



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
ERIE COUNTY**

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:  
Lazarus Gov. Center  
P.O. Box 1049

**Application No: 03-16314**

**Fac ID: 0322020274**

**DATE: 3/6/2008**

ThorWorks Industries Inc.  
Dave Shupe  
2520 South Campbell Street  
Sandusky, OH 44870

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

NWDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 3/6/2008  
Effective Date: 3/6/2008**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-16314

Application Number: 03-16314  
Facility ID: 0322020274  
Permit Fee: **\$400**  
Name of Facility: ThorWorks Industries Inc.  
Person to Contact: Dave Shupe  
Address: 2520 South Campbell Street  
Sandusky, OH 44870

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

**2520 South Campbell Street  
Sandusky, Ohio**

Description of proposed emissions unit(s):

**Administrative modification to eliminate PE limits established under OAC 3745-31-05(A)(3), and require use of particulate filter and work practice standards under OAC rule 3745-17-11(C).**

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

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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)**

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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.

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**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>
OC	12.1

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PTI A

Modification Issued: 3/6/2008

Emissions Unit ID: K001

**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

Applicable Rules/Requirements

OAC rule 3745-17-07(A)

K001 - Miscellaneous metal parts coating operation, with dry filtration (Administrative modification to remove the PE limits and insert requirement to use dry filtration and work practice standards).

OAC rule 3745-31-05(A)(3)

OAC rule 3745-21-09  
(U)(2)(e)(iii)

OAC rule 3745-17-11(C)

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Applicable Emissions  
Limitations/Control Measures

See A.2.a.

Coating operation:

60.0 lbs organic compounds  
(OC)/day;  
11.0 tons OC/yr

Visible PE from any stack  
serving this emissions unit shall  
not exceed 20% opacity as a  
six-minute average.

Cleanup operation:

180.2 lbs OC/month;  
1.1 ton OC/yr

VOC exemption, based on  
maximum daily coating usage  
not exceeding 10 gallons in any  
one day

See B.1 and C.4

See A.2.b

**2. Additional Terms and Conditions**

- 2.a** The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09 (U)(2)(e)(iii).
- 2.b** This emissions unit is exempt from the visible PE limitations specified in OAC

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rule 3745-17-07 (A) pursuant to OAC rule 3745-17-07 (A) (3) (h) because OAC rule 3745-17-11 is not applicable.

**B. Operational Restrictions**

Any surface coating process not exempt under paragraphs (A)(1)(h) to (A)(1)(l) of OAC rule 3745-17-11 shall be controlled by a dry particulate filter, water wash, or equivalent control device or devices.

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

1. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed;
  - c. the total volume, in gallons, of all coatings employed [sum of (b)]
2. In conjunction with the information required in C.3 above, the permittee shall collect and record the following information on a monthly basis for this emissions unit:
  - a. the total number of gallons of each coating employed;
  - b. the OC content of each coating employed, in pounds per gallon, as applied;
  - c. the OC emissions from each coating material employed, in pounds [(a) x (b), for each coating employed];
  - d. the total OC emissions from all coatings employed, in tons [sum of (c)];
  - e. the annual year to date OC emissions, in tons, from all coatings employed [summation of (d) for each calendar month to date from January to December].
3. The permittee shall collect and record the following information on a monthly basis for this emissions unit:

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- a. the name and identification number of each cleanup material employed;
  - b. the total number of gallons of each cleanup material employed;
  - c. the OC content of each cleanup material employed, in pounds per gallon;
  - d. the OC emissions from each cleanup material employed, in pounds [(b) x (c), for each cleanup material employed];
  - e. the total OC emissions from all cleanup material employed, in tons [sum of (d)];
  - f. the annual year to date OC emissions, in tons, from all cleanup material employed [summation of (e) for each calendar month to date from January to December];
4. Any surface coating process not exempt under paragraph (A)(1)(h) to (A)(1)(k) of OAC rule 3745-17-11 shall follow all of these work practices:
- a. The owner or operator shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the control devices with any modifications deemed necessary by the owner or operator during the time period in which the control devices are utilized.
  - b. The owner or operator shall operate the control devices in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator.
  - c. The owner or operator shall conduct periodic inspections of the control devices to determine whether the devices are operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator. The periodic inspections of each control device shall be performed at a frequency that is based upon the recommendation of the manufacturer of the control device, and the owner or operator shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, not less than once each calendar year the owner or operator shall conduct a comprehensive inspection of the control device while the emissions unit is shut down and perform any needed maintenance and repair for the control device to ensure that it is able to routinely operate in accordance with the manufacturer's recommendations.

- d. The owner or operator shall document each inspection of a control device by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection.
  - e. In the event that the control devices are not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator, the control devices shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The owner or operator shall maintain documentation of those periods when the control devices are not operating in accordance with such requirements.
  - f. Any documentation required under paragraphs (C)(2)(d) and (C)(2)(e) of OAC rule 3745-17-11 shall be maintained for not less than five years.
  - g. Any documentation required under paragraphs (C)(2)(a) to (C)(2)(e) of OAC rule 3745-17-11 shall be maintained at the facility and shall be made available to Ohio EPA upon request.
5. The permit to install for emissions unit K001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit 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 the emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Xylene

TLV (mg/m3): 434.0

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,186.0

MAGLC (ug/m3): 10,333.0

Pollutant: Ethylbenzene

TLV (mg/m3): 434.0

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Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 831.1  
MAGLC (ug/m3): 10,333.0

Pollutant: Toluene  
TLV (mg/m3): 434.0  
Maximum Hourly Emission Rate (lbs/hr): 0.6  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 44.33  
MAGLC (ug/m3): 10,333.0

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 (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.).
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) is (are) defined as a modification under

**Emissions Unit ID: K001**

other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

8. 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 its 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 District Office or local air agency) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limit of 10 gallons per day. 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 45 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation reports that identify exceedances of the following:
  - a. the monthly cleanup OC emission limitation.
  - b. each day during which the average hourly PE rate exceeded the emission limitation of 0.9 lb/hr and the permittee shall include in the report the actual average hourly emissions for each such day.

The quarterly deviation reports shall be submitted to the Director (appropriate District Office of local air agency) in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit annual deviation (excursion) reports which identify any exceedances of the annual coating and cleanup OC emission limitations of 11.0 tons

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OC/yr and 1.1 ton OC/yr, respectively. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 of each year and shall cover the previous calendar year. If no deviations occur during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year.

## E. Testing Requirements

1. Compliance with the emission limitation(s) specified in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation: coating operation  
60.0 lbs OC/day

Applicable Compliance Method:

The daily emission limitation is based on a maximum, combined coating/thinner usage rate of 10 gallons per day, as follows:

coating emissions - 9.1 gallons/day @ 5.82 lbs OC/gallon;  
thinner emissions - 0.9 gallons/day @ 7.21 lbs OC/gallon.

Therefore provided compliance is shown with the daily coating usage rate, compliance with the daily emission limitation will be assumed.

- b. Emission Limitation: coating operation  
11.0 tons OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the record keeping requirements specified in Section C.2 of this permit.

- c. Emission Limitation: coating operation  
0.9 lb PE/hr; 0.40 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitations in accordance with the record keeping requirements specified in Section C.4 of this permit.

- d. Emission Limitations: cleanup operation  
180.2 lbs OC/month and 1.1 ton OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with these emission limitations in accordance with the record keeping requirements specified in Section C.3 of this permit.

- e. Emission Limitation:  
Maximum coating usage shall not exceed 10 gallons in any one day

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the record keeping requirements specified in Section C.1 of this permit.

- f. Emission Limitation:  
Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a six-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.

## F. Miscellaneous Requirements

None.