

are each controlled by a 1,400 DSCFM baghouse. When the construction permit application was submitted, Chromalloy intended that the three baghouses controlling the blasting cabinets vent outdoors. However, when the units were built, they were built so that the baghouses vent indoors. Because the baghouses vent indoors and because potential PM emissions from each blasting and sanding cabinets are less than 1.0 tons/year, these units are exempt from PM RACT per Rule 62-296.700(2)(c), F.A.C. In addition, because the combined potential PM emissions from all of the blasting and sanding cabinets controlled by the baghouses at the facility are less than 5.0 tons/year, these sources are exempt from permitting per Rule 62-210.300(3)(b)1., F.A.C.

The material usage, density, and the VOC content of the materials used in the core making process may vary provided that the maximum VOC emissions from this operation do not exceed 19.5 tons/year. The increase in VOC emissions from the core making process results in a facility-wide potential VOC emissions of 30.2 tons/year. In addition, because the baghouses were determined to be exempt from permitting, the facility-wide potential PM emissions decrease from 21.8 tons/year to 10.7 tons/year. Therefore, the facility is no longer subject to PM RACT and Rule 62-296.712, F.A.C. - Miscellaneous Manufacturing Process Operations because potential PM emissions from the facility are less than 15 tons/year and 5 lbs/hour.

On June 15, 2012, the facility performed VE testing on the two new wax burn-off ovens with afterburners. The tests were determined to be in compliance with the opacity standard specified in Permit No. 0571408-003-AC.

The facility is subject to 40 CFR 63 Subpart ZZZZZZ— National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries. However, since the State has not adopted this Rule, the only reference to this federal regulation is in the process description.

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

LAW: 0571408-005-AO

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

Stephen Misuraca
Environmental, Health, and Safety Manager
Chromalloy Castings Tampa Corporation
3401 Queen Palm Dr.
Tampa, Fl 33619

File No.: 0571408-005-AO
County: Hillsborough

Enclosed is Permit Number 0571408-005-AO to operate a metal casting product manufacturing facility, which includes a core making process. This permit is 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. 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/LAW/law

cc: Florida Department of Environmental Protection, Southwest District (via email)
Omana Antony Taylor, P.E. (via email)

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:
Chromalloy Castings Tampa Corporation
3401 Queen Palm Dr.
Tampa, FL 33619

PERMIT/CERTIFICATION
Permit No: 0571408-005-AO
County: Hillsborough
Expiration Date: April 17, 2017
Project: Metal Casting Product Manufacturing

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:

This permit is being issued to incorporate the operation of a core making process at a metal casting product manufacturing facility. The metal casting product process begins with wax injection molding. Casting molds are injected with wax and stored inside the building to allow for cooling. Once cooled, the molds are dipped into a tank containing a VOC based solvent to clean the mold. The molds are then covered with sand or stucco using an automated system to create a ceramic covering over the wax mold.

Once the ceramic covering has dried, the molds are put into one of two electric powered steam autoclaves which use high temperatures to melt the wax out of the mold. The autoclaves are exempt from permitting because the wax is not volatilized, therefore, there are no emissions associated with the autoclaves. To burn off any residual wax which may remain inside of the mold, the molds are placed in one of four identical, natural gas fired 1.0 MMBtu/hr Pacific Kiln wax burn-off ovens. Two of the burn-off ovens have their own afterburners rated at 1.0 MMBtu/hr each and the remaining two burn-off ovens share one afterburner rated at 0.75 MMBtu/hr.

In some of the molds, there is an additional ceramic piece(s) in the interior of the mold called a core. The core is used to create a void or hollow space inside of the mold when the molten metal is poured into the ceramic mold. The ceramic core, which is partially covered with metal when the metal is poured into the ceramic mold, is grit blasted, cut, sanded, or leached out so that the finished metal part has a void or hollow spot within the part.

The ceramic cores are made using either of two distinct processes. The first process is called the Injection Molded Core Process. In this process, wax and ceramic are mixed together and injected into a core casting mold which is enclosed in a box called a sagger. The sagger is placed in one of

two, natural gas fired, 3.0 MMBtu/hr wax burn-off ovens to burn off the wax. Each wax burn-off oven is controlled by one 0.8 MMBtu/hr afterburner. The ceramic core is then removed from the sagger, inspected, and grit blasted, sanded, or cut as needed within two enclosed booths. Each booth has its own 1,400 DSCFM baghouse which vent inside of a partially enclosed area. The core is then dipped in a water and polyvinyl alcohol mixture, which helps to increase the tensile strength of the ceramic core. The finished core is then placed inside of the ceramic casting mold and the mold continues through the metal casting product process described below.

The second process used to make the cores is called the Alternate Core Process. This process begins by mixing an alcohol based binder and ceramic to make a slurry. The slurry is pumped to a hopper and pressed into a die in the shape of the core. The alcohol based binder is added to the ceramic to ensure that the ceramic material is soft enough to be pressed into the die. The core is then ignited with a torch to burn off the alcohol. The ceramic core is then placed in one of the two wax burn-off ovens described above to burn off any residual wax or binder. The ceramic core is then dipped in a liquid mixture of silica and sodium (colloidal silica) to improve the strength of the core. The core is then once again placed in one of the two wax burn-off ovens to burn off any moisture that may remain in the core.

After the wax burn-off ovens, the core is placed in one of three enclosed booths to be cut or grinded as needed. One booth is controlled by a 7,000 DSCFM baghouse and the other two booths are each controlled by a 1,400 DSCFM baghouse for a total of two 1,400 DSCFM baghouses. These three baghouses vent indoors. The core is then dipped in the water and polyvinyl alcohol mixture. The finished core is then placed inside of the ceramic casting mold and the mold continues through the metal casting product process described below.

The molds, which may contain one or more cores, are placed in one of four natural gas fired pre-heat ovens which heat the mold to a uniform temperature in order to prevent the mold from cracking when cast. Three of the pre-heat ovens are rated at 4.0 MMBtu/hr and the fourth pre-heat oven is rated at 1.0 MMBtu/hr. The mold is then moved into one of eight vacuum furnaces where metal ingots are melted down and the molds are filled with molten metal. The parts are then removed from the furnaces and sprinkled with a chemical referred to as "hot top" which is used to help ensure that the part cools at a uniform rate. For small parts, the molds may be cast by one of two roll over furnaces where metal is melted inside the furnace, a mold is placed on top of an opening at the top of the furnace, and the furnace is manually turned upside down so that the molten metal falls into the mold. Once cast, the molds from all of the furnaces are moved to an adjacent area where they are left for several days to cool. The facility uses natural gas for fueling the wax burn-off ovens and the pre-heat ovens. The vacuum furnaces and the rollover furnaces are electric powered and are exempt from permitting pursuant to Rule 62-210.300(3)(b)1., F.A.C.

Once the mold has cooled, the parts are separated, grit blasted, and buffed to ensure that all of the ceramic and the core(s) is removed from the metal part. There are a maximum of fifty blasting and/or buffing cabinets which vent to a maximum of thirty-one baghouses. The baghouses exhaust inside a partially enclosed process area. These emission sources, as well as the blasting and sanding cabinets associated with the core making process described above, which are also controlled by baghouses, are all exempt from permitting per Rule 62-210.300(3)(b)1., F.A.C. because the combined potential PM emissions from all these sources are less than 5.0 tons/year.

In addition to grit blasting the metal part to remove the ceramic core, the finished parts may be placed in one of two heated tanks. The tanks contain sodium hydroxide, which in combination with high temperatures and pressures, is used to leach the core out of the finished part. Each tank has one natural gas fired heater that is rated at 0.875 MMBtu/hr. The heaters are exempt from permitting per Rule 62-210.300(3)(a)33., F.A.C. because the rated heat input capacity of each heater is less than 10 MMBtu/hr.

After being grit blasted and/or buffed, a portion of the parts are dipped in several types of acids in the acid cleaning room to determine the grain characteristic of the part. An 11,000 ACFM AAT, Inc., Orion Model 11V-IS-P, Packed Bed Scrubber with a mist eliminator controls particulate matter and acid mist emissions from the acid cleaning room.

The metal parts are then placed into one of six vacuum heat treat ovens which use negative pressure and heat to harden the part. The heat treat ovens are electric powered and no melting of metal occurs in the ovens. Therefore, the heat treat ovens are exempt from permitting because there are no emissions associated with them. The finished parts are then inspected using several nondestructive means (magnetic tester and x-ray). The parts are also inspected using a fluorescent penetrate process. The parts are dipped in penetrate, covered with a developer, and then inspected under a black light for flaws, defects, or residual ceramic.

In some metal parts, ceramic may still remain on or inside the part. If the parts need any final cleaning or touch-up, they are moved to a separate staging area where the parts are inspected, hand sanded or cleaned, and re-inspected. If the part is off-spec or the metal part needs additional machining, three XERMACH electro discharge machines (EDM) are used. Each EDM machine is rated at 3 inches per hour for machining. The EDM machines are exempt from permitting pursuant to Rule 62-210.300(3)(b)1., F.A.C.

The facility is subject to 40 CFR 63 Subpart ZZZZZZ— National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries. This NESHAP has not been adopted by the State of Florida.

The facility also has a 2,400 HP, diesel fired, emergency generator that is categorically exempt from permitting pursuant to Rule 62-210.300(3)(a)35., F.A.C. provided that the fuel usage of the generator does not exceed 64,000 gallons/year of diesel fuel.

The facility also conducts lab testing and research at a warehouse located near the main facility. The lab is located at 3409 Cragmont Drive, Tampa, FL 33619. Based on information provided by the permittee, the lab is exempt from permitting pursuant to Rule 62-210.300(3)(b)2., F.A.C. because the emissions from the lab testing and research were estimated to be less than 2.5 tons per year of total hazardous air pollutants; less than 25 tons per year of carbon monoxide, nitrogen oxides and sulfur dioxide; and less than 10 tons per year of any other regulated pollutant.

Below is a list of the make and model number of all furnaces at the facility and a description of the regulated emission units.

Type of Furnace	Manufacturer	Model No.
Burn-Off Ovens	Pacific Kiln	FFDWS-9487236D8
Burn-Off Ovens	Pacific Kiln	FFDWS-6487236D8

Burn-Off Ovens	Pacific Kiln	PBF-CB-727252NG
Type of Furnace	Manufacturer	Model No.
Burn-Off Ovens	Pacific Kiln	PBF-CB-727252NG
Burn-Off Oven	Harrop	GF-SG-38/36/72-3000-2600
Burn-Off Oven	Harrop	GF-SG-48/48/96-3000-2450
Preheat Furnace	Pacific Kiln Pusher	1119-248
Preheat Furnace	Pacific Kiln Pusher	1298-241
Preheat Furnace	Pacific Kiln Pusher	0598-234
Preheat Furnace	Pacific Kiln Pusher	PBF-104-NG-HT
Vacuum	Retech	010139-9-1/260
Vacuum	Retech	010337
Vacuum	Retech	011950-15-1
Vacuum	Ajax	M-06-31414-TFK
Vacuum	DS	419988-JEE
Vacuum	Retech	300
Vacuum	Retech	300
Vacuum	Retech	300
Rollover	Inductotherm	N/A
Rollover	Inductotherm	N/A

Emission Unit Nos. and Descriptions:

EU ID No.	Description	Total Quantity	Control device
001	Dip Tank	1	None
002	Wax Burn-Off Ovens	6	Two 1.0 MMBtu/hr afterburners; One 0.75 MMBtu/hr afterburner; and Two 0.8 MMBtu/hr afterburners
005	Finished Parts Inspection Process	1	11,000 ACFM AAT, Inc., Orion Model 11V-IS-P, Packed Bed Scrubber with a mist eliminator
008	Core Making	--	None
009	Natural Gas Combustion in the Pre-heat Ovens and Wax Burn-Off Ovens	4	None

Location: 3401 Queen Palm Dr., Tampa, Fl 33619

UTM: 17- 349.00E and 3100.00N NEDS No: 1408

Replaces Permit No.: 0571408-004-AO

References Permit No.: 0571408-002-AC and 0571408-003-AC

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. 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.]
5. As requested by the permittee, in order to limit the potential to emit and establish the facility as a synthetic minor for VOC and Hazardous Air Pollutants (HAP), the following emission limitations shall apply per any twelve consecutive month period: [Rules 62-4.070(3) and 62-210.200, F.A.C. and Permit Nos. 0571408-002-AC and 0571408-003-AC]
 - A) The facility wide VOC emissions shall not exceed 30.1 tons/year.
 - B) The combined VOC emissions from the Dip Tank (EU No. 001) and the Finished Parts Inspection Process (EU No. 005) shall not exceed 10.0 tons/year.
 - C) The VOC emissions from the Core Making Process (EU No. 008) shall not exceed 19.5 tons/year.
 - D) The HAP, as defined in Rule 62-210.200, F.A.C., emissions shall be less than 10 tons for any individual HAP and less than 25 tons for any combination of HAPs.
6. The following restrictions and limitations shall apply in order to ensure compliance with Specific Condition No. 5: [Rule 62-296.320(4)(b)1., F.A.C., Ch. 1-3.52.1. and 2. of the Rules of the EPCHC, and Permit Nos. 0571408-002-AC and 0571408-003-AC]
 - A) Visible emissions from each pre-heat oven shall not exceed 20% opacity.
 - B) Visible emissions from EU Nos. 002 and 005 or any other activity at the facility shall not exceed 5% opacity.
7. The hours of operation of the facility are not limited. [Rule 62-4.070(3), F.A.C. and Permit Nos. 0571408-002-AC and 0571408-003-AC]
8. The following restrictions and limitations shall apply per any twelve consecutive month period in order to ensure compliance with Specific Condition No. 5: [Rule 62-4.070(3), F.A.C. and Permit Nos. 0571408-002-AC and 0571408-003-AC]
 - A) The maximum combined natural gas usage of the pre-heat ovens and the wax burn-off ovens (EU No. 009) shall not exceed 238 million cubic feet.
 - B) The ovens shall burn natural gas only or be electric powered.
9. The following restrictions and limitations shall apply for any twelve consecutive month period in

order to ensure compliance with Specific Condition Nos. 5, 6, and 8: [Rule 62-4.070(3), F.A.C. and Permit Nos. 0571408-002-AC and 0571408-003-AC]

A) Wax burn-off ovens with afterburners (Emission Unit No. 002)

- a. All casting molds shall be placed in an autoclave to remove the wax prior to being placed in the burn-off ovens to remove any residual wax.
- b. The following throughput and limitations shall apply to the wax burn-off ovens used in the casting molds process:
 - i. The throughput of each Pacific Kiln oven shall not exceed 1,600 lb/hour of molds.
 - ii. The number of molds placed in each oven per load shall not exceed 18 molds.
 - iii. The wax content of each mold shall not exceed 3% of the mold weight.
 - iv. The minimum destruction efficiency of each afterburner shall be 99%.
- c. The following practices shall be followed during the operation of each wax burn-off oven used in the casting molds process:
 - i. Preheat the afterburner chamber until it reaches a minimum temperature of 1,425°F prior to the initial charge upon startup.
 - ii. Maintain the afterburner temperature at a minimum of 1,425°F during operation, including during the charging operation.
 - iii. Observe the stack, furnace doors/openings, and seals for visible emissions at least once per shift. Make note of any problems and correct promptly.
 - iv. Record the temperature of each afterburner at least once per shift.
 - v. Turn on the afterburner during ash removal or cleaning of the burn-off chamber.
- d. The following throughput, limitations, and practices shall be followed during the operation of each wax burn-off oven used in the core making process:
 - i. The maximum combined throughput of wax in the two ovens shall not exceed 1,600 lbs/year.
 - ii. The minimum destruction efficiency of each afterburner shall be 99%.
 - iii. The afterburner temperature shall be maintained at a minimum of the temperature the afterburner was set at during the latest successful compliance demonstration.
 - iv. Observe the stack, furnace doors/openings, and seals for visible emissions at least once per shift. Make note of any problems and correct promptly.
 - v. Record the temperature of each afterburner at least once per shift.
 - vi. Turn on the afterburner during ash removal or cleaning of the burn-off chamber.

B) Finished Parts Inspection Process (Emission Unit No. 005)

- a. The maximum material usages for the acid cleaning room shall not exceed the following per any twelve consecutive month period:
 - i. Nitric acid: 12,000 pounds
 - ii. Acetic acid: 5,000 pounds
 - iii. Sulfuric acid: 100,000 pounds
 - iv. Ferric chloride: 60,000 pounds
 - v. Hydrochloric acid: 100,000 pounds
 - vi. Phosphoric acid: 40,000 pounds

- b. Minimum scrubber efficiency: 95 percent
- c. Operating scrubber liquid rate: 300 gallons/minute recirculation rate as recommended by the manufacturer
- d. During the cleaning operation (metals parts being dipped in the tanks) the room doors shall be shut.
- e. The scrubber shall be in operation while the cleaning operation is occurring.
- f. Once per shift, the operator shall record the scrubber pressure drop if the scrubber is in operation during that shift.

C) Core Making ((Emission Unit No. 008)

- a. The material usage, VOC content, and density of the materials used in the Core Making process shall not result in the operation emitting more than 19.5 tons of VOC emissions per twelve consecutive month period.

10. Test each Wax Burn-Off Oven (EU No. 002) and the Finished Parts Inspection Process (EU No. 005) for visible emissions annually (with a target date of November 4), once per federal fiscal year (October 1 – September 30). Submit two copies of the test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. The EPA Method 9 test for the emission units shall be a minimum of thirty (30) minutes in duration. Testing procedures shall be consistent with the requirements of Rule 62-297, F.A.C. [Rule 62-297.310(4)(a)2. and (7)(a)4.a., F.A.C. and Ch. 1-3.52 of the Rules of the EPCHC]

11. In addition to the testing requirements specified in Specific Condition No. 10, the following shall apply to EU No. 009. Two copies of the test data shall be submitted to the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. The EPA Method 9 test for the emission units shall be a minimum of thirty (30) minutes in duration. Testing procedures shall be consistent with the requirements of Rule 62-297, F.A.C. [Rule 62-4.070(3), F.A.C. and Permit No. 0571408-002-AC]

- A) Test each Pre-heat Oven for visible emissions if the combined natural gas usage of the Pre-heat Ovens is equal to or exceeds 99 million standard cubic feet (mmcf) during the corresponding fiscal year.
- B) Test each Pre-heat Oven for visible emissions at least 90 days prior to the expiration date of this permit.

12. Compliance with the emission limitations of Specific Condition Nos. 6, 10, and 11 shall be determined using EPA Method 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. [Rule 62-297.401, F.A.C.]

13. Testing of emissions shall be conducted with the source operating at capacity. For EU No. 002, capacity is defined as 90-100% of processing 18 molds per load per oven for the wax burn-off ovens associated with the casting mold process. In addition, capacity is defined as 90-100% of processing 65 pounds of wax per hour for the wax burn-off ovens associated with the core making process. For EU No. 005, capacity is defined as the scrubber being in operation and the cleaning operation occurring. For EU No. 009, capacity is defined as 90-100% of the rated capacity of 4.0 MMBtu/hr for three of the ovens and 1.0 MMBtu/hr for the fourth oven. 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, including the number of molds or wax processed during the test, the scrubber liquid flow rate (gpm), and the afterburner temperatures (°F), may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

14. 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.]

15. In order to demonstrate compliance with Specific Condition Nos. 5, 7, 8, and 9, the permittee shall maintain a monthly recordkeeping system. The records shall be maintained onsite for three years and shall be made available to any local, state, or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rules 62-4.070(3) and 62-4.160(14), F.A.C.]

- A) Month/Year
- B) The density, VOC content, and HAP content of the solvent wash used in the dip tank
- C) Amount of solvent wash used in the dip tank (gallons)
- D) The amount, density, and VOC content of each material used in the core making process
- E) Monthly VOC emissions from the core making process
- F) Number of molds per load processed through each wax burn-off oven used in the casting molds process
- G) Combined weight of wax processed through the wax burn-off ovens used in the core making process
- H) Combined natural gas usage of the wax burn-off ovens and the pre-heat ovens
- I) Amount of each type of acid used in the acid cleaning room tanks (lbs)
- J) Amount, density, and VOC content of each material used in the fluorescent penetrate process (gallons)
- K) The amount of diesel fuel used in the emergency generator (gallons)
- L) Monthly VOC emissions from the dip tank and the fluorescent penetrate process
- M) Rolling twelve month totals of C), D), E), and G) through L) above
- N) Record the observations specified in 9.A) c.iii and iv, 9.A) d.iv and v, and 9.B) g

16. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but not limited to, the following: [Rule 62-296.320(4)(c), F.A.C. and Permit No. 0571408-002-AC]

- A) Removal of particulate matter from paved areas, buildings, and work areas under the control of the owner/operator.
- B) Ensure that waste collected by the baghouse(s) is effectively contained and disposed of properly.

- C) Clean accidental spills promptly.
- D) Exercise good housekeeping at all times.
- E) Carefully place ash or residue from the burn-off oven chamber in a leak tight container and dispose of properly. Moisten ash/residue, if necessary.

17. 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 pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rules 62-297.310(7)(b) and 62-4.070(3), F.A.C.]

18. The permittee shall not store, handle, process, or use in any process the volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems as follows and as deemed necessary and ordered by the Environmental Protection Commission of Hillsborough County: [Rule 62-296.320(1), F.A.C.]

- A) Maintain tightly fitting cover, lids, etc. on all containers when they are not being handled, tapped, etc.
- B) Where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, etc. of VOC so that it can be covered when not in use.
- C) Immediately attend to all spills/waste as appropriate.

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(205), 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. 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.]

21. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before April 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3)(c), F.A.C.]

22. The scrubber and the afterburners associated with the wax burn off ovens shall be maintained in accordance with the manufacturer's specifications in order to provide reasonable assurance that the control devices will perform adequately the function for which they are intended. [Rules 62-296.700(6) and 62-4.070(3), F.A.C.]

23. 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