



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
50 West Town Street, Suite 700  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL MODIFICATION**

**CERTIFIED MAIL**

**DELAWARE COUNTY**

**Application No: 01-12084**

**Fac ID: 0121000211**

**DATE: 2/27/2007**

Worthington Cylinder Corporation  
Dave Stewart  
333 E Maxtown Road  
Westerville, OH 43082

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final 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 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

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

CDO



**FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 01-12084**

Application Number: 01-12084

Facility ID: 0121000211

Permit Fee: **\$400**

Name of Facility: Worthington Cylinder Corporation

Person to Contact: Dave Stewart

Address: 333 E Maxtown Road  
Westerville, OH 43082

Location of proposed air contaminant source(s) [emissions unit(s)]:

**333 E Maxtown Road  
Westerville, Ohio**

Description of proposed emissions unit(s):

**Air brake tank exterior finishing system.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director

**Part I - GENERAL TERMS AND CONDITIONS**

**A. Permit to Install General Terms and Conditions**

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports 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 quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Records Retention Requirements**

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 for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air

contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

**9. Construction of New Sources(s)**

The proposed emissions unit(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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(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 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. 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 the requirements of this permit or cannot meet applicable standards.

**10. 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.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. 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.

**13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	64.4
HAPs	24.9
HAP	9.9

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

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

1. The specific operations(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 specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K002) - Spray Booth (Nurto Corporation) for Air Brake Tank Interior.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05	Emissions shall not exceed:  36.0 lbs/hr of volatile organic compounds (VOC) from coating operations.  26.4 lbs/hr of VOC from cleanup operations.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B) and 3745-21-09(U)(1).
OAC rule 3745-31-05(C) (synthetic minor to avoid NSR) OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	Emissions shall not exceed, as a 12-month rolling summation:  30.0 tons of VOC from coating material usage.  See Section B.1 below.  VOC emissions from cleanup material usage in emissions units K002 and K003 combined shall not exceed 4.4 tons per rolling, 12-month summation.  See Sections B.3 and B.4 below.
OAC rule 3745-31-05(C) (synthetic minor to avoid NSR) OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	The combined total hazardous air pollutants (HAP) emissions shall not exceed 9.9 tons per rolling 12-month period for any single HAP and 24.9 tons per rolling 12-month period for all HAPs from all coating and cleanup materials used in units K002 and K003, combined.
<b>OAC rule 3745-21-09(U)(1)(i)</b>	See Section B.2 below.
<b>OAC rule 3745-17-11(A)</b>	Particulate emissions (PE) shall not exceed 0.65 pound per hour.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
ORC 3704.03(T)(4)	See A.2.b below.

## 2. Additional Terms and Conditions

- 2.a** The hourly VOC emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** Per the rule, the allowable hourly emissions limitation for PE is greater than the potential to emit for this emissions unit without control. Therefore, no additional monitoring, recordkeeping and/or reporting is necessary to ensure compliance with this limit.

## B. Operational Restrictions

1. The maximum annual coating usage for K002 shall not exceed 20,000 gallons applied based upon a rolling, 12-month summation of the coating usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coating usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Coating Usage</u>
1	3,334
1-2	6,668
1-3	10,002
1-4	13,336
1-5	16,670
1-6	20,000
1-7	20,000
1-8	20,000
1-9	20,000
1-10	20,000
1-11	20,000
1-12	20,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the coating usage figures.

2. The maximum coating content shall not exceed 3.0 lbs VOC per gallon, excluding water and exempt solvents.
  
3. The maximum annual cleanup material usage for emission units K002 and K003 combined shall not exceed 1,320 gallons, based upon a rolling, 12-month summation of the cleanup material usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cleanup material usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Cleanup Material Usage</u>
1	110
1-2	220
1-3	330
1-4	440
1-5	550
1-6	660
1-7	952
1-8	880
1-9	990
1-10	1,100
1-11	1,210
1-12	1,320

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cleanup material usage limitation shall be based upon a rolling, 12-month summation of the cleanup material usage figures.

4. The maximum cleanup material content shall not exceed 6.6 lbs VOC per gallon, excluding water and exempt solvents.
  
5. The permittee shall operate the dry filtration system whenever this emissions unit is in operation, to control particulate emissions.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for emissions unit K002:
  - a. the name and identification of each coating material, as applied;

- b. the VOC content for each coating material in pounds of VOC per gallon of coating material, excluding water and exempt solvents, as applied;
  - c. the number of gallons applied, of each coating material, excluding water and exempt solvents, as applied;
  - d. the rolling, 12-month summation of the coating usage, in gallons, excluding water and exempt solvents;
  - e. the total VOC emissions rate for all coating materials, in pounds per month (b x c); and
  - f. the total VOC emissions rate for all coating materials, in pounds per rolling, 12-month summation (b x d).
2. The permittee shall collect and record the following information each month for emissions units K002 and K003:
- a. the name and identification of each cleanup material, as applied;
  - b. the number of gallons applied, of each cleanup material, excluding water and exempt solvents, as applied;
  - c. the VOC content for each cleanup material in pounds of VOC per gallon of cleanup material, excluding water and exempt solvents, as applied;
  - d. the total VOC emission rate for all cleanup materials, in pounds per month (b x c);
  - e. the amount of cleanup material recovered, in pounds;
  - f. the total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)].
  - g. the rolling, 12-month summation of the cleanup material usage, in gallons, excluding water and exempt solvents; and
  - h. the total VOC emissions rate for all cleanup materials, in pounds per rolling, 12-month rolling summation for K002 and K003 combined.
3. The permittee shall collect and record the following information each month for emissions units K002 and K003:
- a. the name and identification number of each coating, as applied;
  - b. the individual HAP<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;

- c. the total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum of all individual HAP contents from b);
- d. the number of gallons of each coating employed;
- e. the name and identification of each cleanup material employed;
- f. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon cleanup material, as applied;
- g. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum of all individual HAP contents from f);
- h. the number of gallons of each cleanup material employed;
- i. the total individual HAP emissions for each HAP from all coating and cleanup material in pounds or tons per rolling, 12-month period (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material);
- j. the total combined HAPs emissions from all coating and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12-month period (the sum of c times d for each coating plus the sum of g times h for each cleanup material);
- k. the updated rolling, 12-month summation of emissions for each individual HAP in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. the updated rolling, 12-month summation of emissions for total combined HAPs in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

<sup>1</sup> A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or clean materials. This information does not have to be kept on a line-by-line basis.

- 4. The permit to install for this emissions unit K002 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level

Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: acetone

TLV (mg/m3): 1,187.12

Maximum Hourly Emission Rate (lbs/hr): 18.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 810.9

MAGLC (ug/m3): 28,300

Pollutant: n-butyl acetate

TLV (mg/m3): 712.6

Maximum Hourly Emission Rate (lbs/hr): 16.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 725.27

MAGLC (ug/m3): 16,966.67

Pollutant: n-butyl alcohol (n-butanol)

TLV (mg/m3): 60.63

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 135.10

MAGLC (ug/m3): 1443.6

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists’ (ACGIH’s) handbook entitled “TLVs and BEIs” (“Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices”);
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
6. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01

solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a “modification” under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy”:

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

#### **D. Reporting Requirements**

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall notify Ohio EPA, Central District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the VOC content limit for coating materials;
  - b. the VOC content limit for cleanup materials;
  - c. the rolling, 12-month coating usage limitation for K002;
  - d. the rolling, 12-month VOC emission limitation for K002;
  - e. the rolling, 12-month cleanup usage limitation for K002 and K003 combined;
  - f. the rolling, 12-month VOC emission limitation, from cleanup material, for K002 and K003 combined;
  - g. the rolling, 12-month total individual HAP emission limitation for K002 and K003 combined; and
  - h. the rolling, 12-month total combined HAPs emissions limitation for K002 and K003 combined.

4. These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA Central District Office by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.
5. The permittee shall submit annual reports which specify the VOC and individual and combined HAP emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emission Report.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
36.0 lbs/hr of VOC from coating operations.  
  
Applicable Compliance Method:  
Compliance has been demonstrated by multiplying the maximum hourly coating usage rate of 12.0 gallons/hour by the maximum VOC content of 3.0 lbs/gallon.
  - b. Emissions Limitation:  
26.4 lbs/hr of VOC from cleanup operations.  
  
Applicable Compliance Method:  
Compliance has been demonstrated by multiplying the maximum hourly cleanup usage rate of 4.0 gallons/hour by the maximum VOC content of 6.6 lbs/gallon.
  - c. Emission Limitation:  
VOC emissions from coatings shall not exceed 30.0 tons, as a 12-month rolling summation.  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements as specified in Section C.1.
  - d. Emissions Limitation:  
3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents.  
  
Applicable Compliance Method:  
Compliance with the VOC content of the coatings applied in this emissions unit shall be determined through monthly record keeping, as specified in Sections C.1. Formulation data from the coating manufacturer and/or, if required, USEPA Method 24 (or an

alternative approved method) shall be used to determine the volatile organic compound content of the coatings, to be used in the calculation of emissions.

e. Emissions Limitation:

6.6 pounds of VOC per gallon of cleanup material, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content of the cleanup material applied in this emissions unit shall be determined through monthly record keeping, as specified in Sections C.2.

Formulation data from the cleanup material manufacturer and/or, if required, USEPA Method 24 (or an alternative approved method) shall be used to determine the volatile organic compound content of the cleanup materials, to be used in the calculation of emissions.

f. Emission Limitation:

VOC emissions from cleanup materials applied in emissions units K002 and K003 combined shall not exceed 4.4 tons per rolling 12-month summation.

Applicable Compliance Method:

Compliance with the rolling 12-month limitation shall be established by the record keeping found in Section C.2.

g. Emission Limitation:

The individual HAP emissions shall not exceed 9.9 tons per rolling 12-month period for all single HAP from all coatings and cleanup materials used in units K002 and K003 combined.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3 of this permit.

h. Emission Limitation:

The combined total HAPs emissions shall not exceed 24.9 tons per rolling 12-month period for all HAP from all coatings and cleanup materials used in units K002 and K003 combined.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3 of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 specified in narrative form following the table.

**Operations, Property, and/or Equipment - (K003) - Spray Booth (Nutro Corporation) for Air Brake Tank Exterior with drying oven.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions shall not exceed:  36.0 lbs/hr of volatile organic compounds (VOC) from coating operations.  26.4 lbs/hr of VOC from cleanup operations.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B) and 3745-21-09(U)(1).
OAC rule 3745-31-05(C) (synthetic minor to avoid NSR) OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	Emissions shall not exceed, as a 12-month rolling summation:  30.0 tons of VOC from coating material usage.  See Section B.1 below.  VOC emissions from cleanup material usage in emissions units K002 and K003 combined shall not exceed 4.4 tons per rolling, 12-month summation.  See Sections B.3 and B.4 below.
OAC rule 3745-31-05(C) (synthetic minor to avoid NSR) OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	The combined total hazardous air pollutants (HAP) emissions shall not exceed 9.9 tons per rolling 12-month period for any single HAP and 24.9 tons per rolling 12-month period for all HAPs from all coating and cleanup materials used in units K002 and K003, combined.
<b>OAC rule 3745-21-09(U)(1)(d)</b>	See Section B.2 below.
<b>OAC rule 3745-17-11(A)</b>	Particulate emissions (PE) shall not exceed 0.65 pounds per hour.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
ORC 3704.03(T)(4)	See A.2.b below.

## 2. Additional Terms and Conditions

- 2.a** The hourly VOC emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** Per the rule, the allowable hourly emissions limitation for PE is greater than the potential to emit for this emissions unit without control. Therefore, no additional monitoring, recordkeeping and/or reporting is necessary to ensure compliance with this limit.

## B. Operational Restrictions

1. The maximum annual coating usage for K003 shall not exceed 20,000 gallons applied based upon a rolling, 12-month summation of the coating usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coating usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Coating Usage</u>
1	3,334
1-2	6,668
1-3	10,002
1-4	13,336
1-5	16,670
1-6	20,000
1-7	20,000
1-8	20,000
1-9	20,000
1-10	20,000
1-11	20,000
1-12	20,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the coating usage figures.

2. The maximum coating content shall not exceed 3.0 lbs VOC per gallon, excluding water and exempt solvents.
  
3. The maximum annual cleanup material usage for emission units K002 and K003 combined shall not exceed 1,320 gallons, based upon a rolling, 12-month summation of the cleanup material usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cleanup material usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Cleanup Material Usage</u>
1	110
1-2	220
1-3	330
1-4	440
1-5	550
1-6	660
1-7	952
1-8	880
1-9	990
1-10	1,100
1-11	1,210
1-12	1,320

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cleanup material usage limitation shall be based upon a rolling, 12-month summation of the cleanup material usage figures.

4. The maximum cleanup material content shall not exceed 6.6 lbs VOC per gallon, excluding water and exempt solvents.
  
5. The permittee shall operate the dry filtration system whenever this emissions unit is in operation, to control particulate emissions.

**C. Monitoring and/or Recordkeeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
  
2. The permittee shall collect and record the following information each month for emissions unit K003:

- a. the name and identification of each coating material, as applied;
  - b. the VOC content for each coating material in pounds of VOC per gallon of coating material, excluding water and exempt solvents, as applied;
  - c. the number of gallons applied, of each coating material, excluding water and exempt solvents, as applied;
  - d. the rolling, 12-month summation of the coating usage, in gallons, excluding water and exempt solvents;
  - e. the total VOC emissions rate for all coating materials, in pounds per month (b x c); and
  - f. the total VOC emissions rate for all coating materials, in pounds per rolling, 12-month summation (b x d).
3. The permittee shall collect and record the following information each month for emissions units K002 and K003:
- a. the name and identification of each cleanup material, as applied;
  - b. the number of gallons applied, of each cleanup material, excluding water and exempt solvents, as applied;
  - c. the VOC content for each cleanup material in pounds of VOC per gallon of cleanup material, excluding water and exempt solvents, as applied;
  - d. the total VOC emission rate for all cleanup materials, in pounds per month (b x c);
  - e. the amount of cleanup material recovered, in pounds;
  - f. the total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)].
  - g. the rolling, 12-month summation of the cleanup material usage, in gallons, excluding water and exempt solvents; and
  - h. the total VOC emissions rate for all cleanup materials, in pounds per rolling, 12-month rolling summation for K002 and K003 combined.
4. The permittee shall collect and record the following information each month for emissions units K002 and K003:
- a. the name and identification number of each coating, as applied;

- b. the individual HAP<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
- c. the total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum of all individual HAP contents from b);
- d. the number of gallons of each coating employed;
- e. the name and identification of each cleanup material employed;
- f. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon cleanup material, as applied;
- g. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum of all individual HAP contents from f);
- h. the number of gallons of each cleanup material employed;
- i. the total individual HAP emissions for each HAP from all coating and cleanup material in pounds or tons per rolling, 12-month period (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material);
- j. the total combined HAPs emissions from all coating and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12-month period (the sum of c times d for each coating plus the sum of g times h for each cleanup material);
- k. the updated rolling, 12-month summation of emissions for each individual HAP in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. the updated rolling, 12-month summation of emissions for total combined HAPs in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

<sup>1</sup> A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or clean materials. This information does not have to be kept on a line-by-line basis.

- 5. The permit to install for this emissions unit K003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s)

emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: acetone

TLV (mg/m<sup>3</sup>): 1,187.12

Maximum Hourly Emission Rate (lbs/hr): 18.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 810.9

MAGLC (ug/m<sup>3</sup>): 28,300

Pollutant: n-butyl acetate

TLV (mg/m<sup>3</sup>): 712.6

Maximum Hourly Emission Rate (lbs/hr): 16.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 725.27

MAGLC (ug/m<sup>3</sup>): 16,966.67

Pollutant: n-butyl alcohol (n-butanol)

TLV (mg/m<sup>3</sup>): 60.63

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 135.10

MAGLC (ug/m<sup>3</sup>): 1443.6

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists’ (ACGIH’s) handbook entitled “TLVs and BEIs” (“Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices”);
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

7. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
3. The permittee shall notify Ohio EPA, Central District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to Ohio EPA, Central District Office within 45 days after the exceedance occurs.
4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the VOC content limit for coating materials;
  - b. the VOC content limit for cleanup materials;
  - c. the rolling, 12-month coating usage limitation for K003;
  - d. the rolling, 12-month VOC emission limitation for K003;
  - e. the rolling, 12-month cleanup usage limitation for K002 and K003 combined;

- f. the rolling, 12-month VOC emission limitation, from cleanup material, for K002 and K003 combined;
  - g. the rolling, 12-month total individual HAP emission limitation for K002 and K003 combined; and
  - h. the rolling, 12-month total combined HAPs emissions limitation for K002 and K003 combined.
5. These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA Central District Office by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.
6. The permittee shall submit annual reports which specify the VOC and individual and combined HAP emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emission Report.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- a. Emissions Limitation:  
36.0 lbs/hr of VOC from coating operations.  
  
Applicable Compliance Method:  
Compliance has been demonstrated by multiplying the maximum hourly coating usage rate of 12.0 gallons/hour by the maximum VOC content of 3.0 lbs/gallon.
  - b. Emissions Limitation:  
26.4 lbs/hr of VOC from cleanup operations.  
  
Applicable Compliance Method:  
Compliance has been demonstrated by multiplying the maximum hourly cleanup usage rate of 4.0 gallons/hour by the maximum VOC content of 6.6 lbs/gallon.
  - c. Emission Limitation:  
VOC emissions from coatings shall not exceed 30.0 tons, as a 12-month rolling summation.  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements as specified in Section C.1.
  - d. Emissions Limitation:

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content of the coatings applied in this emissions unit shall be determined through monthly record keeping, as specified in Sections C.1. Formulation data from the coating manufacturer and/or, if required, USEPA Method 24 (or an alternative approved method) shall be used to determine the volatile organic compound content of the coatings, to be used in the calculation of emissions.

e. Emissions Limitation:

6.6 pounds of VOC per gallon of cleanup material, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with the VOC content of the cleanup material applied in this emissions unit shall be determined through monthly record keeping, as specified in Sections C.2. Formulation data from the cleanup material manufacturer and/or, if required, USEPA Method 24 (or an alternative approved method) shall be used to determine the volatile organic compound content of the cleanup materials, to be used in the calculation of emissions.

f. Emission Limitation:

VOC emissions from cleanup materials applied in emissions units K002 and K003 combined shall not exceed 4.4 tons per rolling 12-month summation.

Applicable Compliance Method:

Compliance with the rolling 12-month limitation shall be established by the record keeping found in Section C.2.

g. Emission Limitation:

The individual HAP emissions shall not exceed 9.9 tons per rolling 12-month period for all single HAP from all coatings and cleanup materials used in units K002 and K003 combined.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3 of this permit.

h. Emission Limitation:

The combined total HAPs emissions shall not exceed 24.9 tons per rolling 12-month period for all HAP from all coatings and cleanup materials used in units K002 and K003 combined.

**Worthington Cylinder Corporation**

**PTI Application: 01-12084**

**Modification Issued: 2/27/2007**

**Facility ID: 012100021**

**Emissions Unit ID: K003**

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3 of this permit.

**F. Miscellaneous Requirements**

None