

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

B254443073

FACILITY: Carastar Custom Packaging		SRN / ID: B2544
LOCATION: 1957 BEVERLY SW, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: Larry Howard , Maint. Superintendent/Environmental Coordinator		ACTIVITY DATE: 01/19/2018
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled unannounced inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Adam Shaffer (AS) arrived at the Carastar Custom Packaging (CC) facility located in Grandville, MI at 9:30 am on January 19, 2018 to complete a scheduled, unannounced inspection.

Facility Description

Prior to entering the facility, offsite odor and visible emission observations were completed. Weather conditions at the time of the inspection were sunny, winds from the southwest and temperatures in the high 20s°F. A paint/solvent odor was observed along the northeastern edge of the facility property. The odor was brief and minor when identified. No visible emissions were observed.

Upon arrival, AQD staff AS initially met with Mr. Russ Skeel, Plant Manager, who provided a partial tour of the facility. AQD staff AS later met with CC staff Larry Howard, Maintenance Superintendent & Environmental Coordinator, and Mr. Chris Mitran, General Manager for the remainder of the site walk through and discussion at the end of the inspection.

CC is a packaging company that utilizes recycled materials in their production processes. Paper product rolls are received on site and go through several processes including printing and cutting to appropriate sizes before being shipped off site. The facility is in operation with one Opt Out Permit to Install (PTI) No. 710-92B. During the inspection Mr. Howard had stated that since the last inspection in 2014 CC is now utilizing a new fountain solution that he stated contained less volatile organic compounds (VOCs). No additional significant changes have occurred to the facility.

It was noted during the previous inspection on March 31, 2014 that the 61" Bobst slicing machine had been removed and that the facility was in operation with now five gluing lines and one window line. These previous observations were verified during the facility walk through.

EUDieCutting

This emission unit is for the two 50" Bobst slicing machines following printing operations to remove excess paper from the product. The two Bobst machines are connected to four cyclones. Additionally, a manual cutting area of paper waste from the sheet fed printing press are connected to the cyclones.

Each cyclone is limited to 0.01 lbs per 1000 lbs of exhaust gases that is calculated on a dry gas basis per test protocol for particulate matter (PM). Additionally, each cyclone is limited to 0.8 lbs per hour per test protocol for PM-10. Based on the observations prior to entering the site and during the rooftop observations, no testing will be required at this time.

CC has two bailers which collect all paper waste products from the four cyclones. The balers are inspected daily, which would identify if a cyclone had plugged up and was not operating correctly. The daily observations are not recorded; though Mr. Howard does record maintenance to the four cyclones. Maintenance records were requested and reviewed for 2017. During a rooftop inspection of the cyclones, paper debris was observed surrounding the cyclones; though in an enclosure in place to help contain waste from spreading. Mr. Howard stated they just had a cyclone plug two nights prior. Some of the debris observed appeared to not have been from the most recent plug up of a cyclone. CC staff stated that they planned on cleaning up the debris. Based on a review of the maintenance records and observations made during the inspection, the four cyclones appeared to overall be working in a satisfactory manner.

Four stacks were listed in association with this emission unit. Though the stacks were not measured; they appeared to be consistent with the dimensions identified in Opt Out PTI No. 710-92B.

FGOffsetLitho

This flexible group is for the 50" Roland 6-Color Offset Lithographic Printing Press, the 33" Drent Goebel 7-Color Offset Lithographic Printing Press and the fabrication processes. Both presses are non-heat set. The 50" Roland printing press is limited to a VOC content for the fountain solution to be <5% by weight as applied. Additionally, VOC content for the fountain solution used by the 33" Drent Goebel is limited to <5% by weight as applied and shall not contain either Isopropyl Alcohol (IPA, CAS # 67-63-0), Propyl Alcohol (CAS # 71-23-8), or Ethanol (CAS # 64-17-5).

Each printing press has an auto mix ratio of fountain solution to water prior to application. Mix ratios for fountain solutions to water were stated by CC staff to be consistent. CC staff was initially unaware of the VOC contents for the fountain solutions after they are mixed with water. The VOC contents for each fountain solution after they are mixed with water were requested and were eventually provided with the use of the Appendix A calculations. In the future CC shall have the fountain solution VOC contents after mixing with water more readily available. The highest VOC content of the three fountain solutions after it is mixed with water is 3.2%. Based on this, CC is within the permitted limits. Isopropyl alcohol was verified to only be used on the EU50ManRoland. Based on the records reviewed, the fountain solutions used for the EU33DrentGoebel do not contain either Isopropyl Alcohol (IPA, CAS # 67-63-0), Propyl Alcohol (CAS # 71-23-8), or Ethanol (CAS # 64-17-5).

Additionally, this flexible group is limited to 21.0 tons per year (tpy) of VOCs per a 12-month rolling total. The monthly total of VOCs for December 2017 was 2,113.25 lbs (~1.06 tons). As of December 2017, the 12-month rolling total VOCs was 25,984.56 lbs (~13 tons) which is well within the permitted limit. Previous 12-month rolling totals for VOCs were reviewed and identified to be well within the permitted limit of 21.0 tpy.

During the site inspection, several open containers were observed around each printing press. AQD staff AS recommended to CC staff on making sure containers were properly closed to limit the amount of fugitive emissions. The remaining containers observed were properly closed.

Per Special Condition (SC) 2.4 for FGOffsetLitho, CC shall utilize Test Method 24 to determine the VOC content for all inks, coatings, fountain solution additives and cleaning solvent. Upon approval by the District Supervisor, CC may utilize manufacturers formulation data sheets instead to determine the VOC content. A request to use formulation data was received from CC on April 3, 2014. For the coating and ink materials used, CC receives a monthly report from each material provider identifying VOC contents for each material used. The VOC contents for the remaining materials are identified from Material Safety Data Sheets (MSDS). Reviewing the records for the request and approval of the usage of manufacturers formulation data sheets, it was concluded that no violation will be issued; however, in the future CC shall utilize manufacturers formulation data sheets as requested or complete Test Method 24 to identify the VOC contents for the remaining materials used.

Per SC. 2.6 for FGOffsetLitho, CC shall keep records of the category for each material used, compositions, VOC contents, usage and reclaim rates, and 12-month rolling total emissions. Records were requested and reviewed from January 2017 through December 2017. CC does reclaim used solvents. Absorbtech takes the used rags and provides a monthly sheet identifying the amount of solvent reclaimed. Proper reclaim subtractions to emission records were discussed at length with CC staff on using the lowest VOC containing solvent (most conservative). Based on the records received, CC is keeping adequate track of each category of materials, chemical composition, VOC contents, usage rates and emissions.

Three stacks are listed in association with this flexible group. Though the exact dimensions were not measured, they appeared to be consistent with the listed values in the Opt Out PTI No. 710-92B.

An email was received from CC on July 2, 2010 stating that all equipment has been assigned a number and put up in display for ID.

FGFacility

CC is subject to facility wide individual and aggregate hazardous air pollutant (HAP) limits of less than 9.0 and 22.5 tpy respectively. CC receives a monthly usage report for inks and coatings that identify the HAP contents for all materials used. Upon initial review of the requested monthly records, the HAPs were not separated into individual HAPs. However, the total HAPs for the month of December 2017 were 1.03 lbs. Based on how low the HAP emissions were for December 2017 and previous months back, it was concluded that no violation would be issued. The individual HAP records and how to properly keep them were discussed with Mr. Howard and will be

completed adequately moving forward. As of December 2017, the 12-month rolling total for aggregate HAPs was 22.02 lbs which is well within the permitted limits. Based on the records reviewed, CC is keeping adequate track of usage rates, HAP contents, and HAP emission totals. CC does not reclaim any HAP containing materials.

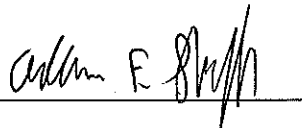
Additional Observations

- One cold cleaner was observed during the inspection. The lid was open and unattended at the time of the site inspection. AQD staff AS advised CC staff on keeping the lid closed when not in operation to limit fugitive emissions. Crystal Clean services the cold cleaner. The cold cleaner was less than 10 square feet and appeared to be exempt per Rule 281(2)(h).
- Coating material storage areas were observed during the site inspection. Containers observed were properly closed.
- One 347,000 natural gas boiler used for building heating purposes was observed at the time of the inspection. The boiler appears to be exempt per Rule 282(2)(b)(i).
- In the plate making room of the facility, metal plates used for imaging are run through an Xpose machine to etch the desired image and then placed into a processor machine that applies a chemical on the surface to keep ink on the image. The Xpose and processor machines appear to be exempt per Rule 285(2)(r)(v) and Rule 285(2)(r)(i) respectively.

Conclusion

A final discussion was completed with AQD staff AS, Mr. Howard, and Mr. Mitran. Based on the review of the records provided and the facility walk through, CC appears to be in compliance with Opt Out PTI No. 710-92B.

NAME



DATE

02/28/2018

SUPERVISOR

