Facility ID: 0278080158 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

Go to Part II for Emissions Unit P012
Go to Part II for Emissions Unit P014
Go to Part II for Emissions Unit P015
Go to Part II for Emissions Unit P019

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Facility ID: 0278080158 Emissions Unit ID: P012 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

   (a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

   (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P012 - Line 13, Ardcor 10-Pass Roll Forming Machine	OAC rule 3745-31-05(A)(3) (PTI 02-19340)	Organic compound (OC) emissions shall not exceed 23.1 pounds per day based on a daily average for each calendar month and 1.4 tons per year. See section B.2 below.
	OAC rule 3745-21-07	exempt See section B.1 below.

2. **Additional Terms and Conditions**

   (a) None

B. **Operational Restrictions**

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

   Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA Northeast District Office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The permittee shall not use more than 365 gallons of lubricants per year at this emissions unit.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect, record and calculate the following information monthly for this emissions unit:

   a. the name and identification number of each lubricant used and an indication of whether or not it is a photochemically reactive material;

   b. the OC content, in pounds per gallon, of each lubricant;

   c. the total number of gallons of each lubricant used for the month;

   d. the total monthly OC emissions from this line, i.e., the summation of (b) times (c) for all lubricants employed;

   e. the number of days the emissions unit was in operation each month; and

   f. the average daily OC emission rate for all lubricants employed, i.e., (d/e), in pounds/day (average).

2. The permit to install for this emissions unit (P012) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application.

The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic: hexylene glycol

TLV (mg/m3): 121

Maximum Hourly Emission Rate (lbs/hr): 0.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 837

MAGLC (ug/m3): 2880

The permittee, has demonstrated that emissions of hexylene glycol, from emissions unit) P012, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

3. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

4. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant

Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

5. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. **Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any record for this line showing that the average daily OC emissions exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing the use of a photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit annual reports that specify the total gallons of lubricants used in this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

5. The permittee shall submit annual reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.1 and the operational restriction in section B.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

OC emissions shall not exceed 23.1 pounds per day based on a daily average for each calendar month.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

OC emissions shall not exceed 1.4 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly OC emissions from the record keeping requirement specified in section C.1.d, divided by 2000 lbs/ton.
Emission Limitation:

The permittee shall not use more than 365 gallons of lubricants per year at this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly records from the record keeping requirement specified in section C.1.c.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

F. **Miscellaneous Requirements**

1. None

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Facility ID: 0278080158 Emissions Unit ID: P014 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

(a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P014 - Line 192, Clinch-on Roll Forming Machine	OAC rule 3745-31-05(A)(3) (PTI 02-19340)	Organic compound (OC) emissions shall not exceed 69.3 pounds per day based on a daily average for each calendar month and 4.8 tons per year. See section B.2 below.
	OAC rule 3745-21-07	exempt See section B.1 below.

2. **Additional Terms and Conditions**

(a) None

B. **Operational Restrictions**

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA Northeast District Office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The permittee shall not use more than 1250 gallons of lubricants per year at this emissions unit.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect, record and calculate the following information monthly for this emissions unit:

a. the name and identification number of each lubricant used and an indication of whether or not it is a photochemically reactive material;

b. the OC content, in pounds per gallon, of each lubricant;

c. the total number of gallons of each lubricant used for the month;

d. the total monthly OC emissions from this line, i.e., the summation of (b) times (c) for all lubricants employed;

e. the number of days the emissions unit was in operation each month; and

f. the average daily OC emission rate for all lubricants employed, i.e., (d/e), in pounds/day (average).

2. The permit to install for this emissions unit (P014) 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 application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per

week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant(s):

Toxic Contaminant: hexylene glycol

TLV (mg/m3): 121

Maximum Hourly Emission Rate (lbs/hr): 2.89

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2512

MAGLC (ug/m3): 2880

The permittee, having demonstrated that emissions of hexylene glycol, from emissions unit P014, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

3. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

4. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

5. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. **Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any record for this line showing that the average daily OC emissions exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing the use of a photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit annual reports that specify the total gallons of lubricants used in this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

5. The permittee shall submit quarterly reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.1 and the operational restriction in section B.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

OC emissions shall not exceed 69.3 pounds per day based on a daily average for each calendar month.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

OC emissions shall not exceed 4.8 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly OC emissions from the record keeping requirement specified in section C.1.d, divided by 2000 lbs/ton
Emission Limitation:

The permittee shall not use more than 1250 gallons of lubricants per year at this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly records from the record keeping requirement specified in section C.1.c.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

F. **Miscellaneous Requirements**

1. None

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Facility ID: 0278080158 Emissions Unit ID: P015 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

(a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P015 - Line 193, Clinch-on Roll Forming Machine	OAC rule 3745-31-05(A)(3) (PTI 02-19340)	Organic compound (OC) emissions shall not exceed 69.3 pounds per day based on a daily average for each calendar month and 4.8 tons per year.

		See section B.2 below.
	OAC rule 3745-21-07	exempt
		See section B.1 below.

2. **Additional Terms and Conditions**

(a) None

B. **Operational Restrictions**

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

   Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA Northeast District Office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The permittee shall not use more than 1250 gallons of lubricants per year at this emissions unit.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect, record and calculate the following information monthly for this emissions unit:

   a. the name and identification number of each lubricant used and an indication of whether or not it is a photochemically reactive material;

   b. the OC content, in pounds per gallon, of each lubricant;

   c. the total number of gallons of each lubricant used for the month;

   d. the total monthly OC emissions from this line, i.e., the summation of (b) times (c) for all lubricants employed;

   e. the number of days the emissions unit was in operation each month; and

   f. the average daily OC emission rate for all lubricants employed, i.e., (d/e), in pounds/day (average).

2. The permit to install for this emissions unit (P015) 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 application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

   a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
   b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

   c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

   d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant(s):

   Toxic Contaminant: hexylene glycol

   TLV (mg/m3): 121

   Maximum Hourly Emission Rate (lbs/hr): 2.89

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2512

   MAGLC (ug/m3): 2880

   The permittee, having demonstrated that emissions of hexylene glycol, from emissions unit P015, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw

material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

3. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
   If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

4. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

   a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

   b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

   c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

   d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

5. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. **Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any record for this line showing that the average daily OC emissions exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing the use of a photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit annual reports that specify the total gallons of lubricants used in this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

5. The permittee shall submit quarterly reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.1 and the operational restriction in section B.2 of these terms and conditions shall be determined in accordance with the following methods:
   Emission Limitation:

   OC emissions shall not exceed 69.3 pounds per day based on a daily average for each calendar month.

   Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

OC emissions shall not exceed 4.8 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly OC emissions from the record keeping requirement specified in section C.1.d, divided by 2000 lbs/ton.
Emission Limitation:

The permittee shall not use more than 1250 gallons of lubricants per year at this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the summation of the monthly records from the record keeping requirement specified in section C.1.c.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

F. **Miscellaneous Requirements**

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0278080158 Emissions Unit ID: P019 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

(a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P019 - WMT roll forming machine Line No. 136	OAC rule 3745-31-05(A)(3) (PTI 02-20360)	Organic compound (OC) emissions shall not exceed 30.8 pounds per day based on a daily average for each calendar month and 5.6 tons per year. See section B.2 below.
	OAC rule 3745-21-07	exempt See section B.1 below.

2. **Additional Terms and Conditions**

(a) None

B. **Operational Restrictions**

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA Northeast District Office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The permittee shall not use more than 1460 gallons of lubricants per year at this emissions unit.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect, record and calculate the following information monthly for this emissions unit:

   a. the name and identification number of each lubricant used and an indication of whether or not it is a photochemically reactive material;

   b. the OC content, in pounds per gallon, of each lubricant;

   c. the total number of gallons of each lubricant used for the month;

   d. the total monthly OC emissions from this line, i.e., the summation of (b) times (c) for all lubricants employed;

   e. the number of days the emissions unit was in operation each month; and

   f. the average daily OC emission rate for all lubricants employed, i.e., (d/e), in pounds/day (average).

2. The permit to install for this emissions unit (P019) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

   a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

   b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

   c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

   d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic: hexylene glycol

   TLV (mg/m3): 121

   Maximum Hourly Emission Rate (lbs/hr): 1.21

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1037

   MAGLC (ug/m3): 2880

   The permittee, has demonstrated that emissions of hexylene glycol, from emissions unit) P019, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

3. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

   c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
   If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any

significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

4. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

   a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

   b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

   c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

   d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

5. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. **Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any record for this line showing that the average daily OC emissions exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing the use of a photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit annual reports that specify the total gallons of lubricants used in this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

5. The permittee shall submit annual reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.1 and the operational restriction is section B.2 of these terms and conditions shall be determined in accordance with the following methods:
   Emission Limitation:

   OC emissions shall not exceed 30.8 pounds per day based on a daily average for each calendar month.

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
   Emission Limitation:

   OC emissions shall not exceed 5.6 tons per year.

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the summation of the monthly OC emissions from the record keeping requirement specified in section C.1.d, divided by 2000 lbs/ton.
   Emission Limitation:

   The permittee shall not use more than 1460 gallons of lubricants per year at this emissions unit.

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the summation of the monthly records from the record keeping requirement specified in section C.1.c.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

F. **Miscellaneous Requirements**

1. None