PERMITTEE

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

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Northeast District
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590

PROJECT

Permit No. 1090447-010-AV
St. Augustine Facility

The purpose of this project is to revise the Title V air operation permit for the above referenced facility.

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Air Permit package on August 23, 2011. The applicant published the Public Notice of Intent to Issue Air Permit in the St. Augustine Record on August 31, 2011. The Department received the proof of publication on September 7, 2011.

COMMENTS

General comments on the proposed permit revision were received from the EPA Region 4 Office on November 17, 2011.

The recommended changes were accepted as noted below. ~~Strikethrough~~ indicates deleted text; double-underline indicates added text.

General Comment 1: *Statement of Basis*:

The permit authority might want to revise the third and fourth paragraphs in page 6 of the SOB to reflect the completion of the emissions tests for Dioxin/Furan (D/F) and particulate matter (PM).

Response: The project information for Emission Units 003 and 004 is corrected as follows:

(1st Paragraph of Emission Unit 003 and 004 Project information, Page 5 of 11)

As part of ~~a~~ the construction permit application, Project No. 1090447-009-AC, that was ~~being~~ processed simultaneously with this Title V Permit Revision, the facility requested an increase in the permitted processing rate of both furnaces from the previously established 25 tons/batch to 30 tons/operating cycle. The term "operating cycle" is used instead of "batch" to be more consistent with the terms and the definitions in the applicable NESHAP, 40 CFR 63 Subpart RRR.

(1st Paragraph, Page 6 of 11)

The construction permit application also involve~~s~~d the replacement of the current sill on the Remelt Furnace and a replacement of the swivel joint located on the furnace discharge side. The sill

replacement will increase the free-board to keep aluminum from spilling out of the furnace and the swivel joint replacement is primarily for safety reasons, but will improve the aluminum drain time, which will potentially increase the aluminum processing rate on both an hourly and annual basis.

(3rd Paragraph, Page 6 of 11)

As part of construction permit Project No. 1090447-009-AC, the facility ~~has~~ requested the temporary allowance to operate the Remelt Furnace without the wet scrubber in operation during a Dioxins/Furans performance test. This ~~will~~ allowed the facility an opportunity to demonstrate that the Dioxin/Furan 40 CFR 63 Subpart RRR standard ~~can~~ could be met without the need of the wet scrubber. The performance test ~~will be~~ was conducted while the Remelt Furnace processed aluminum that contained paint, lubricants, coatings, or other foreign materials. Details can be found in the Technical Evaluation and Preliminary Evaluation for construction permit Project No. 1090447-009-AC.

(4th Paragraph, Page 6 of 11)

Also as part of construction permit Project No. 1090447-009-AC, the facility ~~has~~ requested the temporary allowance to operate the Remelt Furnace without the wet scrubber in operation during a visible emissions test. The test ~~will be~~ was conducted while the Remelt Furnace processed only clean charge. Details can be found in the Technical Evaluation and Preliminary Evaluation for construction permit Project No. 1090447-009-AC.

General Comment 2: *Citations*:

Per Volume 40 of the Code of Federal Regulations (CFR), Part 70.6(a)(1)(i), "The permit shall specify and reference the origin and authority for each term or condition…" The regulations indicate that citation must be to the origin of the requirements contained in the condition. An acceptable citation must include the underlying applicable requirement of the condition (i.e., a preconstruction permit, a rule or regulation and section, or both) in which it is based.

a. *EPA requests the permitting authority to revise the citation for the following conditions. EPA advises the permitting authority to remove that phrase from the citation since it is not appropriate underlying applicable requirement. The permitting authority can choose to keep it as a note but not as a citation.*

    i. *Condition FW 8 – Citing the "proposed by the applicant in the Title V revision (project 007) received" as an underlying applicable requirement for this condition is not acceptable.*

    ii. *Section III, Subsection B, Condition 2 and 3 – Citing the "Applicant Comments received 9/16/10" as an underlying applicable requirement for these conditions is not acceptable.*

b. *Based on the same argument, EPA requests the permitting authority to revise the citation of the following conditions: Section III, Subsection A, Condition 3 and Section III, Subsection E, Condition 1. These two conditions specify the hour of operations as amended through construction permit 1090447-009-AC and should be citing the construction permit along with the cited rules.*

c. *Other "hours of operation" conditions that need to revised to include the construction permit that serves as the underlying applicable requirement are Section III, Subsection D, Condition 1, with 1090447-002-*

AC as the origin of the requirement, and Section III, Subsection B, Condition 1, with 1090447-001-AC as the underlying applicable requirement.

d. The permitting authority should revise the citation for Section III, Subsection B, Condition 13 regarding the performance test requirements for visible emission from eh holding furnace. These requirements were originated in construction permit 1090447-001Ac but the citation does not include a reference to the construction permit.

e. The permitting authority should revise the citation provided for Section III, Subsection A, Condition 1. The condition sets the maximum volatile organic compound (VOC) containing coatings and solvent usage rates. However, it is not clear which is the underlying applicable requirement for the maximum Voc containing solvent usage rate of 440 gallons per 12 consecutive months. If the underlying applicable requirement was not properly included in the citation and needs to added in the final version of the title v permit, please make the correction and include a note for clarification in the SOB.

Response: The language is corrected as follows:

a.

i. (Section II., Facility-wide Conditions)

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)[1]:

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.

[1] 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. ~~and proposed by the applicant in the Title V permit revision (project 007) received;~~ Rule 62-213.440, F.A.C.]

ii. (Section III., Subsection B., Conditions 2 and 3)

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.

[1] *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).

[2] *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~~; Applicant Comments received 9/16/10~~]

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~~; Applicant Comments received 9/16/10~~]

b.

(Section III, Subsection A., Condition 3)

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]

(Section III, Subsection E., Condition 1)

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]

c.

(Section III, Subsection D., Condition 1)

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]

(Section III, Subsection B., Condition 4)

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]

d.

(Section III, Subsection B., Condition 13)

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]

e.
(Section III, Subsection A., Condition 1)

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.]

General Comment 3: *Permitted Capacity – Holding Furnace*:

*Per the applicant's request Condition 2 in Section III, Subsection B was reworded to specify that the Remelt Furnace (EU 004) and the Holding Furnace (EU 003) are operated in series. Therefore, it is assumed that the Holding Furnace will hold the clean charge from the Remelt Furnace, which is permitted to process a maximum feed/charge of 30 tons per operating cycle, plus any additives added to it. EPA requests the permitting authority to include a reference to Condition 3 in Section III, Subsection C Permitted Capacity – Remelt Furnace at the end of the requirements in the Holding Furnace's condition. It can read "**See Subsection C, Condition 3.**"*

Response: The language is corrected as follows:

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.

[1] *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).

[2] *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]

General Comment 4: *Typographical Errors*

EPA requests the permitting authority to revise the following conditions for the accuracy of their citations among other typographical errors we found.

- *Facility-wide (FW) Condition 7 – Citation to Rule 62-206.320(1)(a), F.A.C., should be corrected to read Rule 62-296.320**(1)**, F.A.C.*
- *Section III, Subsection C, Condition 20(4)(ii) – Please revise the item for correct punctuation*
- *Section III, Subsection C, Condition 37 – Citation to 40 CFR 63.1511(c) could be corrected to read 40 CFR 63.1511(c)**(1)-(4),(7)**, to keep this citation as specific as other ones in the permit.*
- *Section III, Subsection C, Condition 59 – The first line can be revised to read "The requirements of the general provisions in subpart A of this part **(40 CFR 63)** that are applicable…"*

Response: The language is corrected as follows:

(Section II, Facility-Wide Condition 7)

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)~~(a)~~, F.A.C.]

After further discussion with Ms. Oquendo on December 1, 2011, the citation should be Section III, Subsection B, condition 20(4)(ii) and not Subsection C, Condition 20(4)(ii).

(Section III, Subsection B, Condition 20(4)(ii))

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~~; and~~.

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

(Section III, Subsection C, Condition 37)

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.

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

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

(Section III, Subsection C, Condition 59)

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]

CONCLUSION

The final action of the Department is to issue the permit with the minor changes listed above.