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Facility Name: **Semco Inc**

Application Number: **03-3099**

Date: **Draft PTI (Date will be entered upon final issuance)**

**GENERAL PERMIT CONDITIONS**

**TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

**CONSTRUCTION OF NEW SOURCES**

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations.

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Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

#### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

#### **PUBLIC DISCLOSURE**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

#### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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**BEST AVAILABLE TECHNOLOGY**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

**SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Semco Inc** located in **Marion** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P901	Electric induction furnace #3	Use of a baghouse, a nitrogen blanket, and compliance with the terms and conditions of this permit and Ohio EPA's Air Toxic Policy	3745-31-05	<p>3.0 x 10<sup>-5</sup> lbs Particulate Emissions (PE)/hr, 1.3 x 10<sup>-5</sup> TPY PE</p> <p>0.013 TPY fugitive PE</p> <p>No visible particulate emissions from the baghouse exhaust stack</p> <p>No visible fugitive particulate emissions from any building openings</p>
			40 CFR Part 61, Subpart C	Emissions shall not exceed 10 grams of beryllium over a 24 hour period (0.022 lb/day, 0.004 TPY)(See Additional Special Terms and Condition's)

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P901 cont'd			3745-17-07(A)	(*)
			3745-17-11 (B)(2)	(**)

\* The emissions limitations based on this applicable rule are less stringent than the limitations established pursuant to OAC Rule 3745-31-05.

\*\* The emissions limitations based on this rule are not applicable because the facility is not in a Priority I county and its UMRE is less than 10 lbs/day.

SUMMARY  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PE	0.013
Be	0.004

**NESHAP REQUIREMENTS**

The following source(s) are subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 61.

<u>Source Number</u>	<u>Source Description</u>	<u>NESHAP Regulation (Subpart)</u>
P901	Electric Induction Furnace	Subpart C

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The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 61 are also federally enforceable.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones:

- a. date of commencement of construction ( no later than 30 days after such date);
- b. anticipated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
- c. actual date of initial start-up (within 15 days after such date); and
- d. date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P.O. Box 163669  
Columbus, OH 43216-3669

and **Ohio EPA Northwest District Office**  
**347 North Dunbridge Road**  
**Bowling Green, Ohio 43402**

#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA Northwest District, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

#### **WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

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**MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA Northwest District, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

**AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**INTRODUCTION:**

The permittee installed an electric induction furnace #3 (P901) prior to obtaining a Permit to Install (PTI). The purpose of PTI No. 03-13099 is to correct this permitting deficiency. This permit will include federally enforceable restrictions on P901 as the emission unit is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements under 40 CFR Part 61, Subpart C.

**A. APPLICABLE EMISSION LIMITATIONS AND/OR CONTROL REQUIREMENTS**

1. Emissions shall not exceed 10 grams of beryllium over a 24 hour period for the entire facility.

**B. OPERATIONAL RESTRICTIONS**

1. Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified

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permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

2. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

#### **C. MONITORING AND/OR RECORDKEEPING REQUIREMENTS**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on weekly basis.
2. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

#### **D. REPORTING REQUIREMENTS**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. Quarterly written reports of (i) any deviations(excursions) from emission limitations, operational restrictions, and control device operating

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parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA Northwest District Office. If no deviations occurred during a calendar quarter, a quarterly report shall be submitted which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**E. TESTING REQUIREMENTS/COMPLIANCE METHODS DETERMINATION**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. the emission testing shall be conducted within 90 days of startup;
  - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for beryllium as referenced in 40 CFR Part 60, Subpart C, Section 61.32;
  - c. the following test method shall be employed to demonstrate compliance with the allowable mass emission rates: for beryllium, Method 104 of 40 CFR Part 61, Appendix B. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; and,
  - d. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the

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emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northwest District Office.

Records of emission tests results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

2. Compliance with the emission limitations established for emissions unit P901 in this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:  $3.0 \times 10^{-5}$  lb PE/hr,  $1.3 \times 10^{-5}$  TPY PE

Applicable Compliance Method: Compliance with the PE limitations shall be determined by multiplying the maximum process weight rate (1000 lbs/hr), the percentage of the process weight rate lost as PE (0.3%- based on material balance provided by company), the control efficiency of the nitrogen blanket (assumed to be 90%), control efficiency of

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the baghouse (assumed to be at least 99.99%), and the maximum operating schedule (8760 hrs/yr). If required, compliance with the mass emission limitation shall be based on stack testing using the methods and procedures specified in USEPA Method 5 of 40 CFR Part 60, Appendix A.

- b. Emission Limitation: 0.013 TPY fugitive PE

Applicable Compliance Method: Compliance with the fugitive PE limitation shall be determined by multiplying the maximum process weight rate (1000 lbs/hr), the percentage of the process weight rate lost as PE (0.3%- based on material balance provided by company), the control efficiency of the nitrogen blanket (assumed to be 90%), the percentage of PE not captured by the baghouse (assumed to 1%), and the maximum operating schedule (8760 hrs/yr).

- c. Emission Limitation: No visible particulate emissions from the baghouse exhaust stack

Applicable Compliance Method: 40 CFR Part 60 Appendix A, Method 22

- d. Emission Limitation: No visible fugitive particulate emissions from any building openings

Applicable Compliance Method: 40 CFR Part 60 Appendix A, Method 22

- e. Emission Limitation: Emissions shall not exceed 10 grams of Be over a 24 hour period (which equates to 0.022 lb/day and 0.004 TPY)

Applicable Compliance Method: 40 CFR Part 61, Appendix B, Method 104

## **F. MISCELLANEOUS REQUIREMENTS**

1. None