



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RICK SCOTT
GOVERNOR

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HERSCHEL T. VINYARD JR.
SECRETARY

FINAL PERMIT

PERMITTEE

Pro-Mac Machine, Inc.
6156 15th Street East
Bradenton, FL 34203

Air Permit No. 0810242-001-AC
Permit Expires: 12/31/2015
Minor Air Construction/Operation Permit
Project: Beryllium Machining

Authorized Representative:
Mr. John Kosiarski, President

This is the final air construction permit to construct a beryllium machining operation for producing high tolerance components manufactured from beryllium. The proposed work will be conducted at the Beryllium Machine Shop (Standard Industrial Classification No. 3599). The facility is located in Manatee County at 6156 15th Street East in Bradenton, Florida. The UTM coordinates are Zone 17, 347.015 km East, and 3035.16 km North. As noted in the Final Determination provided with this final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

Due to the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 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.

Executed in Hillsborough County, Florida


Kelley M. Boatwright 06/23/2014
Permitting & Waste Cleanup Program Administrator Effective Date
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) was sent by electronic mail (or 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 persons listed below.

John Kosiarski, Pro-Mac Machine, Inc. (Pro_Mac_John@msn.com)

Norman Duquette, Pro-Mac Machine, Inc. (Pro_Mac_Norm@msn.com)

Robert E. Wallace, III, P.E., Environmental Engineering Consultants, Inc. (rwallace@eec-tampabay.com)

Marvin Scott, Environmental Engineering Consultants, Inc. (mscott@eec-tampabay.com)

Erin Dibacco, SWD Compliance Assurance Program Manager (erin.dibacco@dep.state.fl.us)

Clerk Stamp

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


(Clerk)

June 23, 2014
(Date)

SECTION 1. GENERAL INFORMATION (FINAL)

FACILITY AND PROJECT DESCRIPTION

Project Description and Affected/Proposed Emission Unit

This facility consists of a metal machine shop which produces high tolerance components manufactured from beryllium and other specialty metals. The emission unit is the beryllium machining operations. Equipment used in beryllium machining consists of a vertical milling machine with backup contingency vertical milling machines and a lathe machine. Particulate matter hazardous air pollutant (HAP) emissions (i.e., beryllium) from operation of the machining equipment are collected by vacuum pickup lines at each tool point. The collected dust is removed by an emission control system which consists of a Spencer Industravac Model SB-515 vacuum type dust collector with a cyclone, bag collector, and an inline HEPA filter (99.9% design efficiency). The Spencer Industravac operates at a design air flow rate of 600 scfm. The emission control system exhaust stack will exhaust outside in an adjacent partial enclosure (similar to a car port with partial walls). This project will create the following emissions unit (EU).

EU ID No.	Emissions Unit Description
001	Beryllium Machining

***NOTE:** Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAPs).
- The facility has no 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 Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a natural minor source.

PERMIT HISTORY/AFFECTED PERMITS

No air permit has been issued for this facility previously.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Air Permitting Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Air Permitting Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority - The compliance authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance Assurance Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Compliance Assurance Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

3. Appendices - The following Appendices are attached as part of this permit:

- a. Appendix A. Citation Formats and Glossary of Common Terms;
- b. Appendix B. General Conditions;
- c. Appendix C. Common Conditions;
- d. Appendix D. Common Testing Requirements;
- e. Appendix E. NESHAP 40 CFR 61, Subpart A;
- f. Appendix F. NESHAP 40 CFR 61, Subpart C; and
- g. Appendix G. Environmental Compliance 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 Chapters 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 or regulations.

5. New or Additional Conditions - For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080, F.A.C.]

6. Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.

[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Application for Non-Title V Air Operation Permit - This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Non-Title V air operation permit is required for continued operation of the permitted emissions unit. 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 or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air operation permit, the applicant shall submit the following:
- a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>*);
 - b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.;
 - c. a copy of the initial compliance test report(s) required by Specific Condition No. A.5., if not previously submitted; and,
 - d. a copy of the most recent month of records/logs specified in Specific Condition No. A.14.

The application shall be submitted to the Air Permitting Program.

[Rules 62-4.030, 62-4.050, and 62-4.220, F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 001 – Beryllium Machining

This section of the permit addresses the following emissions unit (EU).

EU ID No.	Emissions Unit Description
001	This emissions unit consists of a metal machine shop which produces high tolerance components manufactured from beryllium and other specialty metals. The permitted emission unit is the beryllium machining operations. Equipment used in beryllium machining consists of a vertical milling machine with backup contingency vertical milling machines and a lathe machine. Particulate matter hazardous air pollutant (HAP) emissions (i.e., beryllium) from operation of the machining equipment are collected by vacuum pickup lines at each tool point. The collected dust is removed by an emission control system which consists of a Spencer Industravac Model SB-515 vacuum type dust collector with a cyclone, bag collector, and an inline HEPA filter (99.9% design efficiency). The Spencer Industravac operates at a design air flow rate of 600 scfm. The emission control system exhaust stack will exhaust outside in an adjacent partial enclosure (similar to a car port with partial walls).

PERFORMANCE RESTRICTIONS

- A.1. Federal Regulatory Requirements - This emission unit is subject to 40 CFR 61, Subpart A – General Provisions and 40 CFR 61, Subpart C – National Emissions Standard for Beryllium, which are adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800(10), F.A.C.]
- A.2. Restricted Operation - The hours of operation are not limited (8,760 hours per year).
[Rules 62-4.070(3) and 62-210.200 (definition of Potential to Emit), F.A.C.]

EMISSIONS STANDARDS

- A.3. Beryllium Emissions Standard – Emissions to the atmosphere from beryllium machining shall not exceed 10 grams (0.022 lb) of beryllium over a 24-hour period.
[Permit Application dated 04/21/2014 and 40 CFR 61.32(a)]
- A.4. Beryllium Burning Prohibition - The burning of beryllium and /or beryllium-containing waste, except propellants, is prohibited except in incinerators, emissions from which must comply with the standard.
[40 CFR 61.32(c)]

COMPLIANCE TESTING REQUIREMENTS

- A.5. Initial Compliance Tests - The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for beryllium. The initial tests shall be conducted within 90 days of first startup of the unit for processing beryllium.
[Rules 62-4.070(3) and 62-297.310(7)(a)1., F.A.C.; 40 CFR 61.33(a)(2)]
- A.6. Compliance Tests After Initial Testing - During the 6-month period prior to submittal of the operation permit renewal application, the emissions unit shall be tested to demonstrate compliance with the emissions standards for beryllium.
[Rule 62-297.310, F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 001 – Beryllium Machining

A.7. Compliance Test Requirements - Compliance tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit and in accordance with the requirements of 40 CFR 61, Subpart C. Additionally, testing shall be conducted during normal operation of all three permitted pieces of machining equipment (i.e., vertical milling machine, backup contingency vertical milling machine and lathe machine) while machining beryllium, if feasible. If only one machine is operating at the time of testing, the emissions unit will be limited to operation of that machine only for subsequent operations. Each machine has to be tested to gain authority to operate it. [Rule 62-297.310, F.A.C., 40 CFR 61.33]

A.8. Emission Control System Circumvention and Operation - The permittee shall not circumvent any air pollution control devices or allow the emissions of air pollutants without the applicable air pollution control devices (i.e., Spencer SB-515 Industravac w/inline cyclone, bag collector and HEPA filter) operating properly. Emission control system operating procedures shall include, but not limited, to the following:

- a. Upon startup the outlets of the vacuum system shall be checked for vacuum flow.
- b. All vacuum lines that are not in use shall be plugged.
- c. The bag collector and HEPA filter shall be checked daily upon startup and any necessary repairs or replacements made as needed.
- d. The emission control system shall continue to run for at least 5 minutes after all beryllium machining equipment has been turned off.

[Rules 62-210.650 and 62-4.070(3) F.A.C.]

(Permitting Note: The control system exhaust stack exhausts outside in an adjacent partial enclosure (similar to a car port with partial walls)).

A.9. Compliance Test Method(s) - Required compliance tests shall be performed in accordance with any one of the following reference methods:

Method(s)	Description of Method and Comments
EPA Method 29	Determination of Metals Emissions from Stationary Sources
104	Determination of Metals Emissions from Stationary Sources
103	Alternative Method for Determination of Metals Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and in Appendix B of 40 CFR 61 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 Department.

[Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60 and Appendix B of 40 CFR 61]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 001 – Beryllium Machining

NOTIFICATION REQUIREMENTS

- A.10. Test Notification** - The permittee shall notify the Compliance Authority in writing at least 30 days prior to any required tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

(Permitting Note - The notification should also include the relevant emission unit ID No(s), test method(s) to be used, and pollutants to be tested.)

[Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.; 40 CFR 61.33(a)(b)]

- A.11. Notification of Operation Commencement** - The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the EU No. 001 after completing the modifications authorized by this permit, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose.

[Rules 62-4.070, and 62-210.200, F.A.C., (definition of Commence Operation)]

RECORDKEEPING AND REPORTING REQUIREMENTS

- A.12. Compliance Test Reports** - The permittee shall prepare and submit reports for all required compliance tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the source test. All determinations shall be reported to the FDEP SWD Compliance Assurance Program (CAP) by e-mail or a registered letter dispatched before the close of the next business day following such determination.

[Rule 62-297.310(8), F.A.C.; 40 CFR 61.33(d)]

- A.13. Emission Control System Periodic Monitoring** - The permittee shall comply with the "Environmental Compliance Plan" submitted to record the performance/effectiveness of the Industravac emissions control system.

[Rule 62-4.070(3), F.A.C.]

- A.14. Control Equipment Operating Record** –

Daily:

In order to document compliance with the control equipment in operation requirements of Specific Condition No. A.8., the permittee shall keep for each day of operation daily records of the operation of equipment being used to machine beryllium. At a minimum the records shall contain the following:

- a. Upon startup, the outlets of vacuum system shall be checked for vacuum flow.
- b. All vacuum lines that are not in use shall be plugged.
- c. The bag collector and the HEPA filter shall be checked by looking through the observation window.

Monthly:

- a. Checks shall be performed by opening the observation door on the baghouse.
- b. Visually inspect the collection system to determine the remaining capacity.
- c. Visually inspect the indicator panel above the exhaust stack to determine the operating status of the HEPA filter.

[Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

A. EU No. 001 – Beryllium Machining

- A.15.** Environmental Compliance Plan for Beryllium emissions Control - For air pollution control devices and collection systems, the permittee shall maintain and implement an Environmental Compliance Plan to include a schedule for the maintenance and inspection of each control device, collection systems, and auxiliary equipment. Records of inspections, maintenance, and performance data of control devices and auxiliary equipment shall be retained by the emissions unit for a minimum of two (2) years and shall be made available to the Compliance Authority upon request.
[Rule 62-4.070(3), F.A.C.]