

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

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| FACILITY: R L Adams Plastics, Inc. | | SRN / ID: N7221 |
| LOCATION: 5955 Cross Roads Commerce, WYOMING | | DISTRICT: Grand Rapids |
| CITY: WYOMING | | COUNTY: KENT |
| CONTACT: Duane Berends , Dir. of Safety & Training | | ACTIVITY DATE: 11/29/2016 |
| STAFF: Kaitlyn DeVries | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR |
| SUBJECT: The purpose of this inspection was to determine compliance with MI-ROP-N7221-2015 and all other applicable Air Quality Rules and Regulations. | | |
| RESOLVED COMPLAINTS: | | |

On Tuesday November 29, 2016 AQD Staff Kaitlyn DeVries (KD) and Chris Robinson (CR) conducted an unannounced scheduled inspection of R. L. Adams Plastics (R.L. Adams) located at 5955 Cross Roads Commerce, Wyoming Michigan. The purpose of this inspection was to determine compliance with MI-ROP-N7221-2015 and all other applicable Air Quality Rules and Regulations.

AQD staff arrived at the facility at 10:00 am observed the area for any excess odors and opacity, prior to entering the facility. None were noted. Staff met with Mr. Duane Berends, Director of Safety & Training and Mr. Ryan Ritter. Mr. Ritter supplied KD with the pertinent records via e-mail on a later date.

Facility Description

R.L. Adams is a foam product manufacturer that primarily produces goods for the food service, building product, and arts & crafts industries. Products include foam plates, poster board, and foam insulation. The facility consists of four (4) primary areas: the lamination area, the thermoform area, the extrusion area, and the warehouse. KD asked Mr. Berends, if there were any changes to the facility since her last inspection in 2015; Mr. Berends said there were no changes, but they were thinking of adding in a new baghouse, likely next spring. KD told Mr. Berends to keep her informed of any impending changes, and to keep in mind the capacity of the baghouse and other pertinent items in case there needed to be any updates to the ROP, or any subsequent PTI's.

Regulatory Analysis

R. L. Adams is a major source of Volatile Organic Compounds (VOC's) and is subject to the Title V program. R. L. Adams currently holds MI-ROP-N7221-2015, and is not subject to any federal regulations at this time.

Compliance Evaluation

FGPROD®RIND

This flexible group consists of all of the production and regrind operations at the facility, including EUPRODUCITON and EUREGRIND. Specifically, this includes all of the equipment used to manufacture the laminate and plate stock, the extruders to produce the foam, the laminators, and the thermoformers (EUPRODUCTION) and the equipment for the scrap removal system including the central grinder and the four (4) baghouses associated with the grinding operations (EUREGRIND).

As previously mentioned, the facility has four (4) primary areas. The process starts in the extrusion area. There are three (3) tandem extrusion lines that utilized one of three (3) blowing agents: Isopentane, CO₂, and hydrofluorocarbon 152a. The extrusion lines use both virgin and reground ingredients to produce the final product. The blowing agents are stored in one of three (3) storage tanks located just outside of the main floor of the plant. The blowing agents are then piped in to the extrusion lines. Each of the storage tanks have a capacity of 12,000 gallons, and are exempt from Rule 201 permitting under Rule 284(h) (i).

R.L. Adams has a flow meter that monitors the isopentane usage and is displayed on an LCD screen on each of extrusion lines. Isopentane usage and production are limited based on the following equation:

$$(BA_P * S_P) + (BA_L * S_L) \leq 260,000 \text{ pounds of VOC per year (130 tons per year)}$$

Where:

BA_p = percent isopentane in plate stock, in lbs/100 lbs of stock produced

S_p = scrap from plate production in lbs/month

BA_L = percent isopentane in laminate stock, in lbs/100 lbs of stock produced

S_L = scrap from laminate production in lbs/month

The lamination area consists of two (2) identical lines that apply heat to the foam for application of paper to both sides of the foam to create foam boards, and other display boards. Scrap from this area is sent to the regrind area, which will be described below.

The regrind area consists of a central grinding machine, and four (4) pulse-jet baghouses. Each of the four (4) baghouses were observed, and all were operating at the time of the inspection. Particulate emissions from the baghouses are limited to 0.01 lb per 1000 lbs of exhaust gases on a dry gas basis, based on test protocol. All of the baghouses were properly equipped with magnehelic gauges, and were operating at pressures of 0.8, 2.4, 0.8, and 1 inch of water, respectively. R.L. Adams monitors and records, the pressure drop of each of the four (4) baghouses daily, and records for this can be found attached to this report. The pressure drop during the time of the inspection appears to be consistent with what the pressure readings have been over the past year. Mr. Berends stated that the bags are changed on an as needed basis.

This flexible group is limited to 130 tons per year (tpy), 12-month rolling, which corresponds to the 260,000 pounds mentioned in the above equation. Based on the records, which are attached to this report, as of November 2016, the 12-month rolling VOC emissions were 95.612 tpy. Additionally, May 2016 had the highest monthly emissions for the past year at 9.798 tons.

Isopentane usage appears to be properly tracked, and records can be found attached to this report. Production records are also tracked for extrusion, lamination, thermoforming, and regrind. All of the variables outlined in the equation above are clearly outlined in R.L. Adams' records, which are kept in an acceptable manner, including the amount of isopentane containing scrap that is processed.

R.L. Adams has submitted all of the required semi-annual and annual reports and the emissions reported are consistent with what was reported in the 2015 MAERS report.

Finally, while none of the stacks were explicitly measured, all stacks appeared to be of proper dimensions and had not changed since the last inspection.

Exempt Equipment:

R. L. Adams currently has one (1) parts cleaner that is maintained by Safety Kleen, and is exempt from permitting under Rule 281 (h). The facility also utilizes a cooling tower, which is exempt from Rule 201 permitting under Rule 280(d). R.L. Adams does not have any boilers or generators.

Compliance Determination

Based on the observations made during the inspection and a subsequent review of the records, it appears as if R. L. Adams Plastics is in compliance with MI-ROP-N7221-2015 and all other applicable Air Quality Rules and Regulations.

NAME *Kathryn Davis*

DATE *12/06/2016* SUPERVISOR *[Signature]*