

1

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(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 source(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 Ohio Administrative Code (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

2

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

4

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

5

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **W J Ruscoe Company** located in **Summit** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>
L002	Continuous web vapor degreaser - Branson Model WSD-1216-W Serial Z-11-7057-77.
L002 Cont'd	

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

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

When the emissions unit is in operation, the permittee shall employ a clean rag to remove any solvent remaining on the part. The rag shall be placed in a closed container after it is employed.

Facility Name: **W J Ruscoe Company**
 Application Number: **16-1850**
 Date: **March 10, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		(O)		Additional Special Terms and Conditions.
	Applicable Federal & OAC Rules	40 CFR Part 63, Subpart T	Permit Allowable Mass Emissions and/or Control/Usage Requirements	Once this emissions unit becomes subject to 40 CFR Part 63, Subpart T, the permittee shall comply with requirements by the compliance deadline in the rule (see Federal Register: May 5, 1998 (Volume 63, Number 86)).
3745-31-05			63.7 pounds of trichloro-ethylene per month as a three-month rolling average.	
			0.38 ton of trichloro-ethylene per year	
			The permittee shall ensure that the trichloro-ethylene monthly emissions from the solvent cleaning machine do not exceed the 3-month rolling average limit of 99 kilograms/square meter/month (20.28 pounds/square foot/month).	
			See A.1. through A.2 in the	
3745-21-09				

Facility Name: **W J Ruscoe Company**
Application Number: **16-1850**
Date: **March 10, 1999**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Trichloroethylene	0.38

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Akron Air Pollution Control, 146 South High Street, Room 904, Akron, OH 44308.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Additional Terms and Conditions

1. Equip the conveyORIZED degreaser with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor. The conveyORIZED degreaser does not have a drying tunnel or rotating basket because a continuous wire is being pulled through the degreaser. The permittee shall employ a clean rag to remove any solvent remaining on the part. This explanation and or proposed changes are equivalent or more stringent than the rule.
2. The following safety switches shall be operated and maintained:
 - a. a condenser flow switch and thermostat or any other device which shuts off the sump heat if the condenser coolant is either not circulating or too warm;
 - b. a spray safety switch which shuts off the spray pump if the vapor level drops below any fixed spray nozzle; and,
 - c. a vapor level control thermostat or any other device which shuts off the sump heat when the vapor level rises too high.
3. The conveyORIZED degreaser shall be equipped with covers for closing off the entrance and exit of the unit when it is not in use.

B. Operational Restrictions

1. The conveyORIZED degreaser shall be operated and maintained in

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

accordance with the following practices to minimize solvent evaporation from the unit:

- a. use no workplace fans near the degreaser opening, and ensure that exhaust ventilation does not exceed 65 cubic feet per minute per square foot of degreaser opening, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements;
- b. minimize openings during operation so that entrances and exits silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than ten per cent of the width of the opening. This is a problem because the thickness of the wire may only be 0.030 inches allowing only 0.003 inches of clearance. When there are occasional kinks and slices in the wire, this would cause a hangup or breakage problem. The wire shall run through a short section of 1/4 inch pipe as a guide for the wire into and out of the degreaser. This explanation and or proposed changes are equivalent or more stringent than the rule;
- c. provide downtime covers for closing off the entrance and exit during shutdown hours;
- d. minimize carryout emissions by:
 - i. Racking parts so that solvent drains freely from parts and is not trapped. The part is a continuous wire which does not require racking. This explanation and or proposed changes are equivalent or more stringent than the rule.
 - ii. Maintaining the vertical conveyor speed at less than eleven feet per minute. This degreaser runs at speeds in excess of eleven feet per minute and is differentiate from an in-line cleaning machine by the U.S. EPA and is defined as a continuous web cleaning machine in the Federal Register: May 5, 1998 (Volume 63, Number 86). The permittee shall employ a clean rag to remove any solvent remaining on the part. This explanation and or proposed changes are equivalent or more stringent than the rule.
- e. store waste solvent only in covered containers;
- f. repair solvent leaks immediately, or shut down the degreaser;
- g. operate the cleaner such that water cannot be visually detected in solvent exiting the water separator; and,

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

- h. place downtime covers over entrances and exits of the conveyORIZED degreaser at all times when the conveyors and exhausts are not being operated.
- i. clean only materials that are neither porous nor absorbent.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain a log of solvent additions and deletions for each cleaning machine, and ensure that the emissions from each solvent cleaning machine are equal to or less than 99 kilograms/square meters/month (20.28 pounds/square foot/month) as a 3-month rolling average using the procedures in section E.1 below.
2. The permittee shall maintain records, in written or electronic form, of the following for a period of five years:
 - a. the dates and amounts of solvent added to the solvent cleaning machine;
 - b. the solvent composition of wastes removed from cleaning machines as determined using the procedure in section E.1.b.ii below; and,
 - c. calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

3. The permittee shall maintain records of all control equipment maintenance, such as replacement of the carbon in the carbon adsorption unit.

D. Reporting Requirements

1. The permittee shall submit an annual solvent emission report by February 1st of each year which shall contain the following:
 - a. the size and type of each unit subject to subpart T (solvent/air interface area or cleaning capacity);
 - b. the average monthly solvent consumption for the solvent cleaning machine in kilograms per month or pounds per month; and,
 - c. the 3-month rolling average emissions estimates calculated each month using the method described in section E.1.b below.
2. The permittee shall submit an exceedance to the Administrator semiannually except when the Administrator determines on a case-by-case basis that more frequent reporting is necessary. Once the exceedance has occurred, a quarterly reporting format shall be followed until a request to reduce reporting frequency is approved.

Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half (January and July) or quarter (January, April, July, and October), as appropriate. The report shall include the applicable information as follows:

- a. if an exceedance of the three-month rolling emission limitations has occurred, the permittee shall state the reason for the exceedance, a description of the actions taken, and the actual three-month rolling emissions for each such month; and,
- b. if no exceedances have occurred, a statement to that effect shall be submitted.

E. Testing Requirements

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

1. The permittee shall on the first operating day of every month:
 - a. ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soil. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified below in paragraph(b) of this section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.
 - b. comply with the following requirements:
 - i. using the records of all solvent additions and removals for the three previous monthly reporting periods required in the "Monitoring and/or Record keeping Requirements" section of this permit, determine solvent emissions (E_i) using the equation below for cleaning machines with a solvent/air interface:

$$E_i = (S_{Ai} - LSR_i - SSR_i) / AREA_i$$

Where:

E_i = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per square meter of solvent/air interface area per month or pounds solvent per square foot of solvent/air interface area per month).

S_{Ai} = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month or pounds of solvent per month).

LSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month or pounds of solvent per month).

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

SSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described below in paragraph (b)(ii) of this section, during the most recent monthly reporting period *i* (kilograms of solvent per month or pounds of solvent per month).

ARE_{Ai} = the solvent /air interface area of the solvent cleaning machine (square meters or square feet).

- ii. determine SSR_i from tests conducted using reference method 25d or from engineering calculations included in the compliance report; and,
- iii. determine the monthly rolling average EA for the 3-month period ending with the most recent reporting period using the equation below for cleaning machines with a solvent/air interface.

$E_{ai} = (\sum E_i) / 3$, where the summation is from $j=1$ to $j= 3$

Where:

E_{ai} = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month or pounds solvent per square foot of solvent/air interface area per month).

E_i = halogenated HAP solvent emissions for each month (*j*) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month or pounds solvent per square foot of solvent/air interface area per month).

$j=1$ = the most recent monthly reporting period.

$j=2$ = the monthly reporting period immediately prior to $j=1$.

$j=3$ = the monthly reporting period immediately prior to $j=2$.

2. The permittee shall determine the facility's potential to emit (PTE) from all

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit shall be determined in accordance with the following procedures:

- a. determine the potential to emit for each individual solvent cleaning machine using the following equation:

$$PTE_i = H_i \times W_i \times SAI_i$$

Where:

PTE_i = the potential to emit for the solvent cleaning machine i (kilograms solvent per year).

H_i = hours of operation for solvent cleaning machine i (hours per year) = 8760 hours per year, unless otherwise restricted by a federally enforceable requirement.

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour) = 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines = 1.12 kilograms per square meter per hour for in-line cleaning machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent /air interface. Cleaning machines that do not have a solvent area interface shall calculate a solvent/air interface area using the procedure in paragraph (b) below.

- b. cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation:

$$SAI = 2.2 * (Vol)^{0.6}$$

Where:

SAI = the solvent/air interface area (square meters).

Vol = the cleaning capacity of the solvent cleaning machine (cubic meters).

Facility Name: **W J Ruscoe Company**

Application Number: **16-1850**

Date: **March 10, 1999**

- c. sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.
6. Compliance with the emission limitation(s) in Emission Summary and in the Operational Restrictions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation

63.7 pounds of trichloroethylene per month as a three-month rolling average

0.38 ton of trichloroethylene per year

Applicable Compliance Method

Monthly recordkeeping of the solvent added and removed.
 - b. Emission Limitation

99 kilograms/square meter/month (20.28 pounds/square foot/month) as a three-month rolling average

Applicable Compliance Method

Monthly recordkeeping of the solvent added and removed and monthly calculations as described in section E.1.b of the Additional Special Terms and Conditions.

F. Miscellaneous Requirements

1. None.