



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL  
BUTLER COUNTY**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 14-04948**

**DATE: 10/12/2000**

American Fan Company  
Dan Mazzeferri  
2933 Symmes Road  
Fairfield, OH 45014

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

HCDES



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 14-04948**

Application Number: 14-04948  
APS Premise Number: 1409030922  
Permit Fee: **\$1000**  
Name of Facility: American Fan Company  
Person to Contact: Dan Mazzeferri  
Address: 2933 Symmes Road  
Fairfield, OH 45014

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2933 Symmes Road**  
**Fairfield, Ohio**

Description of proposed emissions unit(s):  
**(3) paint spray booths for miscellaneous metal parts.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



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 Related to Monitoring and Recordkeeping 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 quarterly, i.e., 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 are inadequate 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 prove to be inadequate 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

**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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

American Fan Company  
 PTI Application: 14-04948  
 Issued: 10/12/2000

Facility ID: 1409030922

**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	10.23

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K001 - Touch-up paint spray booth for miscellaneous metal parts.	OAC rule 3745-31-05(A)(3)	<p><i>Coatings:</i> 84.0 lbs VOC/day 2.3 tons/yr VOC</p> <p><i>Clean-up:</i> 109.5 lbs VOC/month 0.66 tons/yr VOC</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c)</p>
	OAC rule 3745-21-09 (U)(1)(c)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents based upon a daily volume-weighted average.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of compliance coatings, coating and cleanup material usage limits and compliance with the air toxics policy.
- 2.b The VOC content of all clean-up materials shall not exceed 7.3 pounds per gallon.

- 2.c The daily emission limitation outlined above is based upon the emissions unit's potential to emit (the maximum hourly emission rate multiplied by 24 hours/day). Therefore, no daily records are required to demonstrate compliance with this limit.

## B. Operational Restrictions

1. The maximum cleanup material usage for this emissions unit shall not exceed 15 gallons per month and 180 gallons per year.
2. The maximum annual coating usage for this emissions unit shall not exceed 1,300 gallons per year, excluding water and exempt solvents.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The name and identification number of each coating employed.
  - b. The VOC content of each coating (excluding water and exempt solvents), in pounds per gallon, as applied.
  - c. The name and identification of each cleanup material employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The number of gallons (excluding water and exempt solvents) of each coating employed.
  - f. The number of gallons of each cleanup material employed.
  - g. The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons  $[(b \times e) + (d \times f)]$ .
2. The permittee shall collect and record the following information on a daily basis for the purpose of determining the daily volume weighted average VOC content for all coatings employed in this emissions unit:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content of each coating (excluding water and exempt solvents) in pounds per

gallon, as applied.

- c. The number of gallons (excluding water and exempt solvents) of each coating employed.

- d. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for Cvoc,2.
  - e. The total VOC emissions from all coatings employed in pounds per day (b x c).
3. The permit to install for this emissions unit K001 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 for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Furfuryl alcohol

TLV (ug/m3): 40,123

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 24.8

MAGLC (ug/m3): 955

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, 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 previously modeled;
- 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

Emissions Unit ID: **K001**

- 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.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], 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 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the 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 Hamilton County Department of Environmental Services in writing of any daily and/or monthly record showing the use of noncomplying coatings or cleanup materials. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit annual reports which identify any exceedance of the annual coating and/or cleanup material usage limitation, as well as corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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

1. Compliance with the emission limitation in term A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

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

## Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so 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.

## 2. Emission Limitation (coatings):

84.0 lbs VOC/day (coatings only), 2.96 tons VOC/year (total).

## Applicable Compliance Method:

Compliance with the above emissions limitations shall be determined by using the following equations:

$$\text{lbs VOC/day} = (A \times B)$$

$$\text{tons VOC/year} = (D \times B \times 0.0005) + (E \times C \times 0.0005)$$

where:

A = daily coating usage, gallons, excluding water and exempt solvents

B = VOC content of coatings, in pounds per gallon, excluding water and exempt solvents

C = VOC content of cleanup material, pounds per gallon

D = annual coating usage, gallons, excluding water and exempt solvents

E = annual cleanup material usage, gallons

3. Compliance with the usage limits in term B.1 and B.2 shall be demonstrated by the record keeping in term C.1.
4. Compliance with the VOC content limit in term A.2.b shall be demonstrated by the record keeping in term C.1.

**American Fan Company**  
**PTI Application: 14-04048**  
**Issued**

**Facility ID: 1409030922**

Emissions Unit ID: **K001**

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K002 - Original paint spray booth for miscellaneous metal parts.	OAC rule 3745-31-05 (A)(3)	<i>Coatings:</i> 42.0 lbs VOC/day 1.14 tons/yr VOC  <i>Clean-up:</i> 51.1 lbs VOC/month 0.29 tons/yr VOC  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c)
	OAC rule 3745-21-09 (U)(1)(c)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents based upon a daily volume-weighted average.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of compliance coatings, and coating and cleanup material usage limits.
- 2.b The VOC content of all clean-up materials shall not exceed 7.3 pounds per gallon.

- 2.c** The daily emission limitation outlined above is based upon the emissions unit's potential to emit (the maximum hourly emission rate multiplied by 24 hours/day). Therefore, no daily records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

1. The maximum cleanup material usage for this emissions unit shall not exceed 7 gallons per month and 80 gallons per year.
2. The maximum annual coating usage for this emissions unit shall not exceed 650 gallons per year, excluding water and exempt solvents.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The name and identification number of each coating employed.
  - b. The VOC content of each coating (excluding water and exempt solvents), in pounds per gallon, as applied.
  - c. The name and identification of each cleanup material employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The number of gallons (excluding water and exempt solvents) of each coating employed.
  - f. The number of gallons of each cleanup material employed.
  - g. The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons  $[(b \times e) + (d \times f)]$ .
2. The permittee shall collect and record the following information on a daily basis for the purpose of determining the daily volume weighted average VOC content for all coatings employed in this emissions unit:
  - a. The name and identification number of each coating, as applied.

- b. The VOC content of each coating (excluding water and exempt solvents) in pounds per gallon, as applied.
- c. The number of gallons (excluding water and exempt solvents) of each coating employed.
- d. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{voc}$ ,<sup>2</sup>.
- e. The total VOC emissions from all coatings employed in pounds per day (b x c).

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

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily and/or monthly record showing the use of noncomplying coatings or cleanup materials. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit annual reports which identify any exceedance of the annual coating and/or cleanup material usage limitation, as well as corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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

1. Compliance with the emission limitation in term A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so 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.

2. Emission Limitation (coatings):

42.0 lbs VOC/day (coatings only), 1.43 tons VOC/year(total).

Applicable Compliance Method:

Compliance with the above emissions limitations shall be determined by using the following equations:

$$\text{lbs VOC/day} = (A \times B)$$

$$\text{tons VOC/year} = (D \times B \times 0.0005) + (E \times C \times 0.0005)$$

where:

A = daily coating usage, gallons, excluding water and exempt solvents

B = VOC content of coatings, in pounds per gallon, excluding water and exempt solvents

C = VOC content of cleanup material, pounds per gallon

D = annual coating usage, gallons, excluding water and exempt solvents

E = annual cleanup material usage, gallons

3. Compliance with the usage limits in term B.1 and B.2 shall be demonstrated by the record keeping in term C.1.
4. Compliance with the VOC content limit in term A.2.b shall be demonstrated by the record keeping in term C.1.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K003 - Main paint spray booth for miscellaneous metal parts.	OAC rule 3745-31-05 (A)(3)	<i>Coatings:</i> 168 lbs VOC/day 4.6 tons/yr VOC  <i>Clean-up:</i> 204.4 lbs VOC/month 1.24 tons/yr VOC  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c)
	OAC rule 3745-21-09 (U)(1)(c)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents based upon a daily volume-weighted average.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of compliance coatings, coating and cleanup material usage limits and compliance with the air toxics policy.
- 2.b The VOC content of all clean-up materials shall not exceed 7.3 pounds per gallon.

- 2.c The daily emission limitation outlined above is based upon the emissions unit's potential to emit (the maximum hourly emission rate multiplied by 24 hours/day). Therefore, no daily records are required to demonstrate compliance with this limit.

## B. Operational Restrictions

1. The maximum cleanup material usage for this emissions unit shall not exceed 28 gallons per month and 340 gallons per year.
2. The maximum annual coating usage for this emissions unit shall not exceed 2600 gallons per year, excluding water and exempt solvents.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The name and identification number of each coating employed.
  - b. The VOC content of each coating (excluding water and exempt solvents), in pounds per gallon, as applied.
  - c. The name and identification of each cleanup material employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The number of gallons (excluding water and exempt solvents) of each coating employed.
  - f. The number of gallons of each cleanup material employed.
  - g. The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons  $[(b \times e) + (d \times f)]$ .
2. The permittee shall collect and record the following information on a daily basis for the purpose of determining the daily volume weighted average VOC content for all coatings employed in this emissions unit:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content of each coating (excluding water and exempt solvents) in pounds per

gallon, as applied.

- c. The number of gallons (excluding water and exempt solvents) of each coating employed.
  - d. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{voc,2}$ .
  - e. The total VOC emissions from all coatings employed in pounds per day ( $b \times c$ ).
3. 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 for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Furfuryl alcohol

TLV (ug/m3): 40,123

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 59.3

MAGLC (ug/m3): 955

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, 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 previously modeled;

- 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.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], 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 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the 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 Hamilton County Department of Environmental Services in writing of any daily and/or monthly record showing the use of noncomplying coatings or cleanup materials. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit annual reports which identify any exceedance of the annual coating and/or cleanup material usage limitation, as well as corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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

1. Compliance with the emission limitation in term A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so 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.

2. Emission Limitation (coatings):

168 lbs VOC/day (coatings only), 5.84 tons VOC/year(total).

Applicable Compliance Method:

Compliance with the above emissions limitations shall be determined by using the following equations:

$$\text{lbs VOC/day} = (A \times B)$$

$$\text{tons VOC/year} = (D \times B \times 0.0005) + (E \times C \times 0.0005)$$

where:

A = daily coating usage, gallons, excluding water and exempt solvents

B = VOC content of coatings, in pounds per gallon, excluding water and exempt solvents

C = VOC content of cleanup material, pounds per gallon

D = annual coating usage, gallons, excluding water and exempt solvents

E = annual cleanup material usage, gallons

3. Compliance with the usage limits in term B.1 and B.2 shall be demonstrated by the record keeping in term C.1.
4. Compliance with the VOC content limit in term A.2.b shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

None.

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04948 Facility ID: 1409030922

FACILITY NAME American Fan Company

FACILITY DESCRIPTION (3) paint spray booths for miscellaneous metal parts CITY/TWP Fairfield

SIC CODE 3564 SCC CODE 4-02-025-99 EMISSIONS UNIT ID K001

EMISSIONS UNIT DESCRIPTION Paint spray booth for miscellaneous metal parts

DATE INSTALLED 1/97

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	non-attainment	4.04 lbs. VOC/hr.	2.3 TPY VOC	84.0 lbs. VOC/day	2.96 TPY VOC
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with OAC rule 3745-31-05(A)(3) will be demonstrated by the use of compliance coatings, coating and cleanup material usage limits and compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$-

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: Furfuryl alcohol

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04948

Facility ID: 1409030922

FACILITY NAME American Fan Company

FACILITY DESCRIPTION (3) naint sprav booths for miscellaneous CITY/TWP Fairfield

Emissions Unit ID: **K003**

SIC CODE 3564

SCC CODE 4-02-025-99

EMISSIONS UNIT ID K002

EMISSIONS UNIT DESCRIPTION Paint spray booth for miscellaneous metal parts

DATE INSTALLED 5/84

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	non-attainment	2.02 lbs VOC/hr	1.14 TPY VOC	42.0 lbs VOC/day	1.43 TPY VOC
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

Compliance with OAC rule 3745-31-05(A)(3) will be demonstrated by the use of compliance coatings and coating and cleanup material usage limits.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

No - Installed in 1984

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$-

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*?

X

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

Furfuryl alcohol

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04948

Facility ID: 1409030922

FACILITY NAME American Fan Company

FACILITY DESCRIPTION (3) naint sprav booths for miscellaneous CITY/TWP Fairfield

Emissions Unit ID: **K003**

SIC CODE 3564

SCC CODE 4-02-025-99

EMISSIONS UNIT ID K003

EMISSIONS UNIT DESCRIPTION Paint spray booth for miscellaneous metal parts

DATE INSTALLED 1/97

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	non-attainment	8.08 lbs VOC/gal	4.6 TPY VOC	168 lbs VOC/day	5.84 TPY VOC
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

Compliance with OAC rule 3745-31-05(A)(3) will be demonstrated by the use of compliance coatings, coating and cleanup material usage limits and compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$-

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? X YES        NO

IDENTIFY THE AIR CONTAMINANTS: Furfuryl alcohol

**NEW SC**

PTI Num

FACILITY

Emissions Unit ID: **K003**

FACILITY DESCRIPTION (3) paint spray booths for miscellaneous metal parts

CITY/TWP Fairfield

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	Electronic	<u>Additional information</u> File Name Convention (your PTI # plus this letter)	<u>Hard Copy</u>	<u>None</u>
Calculations (required)	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Permit Review Narrative  
PTI 14-04948

American Fan Company  
2933 Symmes Road  
Fairfield, OH 45014

PN: 1409030922

This permit application is for three (3) existing paint spray booths (emissions units K001- K003). American Fan Company manufactures industrial fans, blowers and exhausts for a variety of customers, including the U.S. Navy. Compliance coatings will be used in all three emissions units. Emissions units K001 - K003 will comply with the applicable emissions limitations by means of a daily volume weighted average VOC content. Coating usage will be limited on a daily and annual basis for emissions units K001 - K003. Clean-up usage will be limited monthly and annually for emissions unit K001 - K003.

*Applicable rules:*

OAC rule 3745-15-07 (air pollution nuisance prohibited)

OAC rule 3745-21-09(U) (surface coating of metal)

OAC rule 3745-31-05 (BAT requirements)

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04948

Facility ID: 1409030922

FACILITY NAME American Fan Company

FACILITY DESCRIPTION (3) naint sprav booths for miscellaneous CITY/TWP Fairfield

Emissions Unit ID: **K003***Coating emissions summary (VOC):*

Actual/Allowable emissions 14.14 lbs/hr, 8.0 tons/year  
 Potential emissions 14.14 lbs/hr, 62.0 tons/year

*Clean-up emissions summary (VOC):*

Actual/Allowable emissions 360 lbs/mo, 2.1 tons/year

*BAT determination:*

Compliance with OAC rule 3745-31-05(A)(3) will be demonstrated by the use of compliance coatings and coating and cleanup material usage limits.

*Permit recommendation:*

Emissions units K001, K002 and K003 will comply with all applicable rules, therefore approval is recommended.

*Permit fee:*

K001 - \$200.00 \* 2 = \$400.00 (permit fee is doubled since installation occurred prior to PTI issuance)

K002 - \$200.00 = \$200.00 (permit fee is not doubled since installation occurred in 1984)

K003 - \$200.00 \* 2 = \$400.00 (permit fee is doubled since installation occurred prior to PTI issuance)

**Total \$1000.00**

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or  Netting Determination  
**Permit To Install 14-04948**

- A. Source Description
- B. Facility Emissions and Attainment Status
- C. Source Emissions
- D. Conclusion

29 NEW SC

PTI Num

FACILITY

Emissions Unit ID: **K003** \_\_\_\_\_

FACILITY DESCRIPTION (3) paint spray booths for miscellaneous  
metal parts

CITY/TWP Fairfield

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

SUMMARY (for informational purposes only)

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant

Tons Per Year

VOC

10.23