

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Cleveland Steel Container Corporation
Attn: Glenn Barnett
117 East Lincoln
Peotone, Illinois 60468

Application No.: 94100102
Applicant's Designation: CHI-COAT1
Subject: Pail Line and Thermal Oxidizer
Date Issued:
Location: 117 East Lincoln, Peotone

I.D. No.: 197075AAA
Date Received: December 3, 2001
Expiration Date:

This Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a pail line with permanent total enclosure (for the interior/exterior spray booth only) controlled by a thermal oxidizer as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Unit Specific Conditions

1.1 Unit Pail Line
Control Permanent Total Enclosure and Thermal Oxidizer

1.1.1 Description

Pail containers are coated in the flange spray booth, bottom spray booth and the interior/exterior spray booth. The pail line is equipped with a drying oven following the interior/exterior spray booth. 100 percent of the VOM emissions from the interior/exterior spray booth are captured (permanent total enclosure) and ducted to a thermal oxidizer.

1.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Pail Line	Flange Spray Booth, Bottom Spray Booth, Interior/Exterior Spray Booth, Drying Oven	Permanent Total Enclosure and Thermal Oxidizer for Interior/Exterior Spray Booth

1.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected coating line" for the purpose of these unit specific conditions is the pail line as described in Conditions 1.1.1 and 1.1.2.
- b. The affected coating line is subject to the requirements of 35 IAC 218.207(b) (2), which requires the system used to control VOM from the affected coating line to have an overall efficiency sufficient to limit VOM emissions to no more than 4.3 lb VOM per gallon of coating (minus water and any compounds which are specifically exempted from the definition of VOM).
- c. The affected coating line is subject to 35 IAC 212.321(b) (1), which provides that the Permittee shall not cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

1.1.4 Non-Applicability of Regulations of Concern

The affected coating line is not subject to 35 IAC Subpart G: Use of Organic Material, because the affected coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

1.1.5 Operational and Production Limits and Work Practices

- a. The thermal oxidizer shall only be operated with natural gas as the fuel.
- b. The thermal oxidizer shall be in operation at all times that the affected coating line is in operation and utilizing VOM containing materials and emitting VOM. The thermal oxidizer shall not be seasonally shut down as would be allowed in 35 IAC 218.107.
- c. The thermal oxidizer combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400 degrees F in the absence of a compliance test, before the coating process is

begun. This temperature shall be maintained during operation of the affected coating line.

- d. The permanent total enclosure (PTE) installed on the affected coating line shall meet the requirements of PTE, which are established in 35 IAC 218, Appendix B, Procedure T. As a result, the capture efficiency of VOM on the affected coating line is assumed to be 100 percent.
- e. The permanent total enclosure and the thermal oxidizer control system shall be operated in a manner consistent with good air pollution control practices.
- f.
 - i. Operation of the flange spray booth and bottom spray booth shall not exceed a VOM usage of 2,495 lbs/month and 24,944 lbs/year.
 - ii. Operation of the interior/exterior spray booth shall not exceed a VOM usage of 2,377 lbs/month and 237,625 lbs/year.

1.1.6 Emission Limitations

- a. Emissions from the affected coating line shall not exceed the following limits:

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
VOM	2.45	24.5

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

1.1.7 Testing Requirements

- a. Within 60 days of issuance of this permit, the volatile organic material emissions of the pail line controlled by an oxidizer shall be measured during conditions, which are representative of maximum emissions.
 - i. The test shall be designed to measure both the destruction efficiency across the oxidizer and the overall control efficiency provided by the combination of the capture system and oxidizer in accordance with 35 IAC 218.105(e) and (f). If the enclosure is a PTE, in conjunction with this test, the Permittee shall verify that the

enclosure meets the criteria for Permanent Total Enclosure in 35 IAC 218, Appendix B, Procedure T (USEPA Method 204, 40 CFR 51, Appendix M), so as to demonstrate the overall control efficiency provided by the combination of the capture system and afterburner.

- ii. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A, and 40 CFR 61, Appendix B, for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Volatile Organic Material	USEPA Method 25, 25A if outlet VOM Content < 50 ppm as C Non CH ₄

- b. Upon a reasonable request by the Illinois EPA, emission testing for VOM from the affected coating line shall be performed.

1.1.8 Monitoring Requirements

- a. Pursuant to 35 IAC 218.105(d)(2)(A)(i), the thermal oxidizer shall be equipped with a USEPA approved continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor specifications at all times the thermal oxidizer is in use. This monitoring equipment shall monitor the combustion chamber temperature of the thermal oxidizer.
- b. The temperature monitoring device(s) shall have an accuracy of 3°C or 5°F.
- c. The Permittee shall install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device(s), such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected coating line to demonstrate compliance with conditions of this permit:

- a. Pursuant to 35 IAC 218.211(e)(2), the Permittee shall collect and record all of the following information each day for the affected coating line and maintain the information at the source:
 - i. The weight of VOM per volume of coating solids as applied each day;
 - ii. Thermal oxidizer monitoring data;
 - iii. A log of operating time for the capture system, thermal oxidizer, monitoring equipment and the associated coating line; and
 - iv. A maintenance log for the capture system, thermal oxidizer and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- b. The name and identification number of each coating and clean-up solvent as applied on the affected coating line;
- c. The usage of each coating and clean-up solvent, in units of gallons/month and gallons/year;
- d. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM), as applied each month on the affected coating line;
- e. Density of each applied coating and cleanup solvent, in units lb/gal;
- f. The weight of VOM per volume of each cleanup solvent, in units lb/gallon, as applied each month on the affected coating line; and
- g. VOM emissions in tons/month and tons/year from the affected coating line calculated based on the recordkeeping and compliance procedures from Condition 1.1.12.

1.1.10 Reporting Requirements

- a. i. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected coating line with the permit requirements as follows. Reports shall describe the probable cause of such

deviations, and any corrective actions or preventive measures taken:

Pursuant to 35 IAC 218.211(e) (3), the Permittee shall notify the Illinois EPA in the following instances:

- A. Any record showing violation of 35 IAC 218.207 and Condition 1.1.3(b) within 30 days of such an occurrence.
 - B. At least 30 calendar days before changing the method of compliance from 35 IAC 218.207 to 35 IAC 218.204 or 205, the Permittee shall comply with all requirements of 35 IAC 218.211(c) (1) and (d) (1).
- ii. The Permittee shall notify the Illinois EPA in writing of proposed modifications to the permanent total enclosures (PTE) or equivalent which would affect the status of the PTE criteria. Such notification shall be submitted prior to commencement of modifications. Modifications to the PTE may require additional testing.
- b. One copy of reports shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

One copy of reports shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit
9511 West Harrison
Des Plaines, Illinois 60016

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Field Operations Section
9511 West Harrison
Des Plaines, Illinois 60016

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

1.1.12 Compliance Procedures

For the affected coating line, compliance with VOM emission limitations in Condition 1.1.6(a) shall be based on the recordkeeping requirements in Condition 1.1.9 and by use of the formula listed below:

$$\text{VOM Emissions (tons/month)} = [\text{Actual Coating/Clean-up solvent Usage (gal/mo)} \times \text{Coating/Clean-up solvent Density (lb/gal)} \times \text{VOM Content of the Coating/Clean-up solvent (Wt.\%)}] \times [1 - (\text{overall control efficiency}/100)] / (2000 \text{ lb/ton})$$

Please note that the Permittee should update their CAAPP application to include this equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

If you have any questions on this, please call Jason Schnepf at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JMS:psj

cc: Region 1