



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/21/2011

Forest Wandel
ALLOY BELLOWS & PRECISION WELDING
653 MINER RD
HIGHLAND HTS, OH 44143

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1318258120
Permit Number: P0107997
Permit Type: Renewal
County: Cuyahoga

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: CDAQ



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
ALLOY BELLOWS & PRECISION WELDING**

Facility ID:	1318258120
Permit Number:	P0107997
Permit Type:	Renewal
Issued:	6/21/2011
Effective:	6/21/2011
Expiration:	6/21/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
ALLOY BELLOWS & PRECISION WELDING

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Authorization

Facility ID: 1318258120
Application Number(s): A0041713
Permit Number: P0107997
Permit Description: PTIO renewal for Alloy Bellows & Precision Welding for the open top vapor degreaser (emissions unit L001) that is used to degrease/clean bar stock and tubular product assemblies by applying heated trichloroethylene (TCE).
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 6/21/2011
Effective Date: 6/21/2011
Expiration Date: 6/21/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

ALLOY BELLOWS & PRECISION WELDING
653 MINER RD
Highland Heights, OH 44143

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

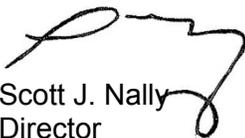
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erievue Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0107997

Permit Description: PTIO renewal for Alloy Bellows & Precision Welding for the open top vapor degreaser (emissions unit L001) that is used to degrease/clean bar stock and tubular product assemblies by applying heated trichloroethylene (TCE).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	L001
Company Equipment ID:	Vapor Degreaser
Superseded Permit Number:	13-3318
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Cleveland Division of Air Quality in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.

C. Emissions Unit Terms and Conditions



1. L001, Vapor Degreaser

Operations, Property and/or Equipment Description:

L001 - BRANSON PSD1620R Open Top Vapor Degreaser (Heated Trichloroethylene vapor degreaser)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-3318 issued on 3/25/1998	Volatile organic compound (VOC as TCE) emissions shall not exceed 0.85 TPY
b.	40 CFR 63 Subpart T	Maximum emissions of TCE/VOC shall not exceed 150 kg/m ² per month as a 3-month rolling average.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The BRANSON PSD1620R open top vapor degreaser covered by this Permit-to-Install and Operate uses trichloroethylene as a degreasing solvent. This degreaser is subject to compliance with OAC Rule 3745-31-05(A)(3) and 40 CFR 63 Subpart T to control air contaminant emissions. Before any other degreasing fluid is used in this degreaser, the applicant must apply for a permit modification.

- (2) The permittee shall, on the first operating day of every month, ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that have been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to calculations.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.
 - (2) The permittee shall maintain the following records either in electronic or written form for a period of five years:
 - a. the dates and amounts of trichloroethylene that are added to the solvent cleaning machine;
 - b. the trichloroethylene composition of wastes removed from the cleaning machines using the procedures described in the "Testing Requirements" section of this permit; and
 - c. calculation sheets showing how the monthly emissions and the rolling 3-month average emissions of trichloroethylene from the solvent cleaning machine were determined, and the results of all calculations.
 - (3) The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment;
 - b. records of the halogenated HAP TCE solvent content for each solvent used in the solvent cleaning machine; and
 - c. the date of installation for the solvent cleaning machine and all of its control devices.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall identify in the annual permit evaluation report the following information during the 12-month reporting period for this emissions unit:

- a. the size and type of the solvent cleaning machine, including if it has a solvent/air interface area or is using cleaning capacity.
 - b. the average monthly trichloroethylene consumption for the solvent cleaning machine in kilograms per month; and,
 - c. the 3-month monthly rolling average trichloroethylene emissions estimates calculated each month using the method as described in the "Testing Requirements" section of this permit.
- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Cleveland Division of Air Quality.
- f) Testing Requirements
- (1) If required compliance with the emission limitations in section b)(1) of the terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
 0.85 TPY of VOC emissions

Applicable Compliance Method:

 Compliance shall be determined using the following method:

 From 40 CFR 63 Subpart T: Per §63.464: 3-month rolling average monthly emission limit = 150 kg/m²-month; and

 The degreasing surface area of = (33") x (20") / 144 x (0.3048)² = 0.43 m².

 Allowable TCE (VOC) emission: 3-month rolling average monthly emission limit
 = (150 kg/m²-month) x (0.43 m²) = 64.5 kg/month
 = (64.5 kg/month) x (2.20462 lb/kg) = 142.2 lb/month
 = 142.2 lb/month * 12 months/yr = 1706.4 lbs/yr
 = 0.8532 TPY

 Therefore, provided compliance is maintained with the 3-month rolling average emission limit, compliance will also be demonstrated with the ton/yr limit.
 - b. Emission limitation:

 TCE/VOC emissions shall not exceed 150 kg/m² per month on a 3-month rolling average



Applicable Compliance Method:

The permittee shall on the first operating day of every month:

- i. ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soil. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified in paragraph (1) a. ii. below. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations;
- ii. comply with the following requirements:
 - (a) using the records of all solvent additions and removals for the three previous monthly reporting periods required in the "Monitoring and/or Recordkeeping Requirements" section of this permit, determine solvent emissions (E_i) using equation (1) below for cleaning machines with a solvent/air interface and equation (2) below for cleaning machines without a solvent/air interface:

$$E_i = (SA_i - LSR_i - SSR_i) / AREA_i \dots \dots (1)$$

$$E_n = SA_i - LSR_i - SSR_i \dots \dots \dots (2)$$

Where:

E_i = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per square meter of solvent/air interface are per month);

E_n = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month);

SA_i = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period I (kilograms of solvent per month);

LSR_i = the total amount of halogenated HAP liquid solvent removed the solvent cleaning machine during the most recent monthly reporting period I (kilograms of solvent per month);

SSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described below in paragraph (b) of this section, during the most recent monthly reporting period *i* (kilograms of solvent per month);

AREA_i = the solvent/air interface area of the solvent cleaning machine (square meters).

- (b) determine SSR_i from tests conducted using reference method 25d or from engineering calculations included in the compliance report;
- (c) determine the monthly average EA for the 3 month period ending with the most recent reporting period equation (3) for cleaning machines with a solvent/air interface or equation (4) for cleaning machines without a solvent/air interface.

$$EA_i = (\sum E_i)/3, \text{ where the summation is from } j = 1 \text{ to } j = 3 \dots (3)$$

$$EA_n = (\sum E_n)/3, \text{ where the summation is from } j = 1 \text{ to } j = 3 \dots (4)$$

Where:

EA_i = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month);

EA_n = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per month);

E_i = halogenated HAP solvent emissions for each month (*j*) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month);

E_n = halogenated HAP solvent emissions for each month (*j*) for the most recent 3 monthly reporting periods (kilograms of solvent per month)

j = 1 = the most recent monthly reporting period

j = 2 = the monthly reporting period immediately prior to *j* = 1

j = 3 = the monthly reporting period immediately prior to *j* = 2

g) Miscellaneous Requirements

- (1) None.