the Group 1 furnace limit on the basis of the aluminum production weight in each Group 1 furnace, rather than on the basis of feed/charge.

[40 CFR 63.1505(i)(3) & (6)]

- 9.a. Secondary Aluminum Processing Unit (SAPU) Dioxin/Furan Emissions Limit: The owner or operator shall comply with the emission limit calculated using the equation for D/F in Condition 9.b. below for each secondary aluminum processing unit.

[40 CFR 63.1505(k)]

- 9.b. Secondary Aluminum Processing Unit (SAPU) Dioxin/Furan Emissions Limit: The owner or operator shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^n (L_{Ti_{D/F}} \times T_{Ti})}{\sum_{i=1}^n (T_{Ti})} \quad (Eq. 3)$$

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 9.b. Continued:**

Where,

$L_{tiD/F}$  = The D/F emission limit for individual emission unit  $i$  in Condition No. 8. for a group 1 furnace;

$T_{ti}$  = The feed/charge rate for individual emission unit  $i$ ; and

$L_{cD/F}$  = The D/F emission limit for the secondary aluminum processing unit.

Note: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

*Pursuant to 40 CFR 63.1503, Secondary aluminum processing unit (SAPU): An existing SAPU means all existing group 1 furnaces and all existing in-line fluxers within a secondary aluminum production facility. Each existing group 1 furnace or existing in-line fluxer is considered an emission unit within a secondary aluminum processing unit. A new SAPU means any combination of individual group 1 furnaces and in-line fluxers within a secondary aluminum processing facility which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to §63.1505(k)(6).*

*Each of the group 1 furnaces or in-line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit.*

[40 CFR 63.1505(k)(3)]

10. Secondary Aluminum Processing Unit (SAPU) Dioxin/Furan Emissions Limit: The owner or operator may demonstrate compliance with the emission limits of Condition No. 9.b. by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of Condition No. 8.

[40 CFR 63.1505(k)(5)]

11. Secondary Aluminum Processing Unit (SAPU) -Existing Emissions Unit Redesignation: With the prior approval of the responsible permitting authority, an owner or operator may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of this MACT standard and will be irreversible.

[40 CFR 63.1505(k)(6)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## OPERATING REQUIREMENTS

12. Summary: On and after the compliance date established by §63.1501, the owner or operator must operate all new and existing affected sources according to the requirements in Section 63.1506. Operating requirements are summarized in Table 2 of 40 CFR 63 Subpart RRR.

[40 CFR 63.1506(a)(1)& (4)]

13. Labeling at Remelt Furnace & In-line Fluxer (Group1 Furnace, Group 2 Furnace, In-line Fluxer): The owner or operator shall provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, and in-line fluxer that identifies the applicable emission limits and means of compliance, including:

- (1) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer).
- (2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

[40 CFR 63.1506(b)(1) and (2)]

14. <Reserved>

15. Feed/Charge Weight: The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge shall:

- (1) Except as provided in paragraph (3) of this condition, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- (2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- (3) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an emission unit, provided that:
  - (i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
  - (ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

[40 CFR 63.1506(d)]

16. In-line Fluxer Using No Reactive Flux Material: The owner or operator shall operate the in-line fluxer using no reactive flux materials.

[40 CFR 63.1506(l)]

17. Remelt Furnace (Group 1 Furnace) without Add-on Air Pollution Control Devices: The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices shall operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

[40 CFR 63.1506(n)(2)]

18. Remelt Furnace (Group 2 Furnace): The owner or operator of a group 2 furnace shall:

- (1) Operate each furnace using only clean charge as the feedstock.
- (2) Operate each furnace using no reactive flux.

[40 CFR 63.1506(o)]

19. Corrective Action. When a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. Corrective action must restore operation of the emission unit to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

[40 CFR 63.1506(p)]

## MONITORING REQUIREMENTS

20. Summary: On and after the compliance date established by March 24, 2003, based on 40 CFR 63.1501(a), the owner or operator of an affected source or emission unit shall monitor all processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to 40 CFR 63 Subpart RRR.

[40 CFR 63.1510(a)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

21. Operation, Maintenance, and Monitoring (OM&M) Plan: The owner or operator shall prepare and implement for each furnace, a written operation, maintenance, and monitoring (OM&M) plan.

The owner or operator shall submit the OM&M plan to the responsible permitting authority no later than the compliance date (March 24, 2003, based on 40 CFR 63.1501(a)).

The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63.1510.

The owner or operator shall comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures.

If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63, Subpart RRR, the owner or operator shall promptly make all necessary revisions and resubmit the revised plan.

If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority.

[40 CFR 63.1510(b)]

22. Operation, Maintenance, and Monitoring (OM&M) Plan: Each OM&M plan shall contain the following information as described below:

- (1) Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process.
- (2) A monitoring schedule for each affected source and emission unit.
- (3) Procedures for the proper operation and maintenance of each process unit used to meet the applicable emission limits or standards in Condition Nos. 8. or 9.b.
- (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 22 Continued:**

- (ii) N/A - Continuous Emission or Opacity Monitoring Systems not at emissions units.
- (5) Procedures for monitoring process parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (6) Corrective actions to be taken when process or operating parameters deviate from the value or range established in paragraph (1) of this condition, including:
  - (i) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (7) A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in Condition No. 18 for each group 1 furnace not equipped with an add-on air pollution control device.

[40 CFR 63.1510(b)]

23. Label Inspections at In-line Fluxer & Remelt Furnace (Group1 Furnace, Group 2 Furnace): The owner or operator shall inspect the labels for each group 1 furnace, group 2 furnace, and in-line fluxer at least once per calendar month to confirm that posted labels as required by the operational standard in Condition No. 13. are intact and legible.

[40 CFR 63.1510(c)]

24. <Reserved>

25. Feed/Charge Weight - Measurement Device: The owner or operator shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 25. Continued:**

- (1) The accuracy of the weight measurement device or procedure must be  $\pm 1$  percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
- (2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

[40 CFR 63.1510(e)]

26. In-line Fluxers Using No Reactive Flux: The owner or operator of an in-line fluxer that uses no reactive flux materials shall submit a certification of compliance with the operational standard for no reactive flux materials in Condition No. 16. for each 6-month reporting period. Each certification must contain the information in Condition No. 53.(2)(vi).

[40 CFR 63.1510(m)]

27. Remelt Furnace (Group 1 Furnace) without Add-on Air Pollution Control Devices: These requirements apply to the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device.

- (1) The owner or operator shall develop, in consultation with the responsible permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters. Test data must establish the highest level of D/F that will be emitted from the furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If the permitting authority determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of 40 CFR 63, Subpart RRR, the owner or operator shall promptly make all necessary revisions and resubmit the revised plan to the permitting authority.
  - (i) The owner or operator shall submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 27. Continued:**

- (ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters. Test data must establish the highest level of D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.
- (2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
- (3) Each site-specific monitoring plan must include provisions for unit labeling as required in Condition No. 23., and feed/charge weight measurement (or production weight measurement) as required in Condition No. 25.
- (4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in Condition No. 8. must include these requirements:
  - (i) The owner or operator must record the type of feed/charge (*e.g.* ., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and
  - (ii) N/A - emissions units not subject to 63.1506(n)(3) or 62.1505(i)(2).
- (5) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in Condition No. 28.
- (6) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in Condition No. 29.

[40 CFR 63.1510(o)(1)-(3),(4), (7),(8)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

28. Scrap Inspection Program for Remelt Furnace (Group 1 Furnace) without Add-on Air Pollution Control Devices:

A scrap inspection program must include:

- (1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
- (2) A scrap inspector training program;
- (3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
- (4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
- (5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
- (6) Recordkeeping requirements to document conformance with plan requirements.

[40 CFR 63.1510(p)]

29. Monitoring of Scrap Contamination Level by Calculation Method for Remelt Furnace (Group 1 Furnace) without Add-on Air Pollution Control Devices: The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

- (1) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.
- (2) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.
- (3) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

[40 CFR 63.1510(q)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

30. Remelt Furnace (Group 2 Furnace): These requirements apply to the group 2 furnace. The owner or operator shall:

- (1) Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.
- (2) Submit a certification of compliance with the applicable operational standard for charge materials in Condition No. 27. for each 6-month reporting period. Each certification must contain the information in Condition No. 53.(2)(v).

[40 CFR 63.1510(r)]

31. Site-specific Requirements for Secondary Aluminum Processing Units (SAPU):

- (1) The owner or operator shall include, within the OM&M plan prepared in accordance with Condition Nos. 21 & 22 the following information:
  - (i) The identification of each emission unit in the secondary aluminum processing unit;
  - (ii) The specific pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
  - (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
  - (iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
  - (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in Condition No. 32.
- (2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:
  - (i) Any averaging among emissions of differing pollutants;
  - (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 31. Continued:**

- (iii) The inclusion of any emission unit while it is shutdown; or
- (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

- (3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (1) of this condition and obtain approval of the applicable permitting authority prior to implementing any revisions.

[40 CFR 63.1510(s)]

- 32. Except as provided in Condition No. 33., the owner or operator shall calculate and record the 3-day, 24-hour rolling average emissions of D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator shall:

- (1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in Condition No. 25. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.
- (2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.
- (3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.
- (4) Compute the 24-hour daily emission rate using Equation 4:

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i} \quad (\text{eq. 4})$$

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 32. Continued:**

Where,

- $E_{\text{day}}$  = The daily D/F emission rate for the secondary aluminum processing unit for the 24-hour period;  
 $T_i$  = The total amount of feed, or aluminum produced, for emission unit  $i$  for the 24-hour period (Mg or tons);  
 $ER_i$  = The measured emission rate for emission unit  $i$  as determined in the performance test (lb/ton or Fg/Mg of feed/charge); and  
 $n$  = The number of emission units in the secondary aluminum processing unit.

- (5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

[40 CFR 63.1510(t)]

33. Secondary Aluminum Processing Unit Compliance by Individual Emission Unit

Demonstration: As an alternative to the procedures of Condition No. 32., the owner or operator may demonstrate, through performance tests, which each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

[40 CFR 63.1510(u)]

34. Dioxin/Furan -Alternative Monitoring Methods: If an owner or operator wishes to use an alternative monitoring method to demonstrate compliance with the D/F emission standard, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR 63.1510(j)(5) and 40 CFR 63.1510(v), the owner or operator may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in paragraphs (1) through (6) of this condition.

- (1) The Administrator will not approve averaging periods other than those specified in this section.
- (2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.
- (3) The owner or operator shall submit the application for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (3)(i) through (iii) of this condition:
  - (i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 34. Continued:**

- (ii) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and
  - (iii) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).
- (4) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:
- (i) Notice of the information and findings upon which the intended disapproval is based; and
  - (ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.
- (5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of this subpart.
- (6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

*Permitting Note: 40 CFR 63.1510(j)(5) and 40 CFR 63.1510(v) are not applicable to the St. Augustine Facility due to the in-line fluxer using non-reactive flux and the non-use of a lime-injected fabric filter.*

[40 CFR 63.1510(w)]

**PERFORMANCE TEST/COMPLIANCE DEMONSTRATION GENERAL REQUIREMENTS**

**PERFORMANCE TEST REQUIREMENTS FOR DIOXIN/FURAN**

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

35. Site-Specific Test Plan. Prior to conducting any performance test required for dioxin/furan, the owner or operator shall prepare a site-specific test plan which satisfies all of the requirements, and must obtain approval of the plan pursuant to the procedures, set forth in 40 CFR 63.7(c).

[40 CFR 63.1511(a)]

36. The owner or operator shall conduct D/F performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c).

- (1) The owner or operator shall conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
- (2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.
- (3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.
- (4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
- (5) Compliance with the applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

[40 CFR 63.1511(b)]

37. Test Methods. The owner or operator shall use the following methods in appendix A to 40 CFR Part 60 to determine compliance with the D/F standard:

- (1) Method 1 for sample and velocity traverses.
- (2) Method 2 for velocity and volumetric flow rate.
- (3) Method 3 for gas analysis.
- (4) Method 4 for moisture content of the stack gas.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition No. 37. Continued:**

(5) Method 23 for the concentration of D/F.

[40 CFR 63.1511(c)(1)-(4),(7)]

38. Alternative Methods. The owner or operator may use an alternative test method, subject to approval by the Administrator.

[40 CFR 63.1511(d)]

39. Dioxin/Furan -Repeat Tests. After the initial compliance test, the owner or operator shall conduct a performance test to demonstrate compliance with the Dioxin/Furan emission limiting standard prior to obtaining a renewed operation permit. In addition to the requirements specified in condition Nos. 35 through No. 37., compliance test procedures shall also meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-297.310 (7)(a)3., F.A.C.]

40. Establishment of Monitoring and Operating Parameter Values. The owner or operator shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator shall use the appropriate procedures in this section and submit the information required in the notification of compliance status report (Condition No. 51.(4)). The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Department:

- (1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.
- (2) The same test methods and procedures as required by Condition Nos. 35. through No. 37. were used in the test.
- (3) The owner or operator certifies that no design or work practice changes have been made to the source or process since the time of the report.
- (4) All process operating parameters required to be monitored were monitored and documented in the test report.

[40 CFR 63.1511(g)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

41. Remelt Furnace (Group 1 Furnace) Without Add-on Air Pollution Control Devices. In the site-specific monitoring plan required by Condition No. 27., the owner or operator of a group 1 furnace without add-on air pollution control devices shall include data and information demonstrating compliance with the applicable emission limits. If the group 1 furnace processes other than clean charge material, the owner or operator shall conduct emission tests to measure emissions of D/F at the furnace exhaust outlet.

[40 CFR 63.1512(e) & (e)(1)]

42. Secondary Aluminum Processing Unit. The owner or operator shall conduct performance tests for Dioxin/Furan emissions as described in this Condition. The results of the performance tests are used to establish emission rates in µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in Condition No. 32.

A performance test is required for each group 1 furnace that processes scrap other than clean charge to measure emissions of D/F.

*Permitting Note: The Title V Permit Revision application received for this project states that the St. Augustine Plant is classified as an Area Source of HAPs. Therefore pursuant to 63.1505(i)(3) the group 1 furnace is subject only to the D/F standards. Pursuant to 63.1505(j)(3) a PM and HCl standard is not applicable to an in-line fluxer that uses no reactive flux materials. Therefore, 63.1512(j)(1) and (j)(3) are not applicable.*

[40 CFR 63.1512(j)(2)]

43. Feed/Charge Weight Measurement. During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, shall measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

[40 CFR 63.1512(k)]

44. Labeling- In-line Fluxer & Remelt Furnace (Group 1 & Group 2). The owner or operator of each in-line fluxer, group 1 furnace, and group 2 furnace shall submit the information described in Condition No. 51.(3) as part of the notification of compliance status report to document conformance with the operational standard in Condition No. 13.

[40 CFR 63.1512(r)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

45. <Reserved>

#### EQUATIONS FOR DETERMINING COMPLIANCE

46. Dioxin/Furans: Use Equation 7A of this condition to determine compliance with an emission limit for D/F:

$$E = \frac{C \times Q}{P} \quad (\text{Eq. 7A})$$

Where:

E = Emission rate of D/F, µg/Mg (gr/ton) of feed;

C = Concentration of D/F, µg/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and

P = Production rate, Mg/hr (ton/hr).

[40 CFR 63.1513(b)(2)]

47. Conversion of D/F measurements to TEQ units. To convert D/F measurements to TEQ units, the owner or operator shall use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), incorporated by reference in 40 CFR 63.1502, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

[40 CFR 63.1513(d)]

48. Secondary Aluminum Processing Unit – Mass-Weighted Dioxin/Furans. Use the procedure in paragraph (1) or the procedure in paragraph (2) of this condition to determine compliance with emission limits for a secondary aluminum processing unit.

- (1) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{CD/F}$ ) calculated using Equation 3 in Condition No. 9.b.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 48. Continued:**

$$E_{C_{D/F}} = \frac{\sum_{i=1}^n (E_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (Eq. 11)$$

Where,

$E_{C_{D/F}}$  = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{ti_{D/F}}$  = Measured D/F emissions for individual emission unit i.

- (2) As an alternative to using the equations in paragraphs (1) of this condition, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in Condition No. 8.

[40 CFR 63.1513(e)(3) and (4)]

PERFORMANCE TEST REQUIREMENTS FOR VISIBLE EMISSIONS STANDARD

49. Remelt Furnace: The owner or operator shall conduct performance tests to demonstrate compliance with the visible emissions limit at least once during each federal fiscal year (October 1 – September 30). The test method shall be EPA Method 9. Compliance test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-297.310(7)(a)3., and 62-297.100, F.A.C.]

**NOTIFICATIONS, REPORTS AND RECORDS**

Notifications

50. Initial notifications. The owner or operator shall submit initial notifications to the applicable permitting authority as described in paragraphs (1) through (7) of this condition.

- (1) As required by 40 CFR 63.9(b)(1), the owner or operator shall provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 50. Continued:**

- (2) As required by 40 CFR 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of 40 CFR 63, Subpart RRR for which an application for approval of construction or reconstruction is not required under 40 CFR 63.5(d), must provide notification that the source is subject to the standard.
- (3) As required by 40 CFR 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of 40 CFR 63, Subpart RRR and for which an application for approval of construction or reconstruction is required by 40 CFR 63.5(d) must provide the following notifications:
  - (i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;
  - (ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);
  - (iii) Anticipated date of startup; and
  - (iv) Actual date of startup.
- (4) As required by 40 CFR 63.9(b)(5), after the effective date of 40 CFR 63, Subpart RRR, an owner or operator who intends to construct a new affected source or reconstruct an affected source, or reconstruct a source such that it becomes an affected source subject to 40 CFR 63, Subpart RRR, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.
  - (i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 50. Continued:**

- (ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
- (5) As required by 40 CFR 63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.
- (6) As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled.
- (7) As required by 40 CFR 63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

[40 CFR 63.1515(a)]

51. Notification of Compliance Status Report. The owner or operator shall submit a notification of compliance status report within 60 days after the compliance date (May 24, 2003) established by 40 CFR 63.1501(a). The owner or operator shall submit a notification of compliance status report within 90 days after conducting the initial performance test. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (1) through (7) of this condition. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

- (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 51. Continued:**

- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (3) Unit labeling as described in Condition No. 13., including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.*, lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in Condition No. 14.
- (6) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (7) Startup, shutdown, and malfunction plan, with revisions.

[40 CFR 63.1515(b)(1),(2),(3),(4),(5),(9),(10)]

**REPORTS**

52. Startup, Shutdown, and Malfunction Plan/Reports. The owner or operator shall develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (2) Corrective actions to be taken in the event of a malfunction of a process, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

[40 CFR 63.1516(a)]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

53. Excess Emissions/Summary Report. The owner or operator shall submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the owner or operator shall submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period.

- (1) A report must be submitted if any of these conditions occur during a 6-month reporting period:
  - (i) N/A - applicable to bag leak detection system
  - (ii) N/A - applicable to COMS
  - (iii) N/A - applicable to aluminum scrap shredder
  - (iv) An excursion of a compliant process or operating parameter value or range ( *e.g.*, lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
  - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR.
  - (vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (2) Each report must include each of these certifications, as applicable:
  - (i) N/A- applicable to a thermal chip dryer
  - (ii) N/A - applicable to a dross-only furnace
  - (iii) N/A - applicable to a sidewell group 1 furnace with add-on air pollution control devices
  - (iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: "Each group 1 furnace without add-on air pollution control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period."

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 53. Continued:**

- (v) For each group 2 furnace: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."
- (vi) For each in-line fluxer using no reactive flux: "Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period."
- (3) The owner or operator shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

[40 CFR 63.1516(b)]

54. Annual Compliance Certifications. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator shall certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in paragraph (1) of Condition No. 53.(1), that occurred during the year were reported as required by the conditions of this permit; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

[40 CFR 63.1516(c)]

RECORDS

55. As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and the requirements as stated below.

- (1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 55. Continued:**

- (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

[40 CFR 63.1517(a)]

56. In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) shall maintain records of:

- (1) For each continuous monitoring system, records required by 40 CFR 63.10(c).
- (2) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (3) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.
- (4) Records of all charge materials for each group 1 melting/holding furnaces without air pollution control devices processing only clean charge.
- (5) For each in-line fluxer for which the owner or operator has certified that no reactive flux was used:
  - (i) Operating logs which establish that no source of reactive flux was present at the in-line fluxer;
  - (ii) Labels required pursuant to Condition No. 13. which establish that no reactive flux may be used at the in-line fluxer; or
  - (iii) Operating logs which document each flux gas, agent, or material used during each operating cycle.
- (6) Records of all charge materials and fluxing materials or agents for a group 2 furnace.
- (7) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (8) <Reserved>

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 56. Continued:**

- (9) Records for any approved alternative monitoring or test procedure.
- (10) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (iii) Startup, shutdown, and malfunction plan;
  - (iv) OM&M plan; and
  - (v) Site-specific secondary aluminum processing unit emission plan (if applicable).
- (11) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

[CFR 63.1517(b)(6) through (9), (11) through (13), and (15) through (17)]

57. Remelt Furnace -Wet Scrubber Operating Status: The owner or operator shall maintain records of the operating status of the wet scrubber (time, date, on/off status). During the time when the scrubber is not operating and the material is charged to the furnace, the owner or operator shall record the amount of the clean charge and confirm that all such material is only clean charge.

*Clean charge* means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

[Rule 62-4.070, F.A.C., Permit No. 1090447-009-AC]

58. Remelt Furnace Operating Rate: The owner or operator shall measure and record the following information:
- a. The total weight of the feed/charge to the Remelt Furnace for each operating cycle.
  - b. The sum of total weight of the feed/charge to the Remelt Furnace each month. The 12 months rolling sum of the total weight of aluminum processed by summing the monthly total weight of aluminum processed for the previous 12 consecutive months.

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Condition 58. Continued:**

- c. The weight of the feed/charge to the melting furnace of aluminum that contains paint, lubricants, coatings, or other foreign materials for each operating cycle, and the record as percent (%) by weight of the total charge mixture for each operating cycle.

[Rule 62-4.070, F.A.C.; Permit No. 1090447-009-AC]

APPLICABILITY OF GENERAL PROVISIONS

- 59. The requirements of the general provisions in subpart A of this part (40 CFR 63) that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

[40 CFR 63.1518]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Subsection D. This subsection of the permit addresses the following emissions unit/units.**

ID No.	Emission Unit Description
006	OPC Solvent Tank  <i>Aluminum tubes are immersed in the aliphatic organic solvent in the tank to remove grease. The solvent tank has the following dimensions (W x H x L): 50" x 54" x 425".</i>

#### **PERFORMANCE RESTRICTION**

1. Hours of 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.; Permit No. 1090447-002-AC]
2. Permitted Capacity: The solvent usage rate is limited to 12,450 gallons per 12 consecutive months.  
  
[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C., Permit No.1090447-009-AC]
3. Method of Operation: The owner or operator shall not use HAP containing solvent.  
  
[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C., Permit No.1090447-009-AC]

#### **COMPLIANCE DEMONSTRATION**

4. By the end of the following calendar month, the owner or operator shall determine the total solvent usage for the month (i.e. – Permittee shall determine February usage by the end of March). The owner or operator shall also determine the 12 months rolling sum of solvent usage by summing the monthly solvent usage for the previous 12 consecutive months. The 12 consecutive months sum of solvent usage shall be used to demonstrate compliance with the solvent usage rate limitation as stated in Condition No. 2 of this subsection.  
  
[Rule 62-4.070, F.A.C.; Permit No.1090447-009-AC]
5. The owner or operator shall use the information from the supplier or manufacturer to demonstrate that each solvent used for the unit does not contain HAP.  
  
[Rule 62-4.070, F.A.C.; Permit No.1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## RECORDKEEPING

6. Recordkeeping: The owner or operator shall keep the following records:

- a. The name and volume of solvent used. The owner or operator shall keep the purchase records for each solvent used to support the record of the volume used.
- b. Information from the supplier or manufacturer demonstrates that each solvent used does not contain HAP.
- c. The total volume of solvent used each month.
- d. The total volume of solvent used for 12-consecutive months.

The owner or operator shall keep the records described above for a period of at least 5 years.

[Rules 62-4.070 and 62-213.440(1)(b), F.A.C., Permit No.1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

**Subsection E. This subsection of the permit addresses the following emissions unit/units.**

ID No.	Emission Unit Description
009	<p>GDT Solvent Tank</p> <p><i>Solvent is used in the cleaning tank to remove the cutting oil from aluminum parts. The parts are then heat-treated in the # 3 and #4 Age Ovens. The solvent tank has the following dimensions (W x H x L): 61.5" x 60" x 516".</i></p>

**PERFORMANCE RESTRICTION**

1. Hours of 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.; Permit No. 1090447-009-AC]
2. Permitted Capacity: The solvent usage rate is limited to 33,815 gallons per 12 consecutive months.  
[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C., Permit No.1090447-009-AC]
3. Method of Operation: The owner or operator shall not use HAP containing solvent.  
[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C., Permit No.1090447-009-AC]

**COMPLIANCE DEMONSTRATION**

4. By the end of the following calendar month, the owner or operator shall determine the total solvent usage for the month (i.e. – Permittee shall determine February usage by the end of March). The owner or operator shall also determine the 12 months rolling sum of solvent usage by summing the monthly solvent usage for the previous 12 consecutive months. The 12 consecutive months sum of solvent usage shall be used to demonstrate compliance with the solvent usage rate limitation as stated in Condition No. 2 of this subsection.  
[Rule 62-4.070, F.A.C., Permit No.1090447-009-AC]
5. The owner or operator shall use the information from the supplier or manufacturer to demonstrate that each solvent used for the unit does not contain HAP.  
[Rule 62-4.070, F.A.C., Permit No.1090447-009-AC]

**PERMITTEE:**  
Hydro Aluminum North America, Inc.  
200 Riverside Blvd  
St. Augustine, Florida 32086

I.D. Number: 1090447  
Permit/Cert: 1090447-010-AV  
Date of Issue: December 12, 2011  
Expiration Date: September 5, 2011

## RECORDKEEPING

6. Recordkeeping: The owner or operator shall keep the following records:

- a. The name and volume of solvent used. The owner or operator shall keep the purchase records for each solvent used to support the record of the volume used.
- b. Information from the supplier or manufacturer demonstrates that each solvent used does not contain HAP.
- c. The total volume of solvent used each month.
- d. The total volume of solvent used for 12-consecutive months.

The owner or operator shall keep the records described above for a period of at least 5 years.

[Rule 62-4.070 and 62-213.440(1)(b), F.A.C., Permit No.1090447-009-AC]