Facility ID: 1677120054 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

Go to Part II for Emissions Unit K001
Go to Part II for Emissions Unit N001
Go to Part II for Emissions Unit N002

Facility ID: 1677120054 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

Go to the top of this document

Part II - Special Terms and Conditions

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.

A. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Paint Booth No. 1, with corrugated filter	OAC rule 3745-31-05 (PTI 16-1067)	2.4 lbs/hr volatile organic compounds (VOC)
	OAC rule 3745-17-07	Visible emissions of particulate matter (PM) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule
	OAC rule 3745-17-11	0.551 lbs/hr particulate matter (PM)
	OAC rule 3745-21-09	None (see A.2.a)

2. **Additional Terms and Conditions**

   (a) Pursuant to OAC rule 3745-21-09(U)(2)(e), and based on the coating usage restriction in section B.1 of these terms and conditions, this emissions unit is exempt from the requirements of OAC rule 3745-21-09.

B. **Operational Restrictions**

1. The total daily coating usage for this emissions unit shall not exceed 3.0 gallons.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records of the total coating usage in this emissions unit, in gallons.

2. The permittee shall collect and record the following information for each month for the coating operation:

   a. the company identification for each coating and cleanup material employed;

   b. the number of gallons of each coating and cleanup material employed;

   c. the VOC content content of each coating and cleanup material, in pounds per gallon;

   d. the solids content of each coating, in pounds per gallon;

   e. the total number of hours the emissions unit was in operation;

   f. the calculated, average hourly VOC emission rate for all coatings and cleanup materials, in pounds per hour (average); and

   g. the calculated, maximum solids application rate, in pounds per hour.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

D. **Reporting Requirements**

1. The permittee shall submit annual reports which identify any exceedances of the daily coating usage limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports which include an identification of each month during which the average hourly VOC emissions exceeded 2.4 pounds per hour, and the actual average hourly VOC emission rate for each such month.

E. **Testing Requirements**

1. Compliance with the emission limitations in Section A of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:
2.4 lbs/hr VOC

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above limit based upon the record keeping requirement of section C.2.f of these terms and conditions.

Method 24 or 24A of 40 CFR Part 60, Appendix A, shall be used to determine the VOC content of the coatings. If pursuant to section 4.3 of method 24, an owner or operator determines that method 24 cannot be used for a particular coating, the owner or operator shall notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for method 24.

If formulation data supplied by the manufacturer(s) for the coatings employed in this emission unit is determined to be representative or overestimates VOC content for all coating samples, based on comparison to method 24 testing, then formulation data may be used in lieu of on-going method 24 analyses. In no case shall formulation data be used which reports lower VOC content than method 24 analysis.
Emission Limitation:
20 percent opacity as a 6-minute average

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance through visible emissions observations, performed in accordance with method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(1).
Emission Limitation:
0.551 lbs per hr particulate matter

Applicable Compliance Method:
To determine the actual worst case emission rate for particulate matter, the following equation shall be used:

E = (M)x(1-TE)x(1-CE)

where
E = particulate matter emission rate (lbs/hr)
M = maximum coating solids usage rate (lbs/hr, from section C.2.g)
TE = transfer efficiency of the coating equipment (0.35 for spray guns)
CE = control efficiency of air pollution control equipment (0.97 for the corrugated filter)

If required, the permittee shall demonstrate compliance through stack testing, in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(10).

F. **Miscellaneous Requirements**

1. None

Facility ID: 1677120054 Emissions Unit ID: N001 Issuance type: Final State Permit To Operate

Go to the top of this document

Part II - Special Terms and Conditions

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.

A. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

Copper reclamation furnace with afterburner	OAC rule 3745-31-05 (PTI 16-765)	Particulate matter (PM) emissions shall not exceed the more stringent of 0.04 grains/DSCF at 12% carbon dioxide or 0.1 lbs/100 lbs charged PCB emissions shall not exceed 0.0000468 lbs/hour
	OAC rule 3745-17-07	Visible emissions of PM shall not exceed 20 percent opacity as 6-minute average, except as provided by rule.
	OAC rule 3745-17-09	See A.2.a

2. **Additional Terms and Conditions**

(a) The emissions limit based on this rule is equally or less stringent than the BAT-based limit established pursuant to OAC rule 3745-31-05.

B. **Operational Restrictions**

1. This permit will allow the incineration of, and reclamation of, metals from decommissioned transformers and other electrical equipment pursuant to 40 CFR part 761, Polychlorinated Biphenyls (PCB's) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. This permit does not allow the incineration of polyvinyl chloride (PVC), or teflon, nor does this permit allow the incineration of any material listed under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants.

2. The incineration of, and reclamation of, metals from decommissioned transformers and other electrical equipment shall be limited to those transformers or other electrical equipment which contain oils with a concentration of less than 500 ppm PCB.

3. All transformers and electrical equipment shall be drained of all free standing liquids prior to incineration. All residuals from draining will be disposed of in accordance with 40 CFR 761. In no instance shall the above-referenced residual liquids be incinerated in this emissions unit.

4. The incinerator's afterburner shall be operated in such a manner as to maintain a minimum, 3-hour average temperature of 2020 degrees Fahrenheit with a two-second residence time and a minimum of three percent excess oxygen in the stack gas. The incinerator shall be operated with a continuous temperature recorder to insure proper operating temperature.

5. The combustion efficiency of the incinerator shall be at least 99.9 percent, as computed below:

combustion efficiency = C(CO2) / [C(CO2) + C(CO)] x 100%

where
C(CO2) = concentration of carbon dioxide
C(CO) = concentration of carbon monoxide

6. If the incinerator and/or afterburner breaks down in such a manner as to cause the emission of air contaminants in violation of any applicable law or permit term and condition, the break down shall be accompanied by an immediate shutdown of the incinerator.

7. The copper reclamation furnace (N001) and the aluminum sweat furnace (N002) shall be equipped with interlocks such that only one can operate at any given time. Interlocks shall also prevent the operation of either emissions unit except when the afterburner is operating at the required temperature and dampers are in the proper positions to direct the emissions of the operating unit to the afterburner.

C. **Monitoring and/or Record Keeping Requirements**

1. All transformers and electrical equipment received by the permittee shall be accompanied by a bill of lading and/or a hazardous waste manifest identifying the name and address of the supplier and the date the transformer or electrical equipment was received. The permittee shall maintain test results and/or other documentation necessary to certify the PCB content of the oil contained in the equipment.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the afterburner when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time during which the average combustion temperature within the afterburner, when the emissions unit was in operation, was less than 2020 degrees Fahrenheit; and

b. a log of the downtime for the afterburner and monitoring equipment, when the associated emissions unit was in operation.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the afterburner does not comply with the minimum temperature restriction specified above.

E. **Testing Requirements**

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 6 months prior to permit renewal;

b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates

for particulate matter and PCB, and shall demonstrate combustion efficiency pursuant to section B.5 of these terms and conditions;

c. for particulate matter and CO2, Methods 1-5 of 40 CFR Part 60, Appendix A, shall be employed;

d. for PCB, NIOSH 5503 shall be employed;

e. for CO, Method 10 of 40 CFR Part 60, Appendix A, shall be employed; and

f. 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 appropriate Ohio EPA District Office or local air agency.

Alternative USEPA test methods may be used with prior approval from the Ohio EPA.

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

3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
0.04 grains/DSCF at 12% carbon dioxide
0.1 lbs PM/100 lbs charged

Applicable Compliance Method:
The permittee shall demonstrate compliance through stack testing, as described in section E.1, above.
Emission Limitation:
0.0000468 lbs PCB/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance through stack testing, as described in section E.1, above.
Emission Limitation:
20 percent opacity as a 6-minute average

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance through visible emissions observations, performed in accordance with method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(1).

F. **Miscellaneous Requirements**

1. None

Facility ID: 1677120054 Emissions Unit ID: N002 Issuance type: Final State Permit To Operate

Go to the top of this document

Part II - Special Terms and Conditions

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.

A. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or

control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Aluminum sweat furnace AF-01 with afterburner	OAC rule 3745-31-05 (PTI 16-765)	Particulate matter (PM) emissions shall not exceed the more stringent of 0.04 grains/DSCF at 12% carbon dioxide or 0.1 lbs/100 pounds charged PCB emissions shall not exceed 0.0000468 lbs/hr
	OAC rule 3745-17-07	Visible emissions of PM shall not exceed 20 percent opacity as 6-minute average, except as provided by rule
	OAC rule 3745-17-09	See A.2.a

2. **Additional Terms and Conditions**

(a) The emissions limit based on this rule is equally or less stringent than the BAT-based limit established pursuant to OAC rule 3745-31-05.

B. **Operational Restrictions**

1. This permit will allow the incineration of, and reclamation of, metals from decommissioned transformers and other electrical equipment pursuant to 40 CFR part 761, Polychlorinated Biphenyls (PCB's) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. This permit does not allow the incineration of polyvinyl chloride (PVC), or teflon, nor does this permit allow the incineration of any material listed under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants.

2. The incineration of, and reclamation of, metals from decommissioned transformers and other electrical equipment shall be limited to those transformers or other electrical equipment which contain oils with a concentration of less than 500 ppm PCB.

3. All transformers and electrical equipment shall be drained of all free standing liquids prior to incineration. All residuals from draining will be disposed of in accordance with 40 CFR 761. In no instance shall the above-referenced residual liquids be incinerated in this emissions unit.

4. The incinerator's afterburner shall be operated in such a manner as to maintain a minimum, 3-hour average temperature of 2020 degrees Fahrenheit with a two-second residence time and a minimum of three percent excess oxygen in the stack gas. The incinerator shall be operated with a continuous temperature recorder to insure proper operating temperature.

5. The combustion efficiency of the incinerator shall be at least 99.9 percent, as computed below:

combustion efficiency = C(CO2) / [C(CO2) + C(CO)] x 100%

where
C(CO2) = concentration of carbon dioxide
C(CO) = concentration of carbon monoxide

6. If the incinerator and/or afterburner breaks down in such a manner as to cause the emission of air contaminants in violation of any applicable law or permit term and condition, the break down shall result in an immediate shutdown of the incinerator.

7. The copper reclamation furnace (N001) and the aluminum sweat furnace (N002) shall be equipped with interlocks such that only one can operate at any given time. Interlocks shall also prevent the operation of either emissions unit except when the afterburner is operating at the required temperature and dampers are in the proper positions to direct the emissions of the operating unit to the afterburner.

C. **Monitoring and/or Record Keeping Requirements**

1. All transformers and electrical equipment received by the permittee shall be accompanied by a bill of lading and/or a hazardous waste manifest identifying the name and address of the supplier and the date the transformer or electrical equipment was received. The permittee shall maintain test results and/or other documentation necessary to certify the PCB content of the oil contained in the equipment.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the afterburner when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time during which the average combustion temperature within the afterburner, when the emissions unit was in operation, was less than 2020 degrees Fahrenheit; and

b. a log of the downtime for the afterburner and monitoring equipment, when the associated emissions unit was in operation.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the afterburner does not comply with the minimum temperature restriction specified above.

E. **Testing Requirements**

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 6 months prior to permit renewal;

b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate matter and PCB, and shall demonstrate combustion efficiency pursuant to section B.5 of these terms and conditions;

c. for particulate matter and CO2, Methods 1-5 of 40 CFR Part 60, Appendix A, shall be employed;

d. for PCB, NIOSH 5503 shall be employed;

e. for CO, Method 10 of 40 CFR Part 60, Appendix A, shall be employed; and

f. 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 appropriate Ohio EPA District Office or local air agency.

Alternative USEPA test methods may be used with prior approval from the Ohio EPA.

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

3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
0.04 grains/DSCF at 12% carbon dioxide
0.1 lbs PM/100 lbs charged

Applicable Compliance Method:
The permittee shall demonstrate compliance through stack testing, as described in section E.1, above.
Emission Limitation:
0.0000468 lbs PCB/hr

Applicable Compliance Method:
The permittee shall demonstrate compliance through stack testing, as described in section E.1, above.
Emission Limitation:
20 percent opacity as a 6-minute average

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance through visible emissions observations, performed in accordance with method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(1).

F. **Miscellaneous Requirements**

1. None