

FINAL DETERMINATION

PERMITTEE

Enkei America, Inc.
2900 West Inwood Drive
Columbus Indiana, 47201

PERMITTING AUTHORITY

Neighborhoods Department, Environmental Quality Division
214 North Hogan Street, Suite 500
Jacksonville, Florida 32202

PROJECT

Air Permit No. 0310433-017-AC
Minor Air Construction Permit
Enkei America Jacksonville

This project authorizes the construction of a chip melter wet scrubber.

NOTICE AND PUBLICATION

The Permitting Authority distributed a draft minor air construction permit package on April 13, 2018. The applicant published the Public Notice in the Florida Times-Union on April 20, 2018. The Permitting Authority received the proof of publication on May 17, 2018. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public, the EPA Region 4 Office or the applicant.

CONCLUSION

The final action of the Permitting Authority is to issue the permit as drafted.

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ONE CITY. ONE JACKSONVILLE.

City of Jacksonville, Florida

Neighborhoods Department
Environmental Quality Division
Ed Ball Building
214 N. Hogan St., 5th Floor
Jacksonville, FL 32202
(904) 255-7100
www.coj.net

PERMITTEE

Enkei America, Inc.
2900 West Inwood Drive
Columbus Indiana, 47201

Air Permit No. 0310433-017-AC
Permit Expires: April 30, 2019
Minor Air Construction Permit

Authorized Representative:
Mr. Jason Jones, Facilities Environmental Manager

Enkei America Jacksonville
Construction of a Chip Melter
Wet Scrubber

PROJECT

This is the final air construction permit, which authorizes the construction of a chip melter wet scrubber. The proposed work will be conducted at the existing America Jacksonville Facility which is an aluminum wheel manufacturing operation, categorized under Standard Industrial Classification No. 3714. The existing facility is located in Duval County at 1401 Wheels Road in Jacksonville, Florida, 32218-9408. The UTM coordinates of the existing facility are Zone 17, 437.08 km East and 3370.64 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (General Conditions); Sections 5 (Common Conditions); and Section 6 (Common Testing Requirements). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit and an Operation and Maintenance Plan is attached.

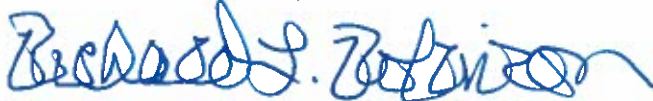
STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Rules 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the F.S. by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Office of General Counsel, City of Jacksonville, 117 West Duval Street, Suite 480, Jacksonville, FL 32202 [Telephone: (904) 630-1700; Fax: (904) 630-1731] and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Permitting Authority.

FINAL PERMIT

Executed in Jacksonville, Florida



Richard L. Robinson, P.E., Manager
Air Pollution Source Permitting Section

RLR/HDS

CERTIFICATE OF SERVICE

The clerk hereby certifies that this Air Permit package was sent by electronic mail with a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Jason Jones, Facilities Environmental Manager, Enkei America, Inc. (jjones@enkeiamerica.com)

Mr. Adam Carwile, Enkei America, Inc, (acarwile@enkeiamerica.com)

Mr. Robert Fox, P.E., Environmental Resources Management (BOB.FOX@ERM.COM)

Mr. Stuart Bartlett, Environmental Consultant, FDEP, Northeast District (Stuart.Bartlett@floridadep.gov)

Mr. Wayne Walker, EQD (WLW@coj.net)

Ms. Shannon Stone, EQD (Stone@coj.net)

Ms. Patricia Gee-Jones, EQD (Patricia@coj.net)

FILING AND ACKNOWLEDGMENT FILED, on
this date, pursuant to Section 120.52(7), F.S., with the
clerk, receipt of which is hereby acknowledged.


(Clerk)

5-24-18

(Date)

SECTION 1.
GENERAL INFORMATION

FACILITY DESCRIPTION

Enkei America Jacksonville is an existing aluminum wheel manufacturing operation, which is categorized under Standard Industrial Classification 3714. The existing Enkei America Jacksonville Facility is located in Duval County at 1401 Wheels Road in Jacksonville, Florida 32218-9408. The UTM coordinates of the existing facility are Zone 17, 437.08 km East and 3370.64 km North. This site is in an area that is in attainment (or designated as unclassified) for all pollutants subject to Ambient Air Quality Standards (AAQS)

Enkei America Jacksonville manufactures aluminum automobile wheels. The manufacturing process involves aluminum melting (new ingots and recycled metal), die cast molding, heat treating, mechanical shaping and forming, and machining of aluminum wheels. The facility has two melt furnaces (F1 and F2) for melting clean aluminum (new ingots and off-specification wheels) and one chip melter for melting recycled chips from the mechanical wet forming operations (i.e., sawing, drilling, and machining). These furnaces feed into the casting and heat-treating lines and then into the supporting machining and finishing operations. The melting, spinning, and heat-treating solution furnaces are fired with natural gas.

In addition to the aluminum melting furnaces, the following insignificant activities are onsite: Metal (water) quench activities, mechanical wet-forming operations (sawing, drilling, machining, grinding, etc.), natural gas fired combustion equipment, including two spinning furnaces (0.120 MM Btu/hr each), two solution furnaces (0.715 MM Btu/hr each), two aging furnaces (0.536 MM Btu/hr each), abrasive blasting cabinet operations, cooling tower operation, and two natural gas fired 70 HP emergency generators.

The existing facility consists of the following emissions units.

ID No.	Emission Unit Description
001	Aluminum Melt Furnace No. 1
006	Aluminum Melt Furnace No. 2 and Chip Melter

PROPOSED PROJECT

This project will authorize the construction of a wet scrubber to control emissions from the chip melter. Emission Unit 006, Aluminum Melt Furnace No. 2 and Chip Melter will be inactivated.

This project will add the following emissions units.

ID No.	Emission Unit Description
007	Aluminum Melt Furnace No. 2
008	Chip Melter

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Rule 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- The facility does operate units subject to the National Emissions Standards of Hazardous Air Pollutants (NESHAP) of 40 CFR 63, Subpart ZZZZ.

**SECTION 1.
GENERAL INFORMATION**

The facility is a minor source of air pollution because the potential emissions of regulated air pollutants are less than 100 tons per year and the potential emissions of Hazardous Air Pollutants (HAPs) are less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs pursuant to Rule 62-210.200(PTE), F.A.C. and Rule 2.301, JEPB.

Two 70 HP emergency generators are onsite. These emergency generators are exempt from permitting in accordance with Rule 62-210.300(3)(a)35., F.A.C. However, these emergency generators must still comply with any applicable requirements pursuant to 40 C.F.R. Part 60, Subpart IIII or JJJJ, or 40 C.F.R Part 63, Subpart ZZZZ, all adopted and incorporated by reference at Rule 62-204.800, F.A.C. or by virtue of modification or reconstruction become subject to such subparts, the owner or operator shall comply with all limitations and requirements of the such subparts that apply to the engines.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Neighborhoods Department, Environmental Quality Division (Permitting Authority). The Permitting Authority's mailing address is 214 North Hogan Street, Suite 500, Jacksonville, Florida 32202 and the Permitting Authority's telephone number is (904) 255-7100.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Permitting Authority at the mailing address stated in Administrative Requirement No. 1. or submitted electronically to aircompliance@coj.net.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms) and Operation & Maintenance Plan.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Rules 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Permitting Authority may require the permittee to conform to new or additional conditions. The Permitting Authority shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Permitting Authority may grant additional time. [Rule 62-4.080, F.A.C. and Rule 2.1401, JEPB]
6. Modifications: The permittee shall notify the Permitting Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Permitting Authority. Such permit shall be obtained prior to beginning construction or modification. [Rule 62-210.300(1), F.A.C., Rule 62-212.300(1)(a), F.A.C., Rule 2.301, JEPB, and Rule 2.401, JEPB]
7. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rule 62-4.070(4), F.A.C., Rule 62-4.080 F.A.C., Rule 62-210.300(1), F.A.C., Rule 2.1401, JEPB, and Rule 2.301, JEPB]
8. 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 Rules 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.

SECTION 2.
ADMINISTRATIVE REQUIREMENTS

- 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 Rules 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. and Rule 2.401, JEPB]

9. Application for Non-Title V Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with the applicable rules. A Non-Title V air operation permit is required for regular operation of the permitted emissions units. **The permittee shall apply for a Non-Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation.** To apply for a Non-Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Permitting Authority may by law require. The application shall be submitted to the Permitting Authority. [Rule 62-4.030 F.A.C., Rule 62-4.050 F.A.C., Rule 62-4.070, F.A.C., and Rule 2.1401, JEPB]
10. The facility shall be subject to City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].
11. The facility shall be subject to JEPB Rule 2, Part Nos. I through IV, VI through VII and Part Nos. IX through XIV.

**SECTION 3.
EMISSION UNIT SPECIFIC CONDITIONS**

A. Aluminum Melt Furnace No. 2

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
007	Aluminum Melt Furnace No. 2 – The aluminum furnace melts clean aluminum (new ingots and off-specification wheels). The furnace is fired by natural gas. Emissions are controlled by a Torit Day Dust Collector, Model 232RFW10.

PERFORMANCE RESTRICTIONS

1. **Reasonably Available Control Technology (RACT):** RACT requirements including **Specific RACT Emission Limiting Standards for Stationary Emission Units** [Rule 62-296.700(3), F.A.C. and Rule 2.1101, JEPB]; **Maximum Allowable Emission Rates** [Rule 62-296.700(4), F.A.C. and Rule 2.1101, JEPB]; **Circumvention** [Rule 62-296.700(5), F.A.C. and Rule 2.1101, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), F.A.C. and Rule 2.1101, JEPB] shall apply to this emission unit.
2. **Hours of Operation:** The hours of operation are not limited (8760 hours per year). [Application No. 0310433-017-AC, Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
3. **Permitted Capacity:** The permitted capacity for the Aluminum Melt Furnace No. 2 shall not exceed 2200 pounds per hour of aluminum. [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
4. **Volumetric Flow Rate:** The volumetric flow rate for the **Torit Day Dust Collector, Model 232RFW10** is 12,100 cubic feet per minute (cfm). [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
5. **Heat Input:** The maximum heat input to Aluminum Melt Furnace No. 2 shall not exceed 3.81 million Btu (MMBtu) per hour. [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
6. **Authorized Fuel:** The fuel for this emission unit shall be natural gas only. [Application No. 0310433-017-AC, Rule 62-210.200(PTE), F.A.C., and Rule 2.301, JEPB]

REASONABLE PRECAUTIONS

7. Reasonable precautions to be taken at this facility to prevent unconfined PM emissions include:
 - a. Maintenance of paved areas as needed, including street sweeping.
 - b. Limiting access to plant property by unnecessary vehicles.
 - c. Regular mowing of grass and care of vegetation.
 - d. Exercising best practices to minimize exposure when handling dry chemicals.
 - e. Maintenance and continual operation of the furnace headspace collection/control systems.[Rule 62-296.320(4)(c)2., F.A.C. and Rule 2.1101, JEPB]

EMISSIONS STANDARDS

8. **Emissions Standards:**
 - a. Particulate matter emissions shall not exceed 0.03 gr/dscf (3.11 pounds per hour and 13.62 tons per year). [Rule 62-296.712(2), F.A.C., and Rule 2.1101, JEPB]
 - b. Visible emissions shall be limited to 5% opacity. [Rule 62-296.712(2), F.A.C. and Rule 2.1101, JEPB]

**SECTION 3.
EMISSION UNIT SPECIFIC CONDITIONS**

A. Aluminum Melt Furnace No. 2

TESTING REQUIREMENTS

9. **Initial Compliance Tests:** The emissions unit shall be tested to demonstrate initial compliance with the emissions standard for visible emissions. The initial test shall be conducted **within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit**. Testing shall be conducted for a **minimum period of 30 minutes**. [Rules 62-296.712(3)(a), F.A.C., Rule 62-297.310(5)(b), F.A.C., Rule 2.1101, JEPB, and Rule 2.1201, JEPB]
10. **Testing Notification:** The permittee shall notify the Compliance Authority in writing **at least 15 days prior to any required tests**. Tests shall be conducted in accordance with the applicable requirements specified in Section 6 (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C. and Rule 2.1201, JEPB]
11. **Test Results Submittal:** The permittee of an emissions unit for which an emissions test is required shall submit a written test report to the Compliance Authority specified by permit, on the results of each such test as soon as practicable but **no later than 45 days** after the last run of each test is completed. Test reports may be submitted electronically. [Rule 62-297.310(10), F.A.C. and Rule 2.1201, JEPB]
12. **Operating Conditions during Emission Testing:** Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. **If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. Testing capacity is defined as at least 90% of the maximum operation rate specified by the permit.** [Rule 62-297.310(3), F.A.C. and Rule 2.1201, JEPB]
13. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
5	Method for Determining Particulate Matter Emissions (upon request)
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Permitting Authority. [Rule 62-204.800, F.A.C., Rule 2.201, JEPB, and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

14. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 6 (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the process rate and total emissions. [Rule 62-297.310(10), F.A.C. and Rule 2.1201, JEPB]
15. **Record Retention:** The above records shall be retained for a **minimum period of 5 years** and shall be made available to the Compliance Authority upon request. [Rule 62-4.070(3), F.A.C. and Rule 2.1401, JEPB]
16. **Operation and Maintenance Plan:** The permittee shall use the best operational practices in the attached Operation and Maintenance Plan and shall be part of this permit. Records shall be maintained on file for a **minimum period of 2 years** and made available to the Compliance Authority upon request. [Rule 62-296.700(6), F.A.C. and Rule 2.1101, JEPB]

**SECTION 3.
EMISSION UNIT SPECIFIC CONDITIONS**

B. Chip Melter

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
008	Chip Melter - The chip melter is a Heattec, Model No. CM300(WZ300)B1207. Emissions are controlled by a DeVansco Wet Scrubber, Model No. DV-2410.

PERFORMANCE RESTRICTIONS

1. Reasonably Available Control Technology (RACT): RACT requirements including **Specific RACT Emission Limiting Standards for Stationary Emission Units** [Rule 62-296.700(3), F.A.C. and Rule 2.1101, JEPB]; **Maximum Allowable Emission Rates** [Rule 62-296.700(4), F.A.C. and Rule 2.1101, JEPB]; **Circumvention** [Rule 62-296.700(5), F.A.C. and Rule 2.1101, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), F.A.C. and Rule 2.1101, JEPB] shall apply to this emission unit.
2. Hours of Operation: The hours of operation are not limited (8760 hours per year). [Application No. 0310433-017-AC, Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
3. Permitted Capacity: The permitted capacity for the Chip Melter shall not exceed 704 pounds per hour of aluminum. [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
4. Volumetric Flow Rate: The volumetric flow rate for the wet scrubber is 10,000 cubic feet per minute (cfm). [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
5. Heat Input: The maximum heat input for the chip melter shall not exceed 1.2 million Btu (MMBtu) per hour. [Rule 62-296.700(4)(a), F.A.C. and Rule 2.1101, JEPB]
6. Authorized Fuel: The fuel for this emission unit shall be natural gas only. [Application No. 0310433-017-AC, Rule 62-210.200(PTE), F.A.C., and Rule 2.301, JEPB]

REASONABLE PRECAUTIONS

7. Reasonable precautions to be taken at this facility to prevent unconfined PM emissions include:
 - a. Maintenance of paved areas as needed, including street sweeping.
 - b. Limiting access to plant property by unnecessary vehicles.
 - c. Regular mowing of grass and care of vegetation.
 - d. Exercising best practices to minimize exposure when handling dry chemicals.
 - e. Maintenance and continual operation of the furnace headspace collection/control systems.[Rule 62-296.320(4)(c)2., F.A.C. and Rule 2.1101, JEPB]

EMISSIONS STANDARDS

8. Emissions Standards:
 - a. Particulate matter emissions shall not exceed 0.03 gr/dscf (2.57 pounds per hour and 11.26 tons per year). [Rule 62-296.712(2), F.A.C., and Rule 2.1101, JEPB]
 - b. Visible emissions shall be limited to 5% opacity. [Rule 62-296.712(2), F.A.C. and Rule 2.1101, JEPB]

**SECTION 3.
EMISSION UNIT SPECIFIC CONDITIONS**

B. Chip Melter

TESTING REQUIREMENTS

9. **Initial Compliance Tests:** The emissions unit shall be tested to demonstrate initial compliance with the emissions standard for visible emissions. The initial test shall be conducted **within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit.** Testing shall be conducted for a **minimum period of 30 minutes.** [Rules 62-296.712(3)(a), F.A.C., Rule 62-297.310(5)(b), F.A.C., Rule 2.1101, JEPB, and Rule 2.1201, JEPB]
10. **Testing Notification:** The permittee shall notify the Compliance Authority in writing **at least 15 days prior to any required tests.** Tests shall be conducted in accordance with the applicable requirements specified in Section 6 (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C. and Rule 2.1201, JEPB]
11. **Test Results Submittal:** The permittee of an emissions unit for which an emissions test is required shall submit a written test report to the Compliance Authority specified by permit, on the results of each such test as soon as practicable but **no later than 45 days** after the last run of each test is completed. Test reports may be submitted electronically. [Rule 62-297.310(10), F.A.C. and Rule 2.1201, JEPB]
12. **Operating Conditions during Emission Testing:** Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. **If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. Testing capacity is defined as at least 90% of the maximum operation rate specified by the permit.** [Rule 62-297.310(3), F.A.C. and Rule 2.1201, JEPB]
13. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

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RECORDS AND REPORTS

14. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 6 (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the process rate and total emissions. [Rule 62-297.310(10), F.A.C. and Rule 2.1201, JEPB]
15. **Record Retention:** The above records shall be retained for a **minimum period of 5 years** and shall be made available to the Compliance Authority upon request. [Rule 62-4.070(3), F.A.C. and Rule 2.1401, JEPB]
16. **Operation and Maintenance Plan:** The permittee shall use the best operational practices in the attached Operation and Maintenance Plan and shall be part of this permit. Records shall be maintained on file for a **minimum period of 2 years** and made available to the Compliance Authority upon request. [Rule 62-296.700(6), F.A.C. and Rule 2.1101, JEPB]

SECTION 4.
GENERAL CONDITIONS (FINAL)

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Permitting Authority will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Permitting Authority.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Florida Administrative Code rules, unless specifically authorized by an order from the Permitting Authority.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Florida Administrative Code rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Florida Administrative Code rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Permitting Authority personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Florida Administrative Code rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Permitting Authority with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Permitting Authority for penalties or for revocation of this permit.

SECTION 4.
GENERAL CONDITIONS (FINAL)

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Permitting Authority may be used by the Permitting Authority as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Florida Administrative Code rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Florida Administrative Code rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Florida Administrative Code rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Permitting Authority approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Permitting Authority.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (not applicable);
 - b. Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Florida Administrative Code rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Permitting Authority.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Florida Administrative Code rule.
 - c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The person responsible for performing the sampling or measurements;
 - (3) The dates analyses were performed;
 - (4) The person responsible for performing the analyses;
 - (5) The analytical techniques or methods used;
 - (6) The results of such analyses.
15. When requested by the Permitting Authority, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Permitting Authority, such facts or information shall be corrected promptly.

SECTION 5. COMMON CONDITIONS (FINAL)

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C., and Rule 2.1401, JEPB]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C., and Rule 2.301, JEPB]
3. Excess Emissions Allowed: 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 2 hours in any 24-hour period unless specifically authorized by the Permitting Authority for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700 (Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C. and Rule 2.301, JEPB]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(2), F.A.C., and Rule 2.301, JEPB]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority 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 Permitting Authority. [Rule 62-210.700(6), F.A.C., and Rule 2.301, JEPB]
6. VOC or OS Emissions: No person shall 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 Permitting Authority. [Rule 62-296.320(1), F.A.C., and Rule 2.1101, JEPB]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2), F.A.C., Rule 62-210.200 (Definitions), F.A.C., Rule 2.1101, JEPB, and Rule 2.301, JEPB]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C., and Rule 2.1101, JEPB]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C., and Rule 2.1101, JEPB]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Permitting Authority upon request. [Rule 62-213.440(1)(b)2, F.A.C. and Rule 2.501, JEPB]

SECTION 5.
COMMON CONDITIONS (FINAL)

11. Emissions Computation and Reporting:

- a. *Applicability.* This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of Rule 62-210.370(3) and Rule 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C. and Rule 2.301, JEPB]
- b. *Computation of Emissions.* For any of the purposes set forth in Rule 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this rule.
 - (1) *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of Rule 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the Permitting Authority that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (b) If a CEMS is not available or does not meet the requirements of Rule 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of Rule 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the Permitting Authority that an alternative approach is more accurate.
 - (c) If a CEMS is not available or does not meet the requirements of Rule 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of Rule 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the Permitting Authority that an alternative approach is more accurate.
 - (2) *Continuous Emissions Monitoring System (CEMS).*
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
 - 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - 1) A calibrated flow meter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at Rule 62-210.370(2)(b)2., F.A.C., above.

SECTION 5.
COMMON CONDITIONS (FINAL)

(3) Mass Balance Calculations.

- (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
- (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
- (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

- (a) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the Permitting Authority that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (b) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS.** In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown.** In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

SECTION 5.
COMMON CONDITIONS (FINAL)

- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the Permitting Authority for any regulatory purpose.

[Rule 62-210.370(2), F.A.C. and Rule 2.301, JEPB]

c. Annual Operating Report for Air Pollutant Emitting Facility

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - (a) All Title V sources.
 - (b) All synthetic non-Title V sources.
 - (c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - (d) All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding Rule 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
- (3) By April 1 of the year following each calendar year, an annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office. However, if the annual operating report is submitted using the DEP's electronic annual operating report software, there is no requirement to submit DEP Form No. 62-210.900(5) to any DEP or local air program office. Each Title V Source shall submit the annual operating report using the DEP's electronic annual operating report software, unless the Title V source claims a technical or financial hardship. A technical or financial hardship is claimed by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management at:

AOR and Major Air Pollution Source Annual Emissions Fee
P.O. Box 3070
Tallahassee, Florida 32315-3070

(See <http://www.dep.state.fl.us/air/emission/eaor/> for information regarding annual operating reports.)

- (4) Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for purposes of the annual operating report.

[Rule 62-210.370(3), F.A.C. and Rule 2.301, JEPB]

- d. Facility Relocation.* Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Permitting Authority at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated. [Rule 62-210.370(4), F.A.C. and Rule 2.301, JEPB]

SECTION 6.
COMMON TESTING REQUIREMENTS (FINAL)

EMISSIONS TESTING REQUIREMENTS

1. Applicability: Unless otherwise stated in a specific rule, permit, or other order, the general requirements set forth in Rules 62-297.310(2) through (10), F.A.C., shall be used for regulated stationary sources' emissions tests for comparison with air pollution emission-limiting standards that are enforceable under state law. An emissions test is an emissions rate test, a concentration test, or an opacity test. [Rule 62-297.310(1), F.A.C. and Rule 2.1201, JEPB]

REPORTS

2. Test Reports:

- a. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the Compliance Authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.
- b. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT), the written report specified in Rule 62-297.310(10)(a), F.A.C., need not be submitted, provided the conditions of Rules 62-297.310(10)(b)1. through 3., F.A.C., are met:
 - (1) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;
 - (2) The test information shall provide, as a minimum, the information specified in Rules 62-297.310(10)(c)1. through 24., F.A.C.; and
 - (3) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.

[Rule 62-297.310(10), F.A.C. and Rule 2.1201, JEPB]

APPENDIX A CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

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

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

APPENDIX A CITATION FORMATS AND GLOSSARY OF COMMON TERMS

bhp: brake horsepower	CO₂: carbon dioxide
COMS: continuous opacity monitoring system	NSPS: New Source Performance Standards
DARM: Division of Air Resource Management	O&M: operation and maintenance
DEP: Department of Environmental Protection	O₂: oxygen
Department: Department of Environmental Protection	Pb: lead
dscf: dry standard cubic feet	PM: particulate matter
dscfm: dry standard cubic feet per minute	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
EPA: Environmental Protection Agency	ppm: parts per million
ESP: electrostatic precipitator (control system for reducing particulate matter)	ppmv: parts per million by volume
EU: emissions unit	ppmvd: parts per million by volume, dry basis
F: fluoride	QA: quality assurance
F.A.C.: Florida Administrative Code	QC: quality control
F.A.W.: Florida Administrative Weekly	PSD: prevention of significant deterioration
F.D.: forced draft	psi: pounds per square inch
F.S.: Florida Statutes	PTE: potential to emit
FGD: flue gas desulfurization	RACT: reasonably available control technology
FGR: flue gas recirculation	RATA: relative accuracy test audit
ft²: square feet	RBLC: EPA's RACT/BACT/LAER Clearinghouse
ft³: cubic feet	SAM: sulfuric acid mist
gpm: gallons per minute	scf: standard cubic feet
gr: grains	scfm: standard cubic feet per minute
HAP: hazardous air pollutant	SIC: standard industrial classification code
Hg: mercury	SIP: State Implementation Plan
I.D.: induced draft	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
ID: identification	SO₂: sulfur dioxide
kPa: kilopascals	TPD: tons/day
lb: pound	TPH: tons per hour
MACT: maximum achievable control technology	TPY: tons per year
MMBtu: million British thermal units	TRS: total reduced sulfur
MSDS: material safety data sheets	UTM: Universal Transverse Mercator coordinate system
MW: megawatt	VE: visible emissions
NESHAP: National Emissions Standards for Hazardous Air Pollutants	VOC: volatile organic compounds
NO_x: nitrogen oxides	

ATTACHMENT EU-1
Operation and Maintenance Plan for Melt Furnace Emissions Controls
Air Construction Permit Application (Application No. 5197-1)
Enkei America, Inc.
Jacksonville Aluminum Wheel Manufacturing Plant
(Facility ID No. 0310433)

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1.0 PURPOSE AND INTRODUCTION

Enkei America, Inc. (Enkei) has prepared this Operation & Maintenance (O&M) Plan, in order to satisfy the regulatory requirements found at Rule 62-296.700(6), Florida Administrative Code (FAC) as adopted by reference and Rule 2.1101, Jacksonville Environmental Protection Board (JEPB). The purpose of this O&M Plan is to demonstrate the compliance basis for the facility and for the proper operation of the melt furnaces, associated control devices, and ancillary equipment.

The O&M plan contains information on the:

- Melt Furnace and control device parameters to be monitored,
- Established operating levels and/or ranges for regulated equipment,
- Procedures for operation/maintenance of furnaces and control devices,
- Performance of work practices that will show compliance with permit terms,
- Corrective actions taken if/when operating parameters deviate from ranges,
- Manufacturer's recommended maintenance schedules for equipment,
- Documentation of work practices and pollution prevention measures
- Documentation/Logs kept for the charge rate established by the permit.

This O&M Plan will be incorporated by reference into the facility air operation permit after review by the City of Jacksonville during review of the application to renew the facility air operation permit application. If the facility substantively revises a work practice or operating procedure, this Plan must be modified accordingly and re-submitted to the City for approval.

2.0 SOURCE DESCRIPTION

Enkei manufactures aluminum automobile wheels at the Jacksonville Plant. The manufacturing process involves aluminum melting (new ingots and recycled metal), die cast molding, mechanical shaping and forming, and machining of the aluminum wheels. The facility includes two Melt Furnaces (F1 and F2) for melting clean aluminum (new ingot & off-specification wheels) and one Chip Melter for melting recycled chips from the mechanical wet forming operations (i.e., sawing, drilling, and machining). These furnaces feed into the casting and heat-treating lines and then into the supporting machining and finishing operations. The melting, spinning, and heat-treating solution furnaces are fired with natural gas. A co-located business, Technical Painting of Jacksonville, Inc. (TPJ), occupies the southernmost building and paints the wheels produced by Enkei as a separate operation that is closely coordinated with Enkei. TPJ operates as a separate business operation and its emissions are authorized under a separate air operation permit (No. 0310606-001-AO).

Based upon emissions data from stack tests completed in 2000 and 2007 on the furnace bag houses, the facility is a minor source of particulate matter. However, the facility is located within the area of influence for the Duval County air quality maintenance area for particulate matter and is thus subject to the Reasonably Achievable Control Technology (RACT) requirements found at Rule 62-296.700 and 712, FAC. The facility also emits combustion-related pollutants (i.e., carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM), volatile organic compounds (VOC), and total hazardous air pollutants (THAP)) at rates well below Florida permitting thresholds. Several insignificant emission sources are present at the facility that are exempt from permitting based on their estimated emission rates, including the following:

- 1) Metal (water) quench activities;
- 2) Mechanical wet-forming operations (sawing, drilling, machining, grinding, etc.);
- 3) Natural-gas fired combustion equipment, including:
 - two spinning furnaces (0.120 mm Btu/hour each),
 - two solution furnaces (0.715 mm Btu/hour each), and
 - two aging furnaces (0.536 mm Btu/hour each);
- 4) Abrasive blasting cabinet operations;
- 5) Cooling tower operation; and
- 6) Natural gas fired emergency generators (two 70 horsepower units).

3.0 CONTROL DEVICES

Each of the three melting furnaces operated by the facility (i.e., two melt furnaces and one chip melter) include an off-gas collection system consisting of hooding, ductwork, and evacuation fans to draw impacted head space air from the furnaces through separate control devices. The control device design specifications and other descriptive data are presented as follows:

Table 1 – Control Device Descriptions

Device Characteristic	Melt Furnace F1	Melt Furnace F2	Chip Melter
Manufacturer	Donaldson Torit	Donaldson Torit	DeVansco
Model	Model 376RFW10	Model 232RFW10	DV-2410
Type	Fabric Filter - Low Temperature (< 180 °F)	Fabric Filter - High Temperature (> 250 °F)	Wet Scrubber - High Efficiency (95.0-99.9%)

Device Characteristic	Melt Furnace F1	Melt Furnace F2	Chip Melter
Design flow rate	16,200 cfm	12,100 cfm	10,000 cfm 430 gpm
Control Efficiency	99+ %	99+ %	95+ %
Pressure drop	1 - 6 inches wc	1 - 6 inches wc	24 inches wc
Scrubbing liquor	N/A	N/A	Water

cfm = cubic feet per minute

gpm = gallons per minute

wc = water column

4.0 FACILITY COMPLIANCE REQUIREMENTS

Enkei has accepted various air permit-imposed operating and particulate matter emission limits for the melting furnaces to reflect the maximum operating parameters desired or achievable by the Jacksonville Plant. The key operating and emission limits included in the facility permit are as follows:

Table 2 – Key Facility Operating and Emission Limits

Operating Parameter	Melt Furnace F1	Melt Furnace F2	Chip Melter
Operating hours (hours/year)	8,760	8,760	8,760
Maximum process rate (pounds/hour feed)	≤ 2,200	≤ 2,200	≤ 704
Maximum heat input (MMBtu/hour natural gas)	≤ 3.81	≤ 3.81	≤ 1.20
Volumetric flow rate (cubic feet/minute (nominal))	16,200	12,100	10,000
Visible emissions (% opacity)	≤ 5%	≤ 5%	≤ 5%
Particulate matter emissions (grains/dry standard cubic feet)	0.03 (4.16 lbs/hr)	0.03 (3.11 lbs/hr)	0.03 (2.57 lbs/hr)

5.0 MONITORING PROCEDURES

Enkei has prepared and implemented this written O&M Plan for the furnace process operations and control equipment to ensure that the melting furnaces are operated within the established operating limits and the particulate matter emissions remain below the required facility limits. The operating and documentation procedures established by this O&M Plan will satisfy the permit requirements and provide a compliance basis for the facility.

5.1 Monitoring Procedures – Furnaces

The facility will keep records of the amount of aluminum charged to the three furnaces on an hourly basis to provide a compliance basis for the monitoring parameters. The ingot charged to the Melt Furnaces are of known weight; therefore, the operators will keep a log of the number of ingots placed into the furnace melt chambers. Additional charges to the furnaces include molten aluminum from the Chip Melter and runaround off-specification cast wheels. These charge amounts are also part of the charge logs kept by the Plant. Each time materials enter the furnace, the time is recorded so that the

hourly charge rate can be calculated to verify compliance with the allowable charge rate limits. This process will also result in the logging of daily operation hours for the furnaces.

The facility will read and log the furnace gas meters on a daily basis so the associated natural gas consumption volumes can be calculated and recorded. Published gas heating values are obtained from the commercial gas supplier and the natural gas volumes consumed in each furnace are multiplied by these heating values and then divided by the logged furnace operating hours for that day to determine the hourly heat input rate for comparison to the allowable heat input rates.

Enkel maintains appropriate log forms for documentation of the recorded charge and fuel consumption rates as part of the overall quality management system implemented at this facility. These log forms include procedures for the calculation of the attendant monitoring parameters and support ongoing comparison of the parameters against the permit limits. Separate forms are completed for each furnace and are maintained by the furnace operators.

5.2 Monitoring Procedures – Furnace Baghouses

Standardized work charts have been developed for the proper operation of the furnace baghouses. The baghouse forms used are as recommended by the equipment manufacturer are standard in the industry. In addition, periodic monitoring of the physical condition of the dust collector will allow timely repair or replace of any damaged components, thus minimizing downtime and maintaining optimum system performance. General and specific operational checks as recommended by the unit manufacturer include the following:

General

1. Periodically check the positive displacement pump components and replace filters as required to maintain blower pressure rating. Check rotation of cleaning arms.
2. Monitor pressure drop across filters. Abnormal changes in pressure drop may indicate a change in operating conditions and possibly a fault that needs to be corrected.
3. Monitor exhaust for visible emissions. Any indication of visible emissions must be investigated and rectified as soon as possible to avoid a violation of the emission limit. Furnace operations may need to be suspended until the cause for the visible emissions is addressed.
4. Monitor the dust disposal receptacle and arrange for proper disposal of the collected dust.

Weekly

5. Check that pressure drop is within normal operational range (from 1 to 6 inches water column).
6. Check for proper air pressure at the reservoir (7.5 pounds per square inch gauge).
7. Check for proper lubricant level in positive displacement blower.
8. Record the differential pressures across the baghouses weekly.
9. Conduct visual inspection of the baghouse filters weekly per the manufacturer's recommendations and replace filters as necessary.

Quarterly

10. Check condition of the clean-air plenum. If dust accumulation is present, check filter bags for wear, tears or loose seals. Replace as necessary.

11. Check solenoid and diaphragm valve operation.
12. Check door seals and replace as necessary. Check cleaning arm drive chain and positive displacement blower belt tension.
13. Check positive-displacement blower and gear reducer oil levels. Add oil through breather mounting holes or other oil fill locations. Reference the blower owner's manual for proper lubricant.
14. Check the rotating arm manifold drive gear reducer oil level. Add oil through breather mounting holes or other oil fill locations. The gear reducer is filled with synthetic oil. See reducer manual for recommended lubrication type and quantity. When checking or replacing the oil, make sure to check both housings of the double reduction reducer. Each housing has its own vent, fill and drain plug

Annually

15. Complete detailed inspect of the emission collection, capture, and transport systems per the manufacturer's recommendations.

Enkei maintains appropriate log forms to document the completion of and findings from the various baghouse inspections as part of the overall quality management system implemented at this Plant. Separate forms are completed for each baghouse and are maintained by the furnace operator. Maintenance driven by the inspection findings, as well as preventative maintenance, is completed in accordance with the manufacturer's recommendations and is usually completed by an outside vendor qualified to service similar fabric filter control devices.

5.3 Monitoring Procedures – Chip Melter Scrubber

The DeVansco unit is designed to operate effectively with minimal operator intervention. However, a proactive program of periodic monitoring of the unit by operations or maintenance personnel will serve to minimize unscheduled or nuisance shutdowns due to operating problems. Two items of instrumentation are available to monitor the performance of the DeVansco unit, including:

1. The exhaust fan ammeter measuring the values and characteristics of the electrical current draw on the fan motor, and
2. The manometer measures the air pressure losses through the unit and the pressure remaining for cleaning.

In addition, periodic monitoring of the physical condition of the scrubber will allow timely repair or replace of any damaged components, thus minimizing downtime and maintaining optimum system performance. General and specific operational checks as recommended by the unit manufacturer include the following:

Daily

1. Inspect the general condition of the unit to note anything unusual in its condition or operation, such as physical damage to the equipment or inlet or outlet ductwork or water leakage.
2. Check and document the pressure drop across the scrubber. Abnormal changes in pressure drop may indicate a change in operating conditions and possibly a fault that needs to be corrected.

3. Conduct observations of the stack and areas adjacent to the stack to determine if droplet re-entrainment is occurring from an improperly operating mist eliminator. Indicator signs include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack.
4. Observe the fan and recirculation pump operation including unusual noise (i.e., excessively loud or a rolling drone sound), vibration (e.g., the feel of more energetic vibration when touching the scrubber housing), or bearings running hot.

Weekly

5. Carefully observe the condition of the venturi section of the unit. Make note of the venturi gap in inches and the condition of the transparent access/inspection doors.
6. Verify that the moisture eliminators are correctly oriented (i.e., pointing towards the venture).
7. Observe the presence of solids build-up on the moisture eliminators and venturi or shed plate. Anything more than a light build-up of solid indicates that cleaning is required.
8. Check liquid pressure gauges on supply headers to the scrubber to monitor for problems such as nozzle pluggage, header pluggage, and nozzle erosion. Pluggage problems are indicated by higher than normal pressures and erosion problems are indicated by less than normal pressures.
9. Observe the water level in the recirculation tank to confirm that it is approximately 4 inches below the tank top when the unit is shutdown.

Quarterly

10. Observe the water recirculation system carefully to note if the overall water volume appears normal, reduced, or erratic. Observe whether the water distribution across the venturi is normal, obstructed, or has void(s) in the flow pattern.
11. Inspect water surface in the recirculation tank to identify if the observed turbulence is normal or if the water surface appears foamy or oily. Normal turbulence may carry water up to and into lower set of moisture eliminators, but not into the upper set of moisture eliminators.
12. Observe the scraper conveyor operation including air leaks at the conveyor outlet (indicating low tank water level), erratic conveyor chain motion erratic, unusual noise, or visible wear or missing parts on the conveyor.
13. Conduct a walk-around inspection of the entire system to search for leaks.

Annually

14. Complete detailed internal inspect of the scrubber per the manufacturer's recommendations. This inspection will specifically check the unit for signs of:
 - corrosion and erosion
 - solids accumulation in mist eliminators
 - plugged or eroded spray nozzles

Enkei maintains appropriate log forms to document the completion of and findings from the various scrubber inspections as part of the overall quality management system implemented at this Plant. Maintenance driven by the inspection findings, as well as preventative maintenance, is completed in accordance with the manufacturer's recommendations and is usually completed by an outside vendor qualified to service similar wet scrubber control devices.

5.4 Monitoring Procedures – Monitoring Devices

Enkei is not required to install any specific continuous monitoring devices pursuant to either the operating permit or applicable regulations. The facility documents the process operations and natural gas usage as discussed above in order to provide a compliance basis. The continued operation of the control measures within ranges of specified indicators of performance such as process parameters (charge rate) and recording the natural gas consumption are designed to provide a reasonable assurance of compliance with applicable requirements.

6.0 CORRECTIVE ACTION FOR EMISSION UNIT DEVIATIONS

The following corrective actions shall be taken when the melt furnaces, baghouses, or wet scrubber operating parameters deviate from the values or ranges established:

1. Determine and record the cause of the deviation or excursion,
2. Record the time of the deviation or excursion began and ended;
3. Record the corrective actions taken;
4. Record the time corrective action was initiated; and
5. Record the time/date corrective action was performed.

In the event that the melt furnaces, baghouses, or wet scrubber operating parameters deviate from the value or range established Enkei will implement the corrective actions indicated below. Operating personnel will mark the appropriate operational or inspection logs with any deviations that are recorded.

Table 3 - Corrective Actions

Parameter	Acceptable Range	Corrective Actions Taken
Natural Gas Combustion	Furnace heat inputs shall not exceed: – 3.81 MMBtu/hour – Melt Furnaces – 1.2 MMBtu/hour – Chip Melter (Exceedance of the values is unlikely as these are the design rating for the furnace burners.)	Make changes in production schedule to reduce natural gas usage rates below the acceptable limit. Report exceedances of the permit limit to the City of Jacksonville within 30 days.
Aluminum Charge	Aluminum charge rates shall not exceed: – 2,200 lbs/hour – Melt Furnaces – 704 lbs/hour – Chip Melter	Make changes in production schedule to reduce charge rates below the acceptable limit. Report exceedance from permit requirements to City of Jacksonville within 30 days.

Parameter	Acceptable Range	Corrective Actions Taken
Stack Opacity	Opacity shall not exceed 5 percent (5%) using EPA Reference Method 9.	Visible emissions observed during routine inspections may indicate an operational problem with the baghouse and will be investigated and rectified quickly. Correct operational problem with melting furnace or shut down if problem is not correctable. Report Method 9 exceedances of the permit requirements to City of Jacksonville.
Baghouse	Differential pressure across the filter bags should normally be between 1 and 6 inches water column (wc).	Initiate inspection procedures to identify operational issues resulting in differential pressures that exceed 6 inches wc. Properly maintain equipment and replace filter media as appropriate.
Scrubber	Differential pressure across the scrubber should normally be between 20 and 24 inches wc.	Initiate inspection procedures to identify operational issues resulting in differential pressures outside the normal range.

The facility is committed to take timely corrective action during periods of excursion where the indicators are out of range or a monitored abnormal condition is determined to exist. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the City of Jacksonville.

7.0 DOCUMENTATION OF WORK PRACTICES/POLLUTION PREVENTION

Enkei will document the work practices and pollution prevention measures implemented to achieve compliance with the applicable emission limits established for each process and control device as specified in this site specific O&M Plan. All documentation will be maintained on site for a period of five (5) years and provided to the City of Jacksonville as requested.