

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

B171529396

FACILITY: Industrial Container Services - MI, LLC		SRN / ID: B1715
LOCATION: 4336 HANSEN ST SW, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Dan Belfer		ACTIVITY DATE: 04/15/2015
STAFF: Denise Plafcan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Conducted an announced scheduled inspection. The inspection was announced because it was related to recent complaints and the contact was out of town at the time of the complaint.		
RESOLVED COMPLAINTS:		

Denise Plafcan (DP) conducted an announced scheduled inspection to determine compliance with state and federal Air Quality rules and regulations. This was an announced inspection due to the timing and the owner being out of town during a complaint investigation. Prior to plant entry, DP conducted a visible emissions and odor survey from surrounding property. The wind was generally out of the west. There were no odors and no apparent malfunctions. DP met with Dan Belfer and after a brief introduction and discussion, DP explained the purpose of the inspection and reviewed the Environmental Inspection brochure. Dan was also the escort on the inspection.

DP and Dan discussed the possible sources of the complaints and possible solutions. Dan provided a layout of the area, see attached, to discuss the various locations of the possible source of odors. There have been some extenuating circumstances for the recent complaints, however, if the problem continues, other measures will need to be taken to address the odors. Dan did say that they could not track the exact time for an individual drum but they could track a load at a time for the burn-off oven just in case a particular customer is the source of a particular complaint.

The facility was started in the 1920's by Dan's grandfather and was used for wooden barrels. There are 34 factory workers and 7 drivers that work one shift 6 am to 4:30 pm five days a week. When the former Belfer Drum was purchased by Industrial Container Services (ICS) they submitted a PTI application for control on the painting areas of the plant. This PTI application was voided because they have switched to water-based coatings and the control was not necessary.

The inspection began in the metal working area and moved through the process where the rims are removed from the drums and the drums are reshaped and evaluated. Each group of drums processed is for a specific customer order. The drums that are returned are not reworked for the same facility. Each order may have different requirements ranging from height, color, a drain at the bottom, a seal or to be used for food raw materials. Next is the burn off oven which was operating at 930°F; the afterburner was operating between 1645°F to 1650°F. In the control room there is a large red button that is used for emergency stops. The location of the emergency button is on the flat top of the control panel such that you can easily lean on it when standing at the controls. DP suggested a flip top to prevent the accidental shut down of the oven. Dan said that may not work with OSHA requirements but he would check into it. All of the ash from the oven is double burned and then when the ash bins are being emptied there is a flexible duct that can be placed over the container to draw the

fugitives back through the burner. There is a gap between the duct work immediately next to the afterburner and the longer duct leading to the stack. The gap is about 2-3 inches wide and Dan said it is to draw in fresh air to help cool the plume. The duct/stack has a circuitous route to extend the cooling time before the air exits the stack. The drums then pass through to the next area along a conveyor line located at the east of the plant closest to the railroad tracks. The drums are washed, evaluated, coated outside and sometimes coated inside.

During the closing meeting all records were readily available for review and copies were immediately provided (see attached).

Overall, considering the operation, the plant was clean and well organized.

The following conditions apply to: EUDRUMFURNACE

**Emission Limits**

1.1 The particulate emission rate from EUDRUMFURNACE shall not exceed 0.30 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air. No stack test was required as part of this compliance inspection.

**Visible Emission Limits**

1.2 Visible emissions from EUDRUMFURNACE shall not exceed a six-minute average of 20 percent opacity, except as specified in Rule 301(1)(a). No VE's were conducted as part of this compliance inspection.

**Process/Operational Limits**

1.3 The permittee shall process only containers which are empty as defined in 40 CFR 261.7(b). All drums appear to be being checked to be sure they are emptied before being processed.

1.4 The permittee shall not accept for reconditioning any containers that formerly contained acute hazardous wastes as listed in 40 CFR 261.33(e). Customers are required to certify that the drums do not contain hazardous waste.

1.5 The permittee shall maintain its existing fencing to prevent unauthorized individuals from entering the area of the furnace. Fencing was in place as required.

1.6 Input feed to the furnace shall cease immediately, consistent with safe operating procedures, upon initiation of thermal oxidizer malfunction. Input feed to the furnace shall not restart until the thermal oxidizer is back on line and functioning properly. Compliance not evaluated.

1.7 The permittee shall not operate EUDRUMFURNACE unless a minimum temperature of 1600 °F and a minimum retention time of 1.0 seconds in the thermal oxidizer is maintained. During the inspection the oxidizer was operating at 1645°F to 1650°F. See attached circular charts.

**Equipment**

1.8 The permittee shall not operate the drum furnace unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. At the time of the inspection they were in compliance with this condition.

1.9 The permittee shall not operate the drum furnace in EUDRUMFURNACE unless the secondary containment facilities are maintained and control procedures to prevent the loss of hazardous materials are followed. Appears that appropriate containment is in place. They collect the rainwater from within the "containment" area into drums for off-site disposal.

#### Monitoring

1.10 The permittee shall monitor and record, in a satisfactory manner, the temperature from the thermal oxidizer on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. See attached circular charts.

1.11 The permittee shall monitor and record the visible emissions from the furnace on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. An alarm shall be set to go off at an opacity as established by the District Supervisor, the opacity meter and alarm is set for 20% opacity.

1.12 The permittee shall conduct a monthly visual inspection of the thermal oxidizer to identify any signs of corrosion. If corrosion damage is identified, the permittee shall initiate corrective action to repair any damage within 30 days. The permittee shall keep, in a satisfactory manner, records of the monthly visual inspections which shall include, at a minimum, the dates and results of the inspections and the dates and reasons for repairs. All records shall be kept on file for a period of at least five years and made available to the Department upon request. These inspections are occurring as required.

#### Recordkeeping/Reporting/Notification

1.13 The permittee shall keep the following information for each shipment of drums/containers received and processed in EUDRUMFURNACE: Origin, the number of drums from each originating company, documentation for each shipment of drum/containers received for processing that they did not contain acute hazardous waste. These records are being maintained and are part of their sales records.

1.14 The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EUDRUMFURNACE. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. All records shall be kept on file for a period of at least five years and made available to the Department upon request. Records reviewed on site.

1.15 The permittee shall keep, in a satisfactory manner, operating temperature records for the thermal oxidizer as required by SC 1.10. If the measured operating temperature of the thermal oxidizer falls below 1600°F during operation of EUDRUMFURNACE, compliance may be demonstrated based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes one or more temperature readings below 1600 °F. All records and calculations shall be kept on file for a period of at least five years and made available

to the Department upon request. – DP determined the records are being maintained in a satisfactory manner following an on-site review of the circular charts (see attached).

#### Stack/Vent Restrictions

These dimensions were not verified as part of this compliance inspection.

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)
1.16	SVDRUMFURNACE	42	40

Permit 430-83A

#### SPECIAL CONDITIONS

13. The total volatile organic compound (VOC) emission rate from the exterior barrel coating line shall not exceed 24.5 pounds per hour nor 22.7 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.

Through February 2015 they reported 8.08 pounds per hour and 14.94 tons per year (see attached records). The pound per hour is also being calculated on a 12 month rolling time period, which appears to be in compliance with the way the condition is written.

14. The total volatile organic compound (VOC) emission rate from the interior barrel coating line shall not exceed 22.4 pounds per hour nor 10.5 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.

Through February 2015 they reported 7.08 pounds per hour and 8.72 tons per year (see attached records). The pound per hour is also being calculated on a 12 month rolling time period, which appears to be in compliance with the way the condition is written.

15. The total volatile organic compound (VOC) emission rate from the cleanup and purge operations shall not exceed 35.2 pounds per hour nor 9.5 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month. Through February 2015 they reported 3.49 pounds per hour and 0.6 tons per year (see attached records).

16. The volatile organic compound (VOC) emission rate from the exterior barrel coating line shall not exceed 3.5 pounds per gallon of coating (minus water) as applied. The worst case for the interior barrel coating is 3.05 pounds per gallon minus water. See attached data sheet.

17. The volatile organic compound (VOC) emission rate from the interior barrel coating line shall not exceed 4.3 pounds per gallon of coating (minus water) as applied based upon a calendar day averaging period. The worst case for the interior barrel coating is 3.2 pounds per gallon minus water. See attached data sheet.

18. There shall be no visible emissions from any portion of the exterior barrel coating line. No VE's observed during the inspection.

19. There shall be no visible emissions from any portion of the interior barrel coating line. No VE's observed during the inspection.

20. There shall be no visible emissions from any portion of the cleanup and/or purge operations. No VE's observed during the inspection.

21. Rules 1001, 1003 and 1004 - Verification of volatile organic compound (VOC) emission rates from any portion of or the entire exterior barrel coating line; any portion of or the entire interior barrel coating line; and/or any portion of or the entire cleanup and/or purge operations by testing, at owner's expense, in accordance with Department requirements, may be required for operating approval. Verification of emission rates includes the submittal of a complete report of the test results. If a test is required, stack testing procedures and the location of stack testing ports must have prior approval by the District Supervisor, Air Quality Division, and results shall be submitted within 120 days of the written requirement for such verification. Stack was testing not required as part of this compliance inspection.

22. The applicant shall keep a separate monthly record, acceptable to the District Supervisor, of the following information for each of the two coating lines: All records are being maintained. See attached.

23. The applicant shall keep a monthly record, acceptable to the District Supervisor, of the following information for the cleanup and purge operations. All records are being maintained, see attached records.

24. The applicant shall use high volume low pressure (HVLP) spray equipment in all spray coating booths or an equivalent technology with comparable transfer efficiency. All coating applicators shall be properly installed, maintained and operated according to manufacturer's specifications. HVLP guns are being used.

25. The applicant shall not operate either of the two spray coating booths unless all exhaust filters are in place and operating properly. Exhaust filters were in place, appeared to be operating properly and are changed daily.

26. The disposal of spent filters, and/or waste coating, reducers, and/or cleanup and/or purge solvents shall be performed in a manner which minimizes the introduction of air contaminants to the outer air. It appears they are following proper disposal procedures.

27. The exhaust gases from the two spray coating booths shall be discharged unobstructed vertically upwards to the ambient air from two stacks (one per booth), each with a maximum diameter of 24 inches at an exit point not less than 49 feet above ground level. Actual stack dimensions were not measured as part of this compliance inspection but they appear to be in compliance.

28. The exhaust gases from the two coating ovens shall be discharged unobstructed vertically upwards to the ambient air from two stacks (one per oven), each with a maximum diameter of 18 inches at an exit point not less than 45 feet above

ground level. Actual stack dimensions were not measured as part of this compliance inspection but they appear to be in compliance.

29. Total emissions of any single hazardous air pollutant (HAP) from the exterior barrel coating line, the interior barrel coating line, and the cleanup and purge operations shall be less than 10 tons per year and the total aggregate emissions of all HAP's from the exterior barrel coating line, the interior barrel coating line, and the clean-up and purge operations shall be less than 25 tons per year; both based on a 12-month rolling time period as determined at the end of each calendar month. Highest single HAP as of February 2015 was Butyl Cellosolve at 1414.6 pounds in March 2014. The aggregate HAPs were at 10.6 tons as of February 2015.

Based on the physical inspection and records provided the facility appears to be in compliance with state and federal Air Quality rules and regulations.

NAME



DATE

3-22-15

SUPERVISOR

PAB