TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Benada Aluminum Products LLC
2540 Jewett Lane
Sanford, FL 32771

Benada Aluminum Products LLC

Facility ID No. 1170027

PROJECT

Project No. 1170027-011-AF
Application for FESOP Renewal
Project Name: Renewal

COUNTY

Seminole County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Waste and Air Resource Programs
Central District Office
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us

October 31, 2014

Prepared by Jeff Rustin, P.E.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210, and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

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

I. Project Description:

A. Applicant:

Mr. Brad Aldrich, President
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Sanford, FL 32771
bradaldrich@earthlink.net

B. Application Contact:

Mr. James Keller, Environmental Specialist and Paint Line Manager
Benada Aluminum Products LLC
2540 Jewett Lane
Sanford, FL 32771
james.keller@benada.com

C. Project Location:
2540 Jewett Lane
Sanford, FL 32771

D. Project Summary:
This is a FESOP Renewal Permit for the facility. The aluminum melt furnace has been shut down since May of 2011, the expiration date of this permit is May 30, 2016 (For more information, see Section V. Discussion of this document).

E. Application Information:

Pre-Application Meeting on: 09/24/2014
Application Received on: 10/08/2014
Received supplemental information on: 10/15/2014
Application determined to be complete on: 10/15/2014

II. PSD Applicability for Project

The Melt Furnace's Potential to Emit for PM (particulate matter), the pollutant with the highest emission, is 21.50 tons per year, which is less than 250 tons per year; therefore, no additional PSD Applicability Evaluation is necessary. For more information, see Section IV. Summary of Emissions of this document.

III. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, and Chapters 62-204 through 62-297, F.A.C., as indicated below.

Subject to:	**Y/N**	**Comments**
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	The Melt Furnace's Potential to Emit for PM (particulate matter), the pollutant with the highest emission, is 21.50 tons per year, which is less than 250 tons per year.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	The facility is a potential source of unconfined particulate matter emissions. Visible emissions are limited to less than 20 percent opacity.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	The facility is a source of VOCs and odors. Potential to emit is 0.36 tons per year of VOC.
Rule 62-296.400, F.A.C. – Stationary Source Emission Standards	N	There is no applicable source category.

Subject to:	Y/N	Comments
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Seminole County is an attainment area for ozone
Rule 62-204.800(8), F.A.C. - Standards of Performance for New Stationary Sources (NSPS – 40 CFR 60)	N	No applicable categories
Rule 62-204.800(11), F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	Y	The facility is subject to the requirements of 40 CFR 63 Subpart A – General Provisions and 40 CFR 63 Subpart RRR – Secondary Aluminum Production.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	The Potential to Emit for PM is 21.50 tons per year (uncontrolled).
Rule 62-297.310, F.A.C. – General Compliance Test Requirements	Y	Stack and visible emission testing will be required within 30 days of commencement of operation. During each federal fiscal year (October 1st to September 30th), the emissions unit (EU 001) shall be tested to demonstrate compliance with the emissions standards for dioxins and furans.

IV. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tons/year)	Major Source Thresholds (tons/year)
PM	EU 001 Melt Furnace	21.50** (uncontrolled)	100
CO	EU 001 Melt Furnace	8.97**	100
Total Volatile Organic Compounds (VOCs)	EU 001 Melt Furnace	0.36*	100
Total Hazardous Air Pollutants (HAPs)	EU 001 Melt Furnace	9.2** (According to a previous permit application, less than 20 gallons per year of MEK is used.)	25
HCL - H106 (Single HAP)	EU 001 Melt Furnace	9.2** (uncontrolled)	10

Pollutant	EU No. and brief description	Potential Emissions (tons/year)	Major Source Thresholds (tons/year)
Dioxin (Single HAP)	EU 001 Melt Furnace	0.0000059**	10

*based on ARMS database
**based on Application No. 1170027-006-AV/1170027-007-AC received 03/04/2003

V. Discussion

The facility has a secondary aluminum melting furnace equipped with a venturi scrubber and quenching system to control air emissions. The furnace has been shut down since May of 2011. Rule 62-210.300(2)(a)3.b., F.A.C., states: "Except as provided in sub-subparagraph 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

(I) The owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and
(II) The owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and
(III) The emissions unit was operating in compliance with all applicable rules as of the time the source was shutdown.

The expiration date of this permit is May 30, 2016, which is approximately 5 years from date of shut down. There were no changes requested in the FESOP renewal application.

Based on a review of previous permits, EU 001 is a "Group 1 Furnace." (40 CFR 63.1503). However, the facility is not a major source because the previous PTE calculations indicated HCL to be 9.2 tpy. If EU 001 is placed back into operation, the testing requirements in 40 CFR 63 Subpart RRR should be reviewed to ensure all requirements are clearly stated in the renewal operating permit.

VI. Federal NSPS and/or NESHAP Provisions

The facility is subject to the requirements of 40 CFR 63 Subpart A – General Provisions and the applicable requirements (requirements that apply to a minor source) of 40 CFR 63 Subpart RRR – NESHAP for Secondary Aluminum Production.

VII. Conclusions

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

VIII. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and adopted federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Waste & Air Resource Programs, Central District Office, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767, by e-mail at jeff.rustin@dep.state.fl.us or by phone at 407-897-2930.