

Preliminary  Final

1. CONSTRUCTION STATUS (do not use with #2, 3A, or 3B)  
source name: **Dip Coating Tank No.1 and Oversized Steel Parts Spray Coating Process, Welding Operations, and Roadways & Parking.**

2. NSPS REQUIREMENTS  
source #: \_\_\_\_\_ source description: \_\_\_\_\_ NSPS subpart: \_\_\_\_\_

3A. NESHAP REQUIREMENTS:  
source #: \_\_\_\_\_ source description: \_\_\_\_\_ NESHAP reg.: \_\_\_\_\_

3B. RADIONUCLIDES NESHAP REQUIREMENTS:  
source #: \_\_\_\_\_ source description: \_\_\_\_\_

4. PERFORMANCE TEST REQUIREMENTS:  
C. (optional) source: \_\_\_\_\_ Pollutant(s): \_\_\_\_\_  
D.(optional) Tests shall include a determination of the uncontrolled mass rate of emissions.

5. MONITORING REQUIREMENTS:  
type of monitor: \_\_\_\_\_ source: \_\_\_\_\_

6. PSD REQUIREMENTS:

7. APPENDIX S - EMISSION OFFSET INTERPRETIVE RULING:

8. RECORDS RETENTION AND AVAILABILITY:

9. REPORTING REQUIREMENTS:

10. WASTE DISPOSAL:

11. MAINTENANCE OF EQUIPMENT:

12. MALFUNCTION/ABATEMENT:

13. AIR POLLUTION NUISANCES PROHIBITED:

14. NINETY DAY OPERATING PERIOD:

15. GASOLINE DISPENSING FACILITIES:

16. DIESEL AND/OR KEROSENE DISPENSING FACILITIES:

17. GASOLINE DISPENSING OPERATIONS (SUBMERGED FILL ONLY)  
annual limit of throughput (gallons): \_\_\_\_\_

18. MISC. STORAGE TANKS:

19. NSPS SUBPART Kb, 40 CFR 60.116b(a) AND (b)  
source numbers(s): \_\_\_\_\_ tank size \_\_\_\_\_ max vapor pressure \_\_\_\_\_

In Addition:

A. 40 CFR 60.116b(a) and (c):  
source number(s): \_\_\_\_\_ tank size \_\_\_\_\_ max vapor pressure \_\_\_\_\_

B. 40 CFR 60.116b(a) and (d):  
source number(s): \_\_\_\_\_ tank size \_\_\_\_\_ max vapor pressure \_\_\_\_\_

C. other applicable rules \_\_\_\_\_:  
source number(s): \_\_\_\_\_ tank size \_\_\_\_\_ max vapor pressure \_\_\_\_\_

20. BAT FOR OPEN TOP VAPOR DEGREASERS:

21. BAT FOR COLD CLEANERS:

22. BAT FOR CONVEYORIZED DEGREASERS:

23. NOTICE OF INTENT TO RELOCATE:

24. ADDITIONAL TERMS AND CONDITIONS:  AIR  DSHWM  WW

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for **CANAM STEEL CORPORATION** located in **FRANKLIN** County. The sources 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.

<b>Ohio EPA Source Number</b>	<b>Source Identification/Description</b>	<b>BAT Determination</b>	<b>Applicable Federal and OAC Rules</b>	<b>Permit Allowable Mass Emissions and/or Control &amp; Usage Requirement</b>
K002 (modification)	Dip Coating Tank No.1 and Oversized Parts Spray Coating Process	Compliance with the applicable Ohio rules and regulations, permitted emissions limits, and compliance with the Ohio EPA air toxics policy.	OAC 3745-31-05 OAC 3745-17-11 OAC 3745-21-09(U)(2)(f)	Allowable VOC emissions shall not exceed 69.8 lbs/hr and 154.0 tons/yr.  The VOC content of the coating material shall not exceed 3.9 pounds VOC per gallon, excluding water and exempt solvents.  Allowable PM emissions shall not exceed 22.3 lbs/hr and 3.9 tons/yr.
			OAC 3745-17-07(A)(1)(a)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six minute average, except as provided by rule.  See additional Special Terms and Conditions.
P002	Welding Operation	Compliance with the applicable Ohio rules and regulations, and compliance with the permitted emissions limits.	OAC 3745-31-05 OAC 3745-17-02 OAC 3745-17-11  OAC 3745-17-07(B)(1)	Allowable PM emissions shall not exceed 2.31 lbs/hr, and 6.0 tons/yr.  Visible particulate emissions from any dust source shall not exceed 20% opacity as a three minute average, except as provided by rule.  See additional Special Terms and Conditions.

<u>Ohio EPA Source Number</u>	<u>Source Identification/Description</u>	<u>BAT Determination</u>	<u>Applicable Federal and OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control &amp; Usage Requirement</u>
F001	Roadways and Parking	Compliance with the applicable Ohio rules and regulations, and compliance with the permitted emissions limits.	OAC 3745-31-05 OAC 3745-17-07(B)(4)  OAC 3745-17-07(B)(5)	Allowable annual PM emissions shall not exceed 9.3 tons PM per year.  There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty minute observation period.  There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty minute observation period.  See additional Special Terms and Conditions.

**SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	154.0
PM	19.3

### Special Terms and Conditions

#### A. Operational Restrictions

1. K002 shall not emit more than the average of 10.0 pounds VOC per ton of steel dip coated and the average of 14.0 pounds VOC per ton of steel spray coated.
2. The VOC content of the coating material shall not exceed 3.9 lbs VOC/gallon, minus water and exempt solvents.
3. The maximum annual production rate of dip coated steel products for this emissions unit shall not exceed 28,000 tons per year, based upon a rolling, 12-month summation of the monthly production rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Dip Coated Steel Production (tons)</u>
1-1	4,691
1-2	9,381
1-3	14,072
1-4	15,619
1-5	17,167
1-6	18,714
1-7	20,262
1-8	21,810
1-9	23,357
1-10	24,905
1-11	26,452
1-12	28,000

After the first twelve calendar months of operation following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the monthly production rates of dip coated steel products.

4. The maximum annual production rate of spray coated steel products for this emissions unit shall not exceed 2,000 tons per year, based upon a rolling, 12-month summation of the production rates.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Spray Coated Steel Production (tons)</u>
1	335
1-2	670
1-3	1,005
1-4	1,116
1-5	1,226
1-6	1,337
1-7	1,447
1-8	1,558
1-9	1,668
1-10	1,779
1-11	1,889
1-12	2,000

After the first twelve calendar months of operation following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the monthly production rates of spray coated steel products.

5. The maximum annual production of welding consumables shall not exceed 300.0 tons per year.
6. There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any 60-minute observation period.
7. There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any 60-minute observation period.
8. The permittee shall sweep the paved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. The paved surfaces shall be swept at least once a month. The permittee shall not be required to sweep during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
9. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water shall be used as the dust suppressant. The dust suppressant shall be applied to the unpaved surfaces, at a minimum, once every week. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
10. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent re-suspension.
11. A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.

12. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

**B. Monitoring and Record Keeping Requirements**

1. The permittee shall collect and record the following information each month for K002:
  - a. the name and identification number of each coating, as applied.
  - b. the VOC content of each coating (excluding water and exempt solvents), as applied.
  - c. the number of gallons of coating utilized in the dip coating tank.
  - d. the number of gallons of coating sprayed.
  - e. the number of hours of operation.
2. The permittee shall collect and record the following information for the purpose of determining annual VOC emissions for source K002:
  - a. the name and identification of each cleanup material employed.
  - b. the VOC content of each cleanup material, in pounds per gallon.
  - c. the number of gallons of each cleanup material employed.
  - d. the number of gallons (excluding water and exempt solvents) of each coating employed.
  - e. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons.
3. The permittee shall maintain monthly records of the following information:
  - a. the production rate of dip coated and spray coated steel products for each month.
  - b. beginning after the first twelve calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the dip coated and spray coated steel product production rates.

Also, during the first twelve calendar months of operation following the issuance of this permit, the permittee shall record the cumulative dip coated and spray coated production rate for each calendar month.

4. The permittee shall collect and record the following information

each month for P002:

- a. the identification and type of each welding material consumed.
- b. the quantity of each type of welding material consumed.
- c. the number of hours of operation.

### C. Reporting Requirements

1. The permittee shall notify the Ohio EPA in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative production levels. Additionally, the permittee shall submit quarterly deviation reports which summarize any exceedance of the following: VOC content limits, VOC emissions limits, coating usage limits (for all coatings and all cleanup materials employed in emissions units K002). If no exceedances occurred during the calendar quarter, then the report shall state that there were no exceedances.

These quarterly reports shall be submitted to the Central District Office by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters (i.e., October through December, January through March, April through June, and July through September, respectively).

3. The permittee shall also submit to the Central District Office annual reports which specify the total VOC emissions from each emissions unit in this permit for the previous calendar year. These reports shall be submitted by February 15 of each year.

### D. Air Toxics Policy

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for this PTI. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the hourly VOC emission limitations specified in this permit were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the ISCST3 model and a comparison of the predicted 1-hour maximum ground level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

**Pollutant: Toluene**

**TLV (mg/m3): 188**

**Maximum Hourly Emission Rate (lbs/hr): 0.28**

**Predicted 1-Hour Maximum Ground Level Concentration at the Fence Line (ug/m3): 41.5**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 7520**

**Pollutant: Ethyl benzene**

**TLV (mg/m3): 434**

Maximum Hourly Emission Rate (lbs/hr): 0.14

Predicted 1-Hour Maximum Ground Level Concentration at the Fence  
Line (ug/m3): 20.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3):  
17,360

**Pollutant: Xylene**

**TLV (mg/m3): 434**

**Maximum Hourly Emission Rate (lbs/hr): 0.35**

**Predicted 1-Hour Maximum Ground Level Concentration at the Fence Line (ug/m3): 51.8**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 17,360**

**Pollutant: Stoddard solvent**

**TLV (mg/m3): 525**

**Maximum Hourly Emission Rate (lbs/hr): 69.81**

**Predicted 1-Hour Maximum Ground Level Concentration at the Fence Line (ug/m3): 10,205.8**

**Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 21,000**

2. Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Ohio EPA Central District Office is required, including the possible issuance of modifications to this permit:
  - a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
  - b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
  - c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
  - d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
  - e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).

**E. Compliance Determination**

1. Emission Unit F001

Emission Limitation(s):

There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty minute observation period.

There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty minute observation period.

Compliance with the emissions limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

2. Emission Unit P002

Emissions Limitation: 2.31 lb PM/hr and 6.0 ton PM/yr.

Applicable compliance method: Multiply the amount of welding materials consumed in pounds per hour and pounds per year by an emission factor of 0.02 pound PM emitted per pound welding consumable. Divide the resultant by 2000 to obtain the answer in tons PM per year.

3. Emission Unit K002

Emission Limitation: 69.8 lb VOC/hr and 154.0 tons VOC/yr

Applicable compliance method: Compliance shall be demonstrated by the record keeping requirements in Section B.1 and B.2 of the terms and conditions in this permit.

4. Emission Unit K002

The VOC content of the coating material shall not exceed 3.9 pounds VOC per gallon, excluding water and exempt solvents.

U.S. EPA Method 24 shall be used to determine the VOC contents for coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: Method 24 data may be supplied by the coating manufacturer.