

300°F.

The burners on each oven average approximately 1.0 MMBtu/hr, and the emissions are vented uncontrolled through the roof of the building out a stack. Based on the fact that the 4 baking/drying ovens are not used to burn waste material but rather to dry and bake the motor parts at lower temperatures, they are not subject to a specific state regulation or any other unit specific applicable requirement. Therefore, the ovens have been determined to be exempt from permitting pursuant to Rule 62-210.300(3)(a)33., F.A.C., and have been added to the process description for reference.

During a review of the application, it was also noted that there was an inconsistency in the ratings of the Bayco Burnout Ovens (EU01-02) compared to the values listed under the Emission Unit ID section in the current permit. Based on a review of the two ovens, it appears that the ratings were inadvertently “flip-flopped” in a previous permit; therefore, the descriptions have been corrected with this renewal.

Annual visible emission testing was confirmed on each emission unit as required by the current permit. The surface coating operation (EU07) is permitted separately under Permit No. 0570061-011-AC, which expires on February 16, 2014.

Based on our review, we recommend the above referenced permit be issued as drafted.

JDS: 0570061-014-AO

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

Mr. James A. Turner
President & CEO
Tampa Armature Works, Inc.
6312 78th Street
Riverview, FL 33578

File No.: 0570061-014-AO
County: Hillsborough

Enclosed is Permit Number 0570061-014-AO for the renewal of the current minor source operating permit (Permit No. 0570061-013-AO) at an electric motor re-building facility, issued pursuant to Section 403.087, Florida Statutes. Please read this new permit thoroughly as there are changes from the previous permit.

The EPC will issue the final permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57 F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr, Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of receipt of this permit. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication.

A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute

a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the F.A.C.

A petition that disputes the material facts on which the EPC's action is based is required to contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number if known;
- (b) The name, address, and telephone number of the petitioner and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the EPC's determination;
- (c) A statement of how and when the petitioner received notice of the EPC action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the EPC's proposed action;
- (f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the EPC's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition, this order will not be effective until further order of the EPC.

Any person listed below may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, and all other materials available to the EPC that are relevant to the permit decision.

Tampa Armature Works, Inc.
Riverview, FL 33578

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Interested persons may contact Diana M. Lee, P.E., at the above address or call (813) 627-2600, for additional information.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr, Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION
COMMISSION OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director

RDG/JDS/jds

Attachment

cc: Florida Department of Environmental Protection (via email)
Donald P. Chrosniak, Tampa Armature Works, Inc.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on _____ to the listed persons.

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

Clerk

Date

PERMITTEE:
Tampa Armature Works, Inc.
440 South 78th Street
Tampa, FL 33619

PERMIT/CERTIFICATION
Permit No: 0570061-014-AO
County: Hillsborough
Expiration Date: May 11, 2017
Project: Electric Motor Re-Building Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the EPC and made a part of hereof and specifically described as follows:

For the operation of an electric motor re-building facility. Electric motors are brought into the facility to be rebuilt. The motors are dismantled, removing the stators from the frames. As necessary, the stators and frames are steam-cleaned to remove dirt and other particles that may have accumulated during previous operation. In order to help remove the resin coating on the stator wires, the stators are placed in one of three burnout (aka bake-off) ovens and cooked. Sometimes, the frames are also put into the ovens to help remove paint. The burnout ovens are a Steelman oven to process large motors, a Bayco BB-536 oven to process small/midsize motors, and a Bayco-42 oven to process small motors. These natural gas-fired ovens are heated to about 750°F to bake off the resins from the stator wiring. Each oven has a natural gas-fired afterburner and exhausts to the atmosphere through a vertical stack. The Bayco oven afterburners operate at a minimum of 1200°F and the Steelman oven afterburner operates at a minimum of 1400°F. At startup of the bake-off process, the burners for the oven and the afterburner are fired and then heated to their minimum operating temperatures. The oven remains around 750°F for the cycle and the afterburners are maintained at their minimum required temperature or higher during the cycle. The cycle for the smaller ovens may be up to 8 hours, while the Steelman cycle may be up to 50 hours. Small water nozzles are also present in the ovens to control temperature and to suppress any flames that may occur during operation.

After the stators are removed from the ovens and cooled down, the insulated wiring is removed from the stators and the copper wire is stripped from the insulation. This stripping process is conducted primarily in a partially enclosed area (EU03 – Teardown Room) in front of the Steelman Oven so particulate matter that's generated during this work is captured and exhausted to a DustKop Baghouse (Model No.FH58-3D) located outside on the north side of the building. A smaller teardown area used for small motors is located next to the Bayco-42 oven and is exhausted to the atmosphere after passing across a filter. Its operation was determined to be exempt from permitting due to its low level of emissions.

The motor frames are placed in a blasting booth (EU05) to remove old paint, rust and other materials like concrete. The blasting material may be walnut shells, slag (i.e. Black Beauty), or sand. The blasting

rate is approximately 644 lb/hr based on the test conducted in December 2006. Typically, actual blasting time is about 1/3 of the total time spent. The rest of the time is spent moving the motor frame and repositioning around the motor to cover all sides. The blasting media is recycled until the particle size is too small to be effective. Then some of the media is removed and new media is added. The particulate matter emissions from the blasting are controlled by a Pangborn baghouse, Type CM, Model No. C40 #222K076-662, located outside the east side of the building. A small blasting cabinet also vents to that baghouse.

Motors typically require glass fiber polyester laminate strips to be added as spacers for the windings. The strips are normally received about 36" in length and often cut to fit each motor. The strips are ground on the edges and cut as needed so they can be fitted into the motors. The cutting and grinding occur in the Grinding Room (EU04) where particulate matter emissions from multiple machines are controlled by a Torit Baghouse, Model No. 84-55, located outside the north side of the building.

Once the stators are rewound, they are coated with a resin by dipping them into a tank with resin and solvent. The motor frames are prepared and painted. The painting is done in a paint booth with filters to control overspray. Emissions from solvent usage and surface coating are limited through a separate operating permit.

Also present in the building are four natural gas-fired baking/drying ovens used to bake stators after dipping in the resin or used to dry stators, rotors, and frames after initial washing/steam-cleaning. Two of the ovens (1- Bayco, 1-DESPATCH) are located in the center of the building and handle the smaller motors. The other two (both DESPATCH models) are located on the north side of the building and handle the larger motors. These ovens operate at much lower temperatures than the burnout ovens, typically 300 F. The burners on each oven average approximately 1.0 MMBtu/hr, and the emissions are vented uncontrolled through the roof of the building out a stack. Since the baking/drying ovens are not used to burn waste material but rather to dry and bake the motor parts at lower temperatures, the ovens were determined to be exempt from permitting pursuant to Rule 62-210.300(3)(a)33., F.A.C.

Location: 440 South 78th Street, Tampa

UTM: 17-365.7 E 3091.8 N

FACILITY ID NO: 0570061

Emission Unit (EU) ID:

- EU 01 - Bayco Burnout Oven (Model No. BB-536, max heat input rate of 1.94 MMBtu/hr)
- EU 02 - Bayco Burnout Oven (Model No. BB-42, max heat input rate of 0.97 MMBtu/hr)
- EU 03 - Teardown Room (DustKop Baghouse, Model No.FH58-3D)
- EU 04 - Grinding Room (Torit Baghouse, Model No. 84-55)
- EU 05 - Blasting Operation (Pangborn Baghouse, Type CM, Model No. C40 #222K076-662)
- EU 06 - Steelman Burnout Oven (Model No. 101112 BA, max heat input rate of 2.15 MMBtu/hr)

Reference Permit Nos.: 0570061-012-AC and -013-AO

PERMITTEE:
Tampa Armature Works, Inc.

PERMIT/CERTIFICATION NO.: 0570061-014-AO
PROJECT: Electric Motor Re-Building Facility

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
4. As requested by the permittee, in order to limit the potential to emit, and to exempt the facility from PM RACT, the maximum particulate matter emissions for each of the following emission units shall not exceed the following:
[Rules 62-210.200(Potential to Emit), 62-296.700(2)(a), and 62-4.070(3), F.A.C.; and Permit No. 0570061-012-AC]

Source	Flow Rate (dscfm)	Allowable (gr/dscf)	PTE PM (TPY)
EU 05: Blasting Operation (Pangborn Baghouse)	7,510	0.03	3.0
EU 03: Teardown Room (DustKop Baghouse)	6,200	0.03	3.2
EU 04: Grinding Room (Torit Baghouse)	780	0.03	0.4

5. Visible emissions from the burnout ovens shall not exceed 5% opacity except that visible emissions not exceeding 15% opacity are allowed for up to six minutes in any one hour period. [Rule 62-296.401(1)(a), F.A.C.]
6. Visible emissions from the grinding room, teardown room, and blasting operations shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]
7. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
8. In order to demonstrate compliance with Specific Condition Nos. 4, 5, and 6, the following limits shall apply: [Rules 62-210.200(Potential to Emit), 62-4.070(3) and 62-210.300(2)(a)1., F.A.C.; and Permit Nos. 0570061-002-AO and 0570061-012-AC]

- A) EU 01: Bayco BB-536 Oven:
 - average of 1,500 lbs-stators/hr
 - maximum of 2,340 ton-stators per 12 consecutive months
 - maximum operating hours of 3,120 hr/yr

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- B) EU 02: Bayco BB-42 Oven:
 - average of 150 lbs-stators/hr
 - maximum of 234 ton-stators per 12 consecutive months
 - maximum operating hours of 3,120 hr/yr
- C) EU06: Steelman Oven:
 - average of 1,500 lbs-stators/hr
 - maximum of 6,570 ton-stators per 12 consecutive months
 - no limits on operating hours
- D) EU 05: Blasting Operation:
 - blasting media: walnut shells, slag (i.e. Black Beauty) or sand
 - maximum of 1,004 ton-blast media per 12 consecutive months
 - maximum operating hours of 3,120 hr/yr
- E) EU 04: Grinding Room:
 - maximum of 36 glass fiber polyester (strips)/hr
 - maximum of 144,000 strips per 12 consecutive months
 - maximum operating hours of 4,000 hr/yr
- F) EU 03: Teardown Room:
 - maximum of 300 lbs/hr of wire
 - maximum operating hours of 4,000 hr/yr
- G) Only natural gas shall be used as fuel for the burnoff ovens and afterburners.

9. To ensure compliance with the limitations in Specific Condition Nos. 4, 5, and 6, the following restrictions and conditions shall apply: [Rules 62-210.700 and 62-4.070(3), F.A.C.; and Permit No. 0570061-002-AO]

- A) Minimum afterburner temperature: 1200°F (Bayco Ovens) and 1400°F (Steelman Oven).
- B) Fuel: Natural gas.
- C) Ensure that all emissions from the furnaces vent through the corresponding afterburner chamber.
- D) No solvent cleaning of the stators is allowed.
- E) Remove any PVC coated wire from stators before placing stator in the oven.
- F) All emissions from the blasting, grinding and teardown operations shall be vented to their corresponding baghouse at all times during their operation.

10. Test the exhaust of each emission unit for visible emissions annually during each federal fiscal year (October 1 - September 30), with a target date of December 4th. For the blasting, grinding and teardown operations, the observations shall be at the baghouse exhaust or the point of highest opacity. The EPA Method 9 test observation period on the ovens/afterburners shall be at least 60 minutes in duration, and at least 30 minutes on the teardown, grinding and blasting operations. Two copies of each test data shall be submitted to the Air Management Division of the Environmental Protection Commission of Hillsborough

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SPECIFIC CONDITIONS:

County within 45 days of testing. Testing procedures shall be consistent with the requirements of Rule 62-297, F.A.C. [Rules 62-297.310 and 62-4.070(3), F.A.C.]

11. Testing of emissions shall be conducted with the sources operating at capacity. Capacity is defined as 90-100% of the maximum permitted operating rate. The permitted rates are listed in Specific Condition No. 8. For the blasting operation, capacity is defined as continual blasting of parts within the booth, as much as practical. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310, F.A.C.]

12. Compliance with the emission limitations of Specific Condition Nos. 4, 5, and 6 shall be determined using EPA Methods 1, 2, 4, 5, and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A.

13. The permittee shall install, maintain, and operate a temperature measuring device with an accuracy of 10% or better to register the temperature at each burnout oven afterburner chamber.
[Rule 62-4.070(3), F.A.C.]

14. In order to demonstrate compliance with Specific Condition No. 8, the permittee shall maintain records of operation for the previous three (3) years. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state, or federal air pollution agency upon request. The records shall include, but are not limited to the following: [Rules 62-4.070(3) and 62-4.160(14)(b), F.A.C.]

- A) Daily operating hours in the blasting booth, teardown room and grinding room (hrs/day);
- B) Monthly total of tons of stators processed for each oven. Tons of resin may be given for the Steelman oven;
- C) Monthly operating hours of the Bayco ovens;
- D) Monthly throughput totals and operating hours for the blasting booth, teardown room and grinding room;
- E) Rolling consecutive 12-month totals of B), C) and D) above;
- F) Time, date, and duration of oven usage while the afterburner temperature is below the temperature specified in Specific Condition No. 9.A).

15. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of

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SPECIFIC CONDITIONS:

pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

16. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

17. The pollution control equipment (afterburner chamber and baghouses) shall be maintained in good repair to perform adequately the function for which it was intended. Maintenance shall include, but is not limited to, bi-weekly inspections and replacement or repair of faulty equipment when necessary or as required by the manufacturer.

- A) The Operation and Maintenance (O&M) Plan (see Attachment A) for EU Nos. 01, 02, 03, 04, 05 and 06 is attached as part of this permit. The permittee shall operate and maintain the control devices according to the O&M Plan and manufacturer's manuals. [Rule 62-4.070(3), F.A.C.]
- B) Any maintenance/repair performed should be recorded. Records shall be maintained for the most recent 24-month period and made available for inspection upon request. [Rule 62-4.070(3), F.A.C.]

18. All reasonable precautions shall be taken to prevent emissions of particulate matter. Reasonable precautions shall include, but not be limited to, the following:
[Rules 62-296.320(4)(c) and 62-4.070(3), F.A.C.]

- A) Preheat and maintain the minimum required temperature in the afterburner (Specific Condition No. 9.A) prior to and during the introduction of a charge.
- B) Maintain oven doors as sealed as possible during operation of the ovens. Maintain a negative pressure, if possible.
- C) Remove the copper coils and windings only after all the resin residue and other combustibles have been burned off.
- D) Exercise good housekeeping practices at all times.

19. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200, F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

- A) Alteration or replacement of any equipment or major component of such equipment.
- B) Installation or addition of any equipment which is a source of air pollution.

20. The permittee must submit to the Environmental Protection Commission of Hillsborough County each

PERMITTEE:
Tampa Armature Works, Inc.

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calendar year, a completed DEP Form 62-210.900(5), "Annual Operating Report (AOR) for Air Pollutant Emitting Facility", for the preceding calendar year. The AOR shall be submitted by April 1 of the following year. [Rule 62-210.370(3), F.A.C.]

21. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

22. Prior to sixty days before the expiration of this operating permit, the permittee shall apply for a renewal of the permit using the current version of the permit renewal application form. A renewal application shall be timely and sufficient. If the application is submitted prior to sixty days before the expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the EPC or, if there is court review of the final agency action, until a later date is required by Section 120.60, Florida Statutes. [Rule 62-4.090, F.A.C.]

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director