

AIR EMISSION SUMMARY

The air contaminant source(s) listed below comprise the Permit to Install for The Crook-Miller Co. located in Defiance County. The source(s) listed below shall not exceed the emission limits/control requirements contained in the table below. This condition in no way limits 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.

Ohio EPA Source	Source	BAT	Applicable	Permit Allowable
Number	Identification		Federal and OAC	Mass Emissions
<u>Number</u>	<u>Description</u>	<u>Determination</u>	<u>Rules</u>	<u>Requirements</u>
				<u>& Usage</u>

P003

R003

P004

P005

Sawmill operation; Sawmill main room

Wood hog

Wood waste storage silo

Water based lacquer dip line w/ oven; Large handle

Use of a large diameter cyclone and compliance with the terms and conditions of this Permit

Use of a large diameter cyclone and compliance with the terms and conditions of this Permit

Use of a large diameter cyclone and compliance with the terms and conditions of this Permit

Use of water based nonphotochemically reactive coatings, compliance with the "Air Toxics Policy", and compliance with the terms and conditions of this Permit

3745-31-05

3745-17-11(B)
3745-17-07(A)

3745-31-05

3745-17-11(B)
3745-17-07(A)

3745-31-05

3745-17-11(B)
3745-17-07(A)

3745-31-05

3745-21-07(G)(9)(c)

0.03 grains particulate emissions (PE)/scf [equates to 1.54 lbs PE/hr and 3.08 TPY at 6000 scf/min & 8760 hrs/yr] or 0% opacity, as a 6 minute average, whichever is less stringement;

Operational Restrictions (see ASTC's);

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0.03 grains particulate emissions (PE)/scf [equates to 1.54 lbs PE/hr and 3.08 TPY at 6000 scf/min & 8760 hrs/yr] or 0% opacity, as a 6 minute average, whichever is less stringement;

Operational Restrictions (see ASTC's);

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0.03 grains particulate emissions (PE)/scf [equates to 1.31 lbs PE/hr and 2.62 TPY at 5100 scf/min & 8760 hrs/yr] or 0% opacity, as a 6 minute average, whichever is less stringement;

Operational Restrictions (see ASTC's);

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0.93 lb OC/hr,
4.07 TPY OC;

No limit established per exemption

*The emission limitation(s)/opacity restrictions established by these rules are less stringent than those established by OAC rule 3745-31-05 (BAT).

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PE	8.78
OC	4.07

Date: 6/15/98

Additional Special Terms and Conditions

Introduction:

This Permit to Install is required to correct permitting deficiencies resulting from the installation of the emission units in this permit. These emission units were installed prior to obtaining the appropriate permits.

A. Applicable Emission Limitations and/or Control Requirements:

No additional emissions limitations and/or control requirements.

B. Operational Restrictions:

1. The maximum annual operating hours for emissions units P003, P004, and P005 shall not exceed 4000 on a per emissions unit basis.
2. This permit allows the use of the coatings specified by the permittee in the application for PTI number 03-11380. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the OC emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

<u>Ohio EPA Emissions Unit #</u>	<u>Pollutant</u>	<u>TLV</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Maximum Hourly Emission Rate</u> <u>(lbs/hr)</u>	<u>Predicted 1 Hour Maximum Ground-Level Concentration at the Fence line</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Maximum Acceptable Ground-Level Concentration (MAGLC)</u> <u>($\mu\text{g}/\text{m}^3$)</u>

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Application No. 03-11380
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R003	EGMBE*	121,00 0	0.93	273.1	2881
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*Ethylene Glycol Monobutyl Ether (EGMBE) has the highest hourly emissions rate for all HAP's used that have a listed TLV. It also has the lowest TLV. The modeling was done using the total OC emissions and assuming they were EGMBE. Since the modeling passed, it can be assumed that all HAP's would pass air toxics review.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 03-11380 and the operating permit:

- a. Any changes in the composition of the coatings, or the use of new coatings, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table.
 - b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
 - c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
 - d. Any change in the composition of the coatings, or use of new coatings that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).
3. The permittee shall not employ cleanup materials in emissions unit R003 that result in the emissions of organic compounds.
 4. All coating materials employed in emissions unit R003 shall be formulated to meet the volatile content specifications contained in OAC rule 3745-21-07(G)(9)(c) on an "as applied" basis. The permittee shall obtain a VOC data sheet and material safety data sheet (MSDS) from the coating supplier for each coating, prior to their application in this emissions unit, to verify compliance with these restrictions.

C. Monitoring and/or Record Keeping Requirements:

1. The permittee shall maintain monthly records of the operating hours for emissions units P003, P004, and P005. The permittee shall also calculate on a monthly basis the cumulative year to date hours of operation for each emissions unit.
2. The permittee shall collect and record the following information for each month for the coating operation in emissions unit R003:
 - a. The company identification for each coating employed.
 - b. The number of gallons of each coating employed.
 - c. The organic compound content of each coating, in pounds per gallon.
 - d. The total organic compound emission rate for all coatings, in pounds per month.
 - e. The total organic compound emission rate for all coatings, in tons per year (summation of d).

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

3. 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 an annual written report for emissions units P003, P004, P005, and R003 of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in

this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. The report shall be submitted by January 31 of each year and shall cover the previous calendar year. (This annual report shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

E. Testing Requirements/Compliance Methods Requirements:

1. Compliance with the emission limitation(s) found in the "Air Emissions Summary" of this permit shall be determined in accordance with the following method(s):

- a. Emission Limitation for EU's P003:
0.03 gr/scf, 1.54 lbs PE/hr, and 3.08 TPY PE

Applicable Compliance Method:

Compliance with the emissions limit of 0.03 gr/scf may be based on the AP42, table 10.4.1 emission factor (dated 2/80) for large diameter cyclones, of 0.03 gr/scf. The emissions limits of 1.54 lbs PE/hr and 3.08 TPY were based on a 6000 scf/min and operating at 4000 hrs/yr. If required, the permittee shall demonstrate compliance with the above emissions limit pursuant to Method 5 of 40 CFR Part 60, Appendix A.

- b. Emission Limitation for EU's P004:
0.03 gr/scf, 1.54 lbs PE/hr, and 3.08 TPY PE

Applicable Compliance Method:

Compliance with the emissions limit of 0.03 gr/scf may be based on the AP42, table 10.4.1 emission factor (dated 2/80) for large diameter cyclones, of 0.03 gr/scf. The emissions limits of 1.54 lbs PE/hr and 3.08 TPY were based on a 6000 scf/min and operating at 4000 hrs/yr. If required, the permittee shall demonstrate compliance with the above emissions limit pursuant to Method 5 of 40 CFR Part 60, Appendix A.

- c. Emission Limitation for EU's P005:
0.03 gr/scf, 1.31 lbs PE/hr, and 2.62 TPY PE

Applicable Compliance Method:

Compliance with the emissions limit of 0.03 gr/scf may be based on the AP42, table 10.4.1 emission factor (dated 2/80) for large diameter cyclones, of 0.03 gr/scf. The emissions limits of 1.31 lbs PE/hr and 2.62 TPY were based on a 5100 scf/min and operating at 4000 hrs/yr. If required, the permittee shall demonstrate compliance with the above emissions limit pursuant to Method 5 of 40 CFR Part 60, Appendix A.

- d. Emission Limitation for EU's R003:
0.93 lb OC/hr, and 4.07 TPY OC

Applicable Compliance Method:

The hourly OC emission limit is based on the emissions unit's potential to emit. Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limit. Compliance with the TPY emissions limit shall be based upon the recordkeeping specified in Section C. of these terms and conditions.

- e. Emission Limitation for visible emissions of PE for EU's P003, P004 and P005:
0% opacity, as a six minute average

Applicable Compliance Method:

40 CFR Part 60 Appendix A Method 9

Note: No term or condition specifying a method for demonstrating compliance with any emission limitation or other requirement of this permit shall preclude the use by any person of any credible evidence to establish compliance with or a violation of this permit, the Clean Air Act, or any implementing regulations or rules promulgated there under.

F. Miscellaneous requirements:

None

Date: 6/16/98