# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

N830864239				
FACILITY: ALCO Products, LLC		SRN / ID: N8308		
LOCATION: 580 ST JEAN ST, DETROIT		DISTRICT: Detroit		
CITY: DETROIT		COUNTY: WAYNE		
CONTACT: Weimar King , Chemist		ACTIVITY DATE: 08/16/2022		
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR		
SUBJECT: Scheduled inspection				
RESOLVED COMPLAINTS:		*		

On August 16, 2022, AQD staff Sam Liveson conducted an unannounced inspection of ALCO Products, LLC (ALCO) located at 580 St. Jean Street in Detroit, Michigan. The inspection was led by US Environmental Protection Agency staff Natalia Vazquez and Brittany Cobb. The purpose of the inspection was to determine the facility's compliance with the federal Clean Air Act; Part 55, Air Pollution Control, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; the Michigan Air Pollution Control Rules; federal New Source Performance Standard (NSPS) Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture; and federal National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart JJJJJ for Industrial, Commercial, and Institutional Boilers Area Sources.

# **Pre-Inspection Meeting and Facility Overview**

#### 1. Arrival and Safety Overview

AQD arrived on site around 1:00 PM. Weather was 77 degrees Fahrenheit and mostly sunny. AQD did not observe any opacity from tanks. No stacks were visible from the parking area.

AQD and USEPA entered the facility around 1:15 PM. We stated the purpose of the visit and provided picture identification. We met with Dave Martin, Plant Manager, and Weimar King, Chemist. After an opening meeting, Dave and Weimar provided a tour of the facility. We were advised to wear safety glasses during the walkthrough.

# 2. General Facility Overview

ALCO is located at the end of 580 Old St. Jean St. The facility produces rolled asphalt products for the residential roofing and tiling industries. Dave called the company a "peel and stick" company. They provide rolled goods for residential use. Materials can be on a fiberglass mat or a polyester film. Dave provided a sample of granular roof rolling that is produced at the facility, as well as a flooring product produced at the facility. The roofing product appears to be applied to roofs beneath roof shingling. The flooring product is applied underneath tiling and acts as a sound deadener and crack suppressant.

The facility has two sheeting lines. The north (original) sheeting line was installed around 1999 and 2000, and it was stack tested per NSPS Subpart UU in 2009. The south (new) sheeting line was installed in 2016. The facility has transitioned from selling coatings as its primary business to all rolled goods manufacturing. On sheeting lines, a roller applies a heated and cooked mixture of limestone, rubber, and asphalt evenly along the carrier sheet. According to the facility, 100 rolls can be produced per hour. The facility claims that sheeting lines are exempt from obtaining a Permit to Install per Rule 290. According to the facility, there are two exhaust points on each sheeting line.

The facility also has mixers, storage tanks, and several boilers. There are no blowing stills. The company has approximately 40 employees and operates Monday through Thursday.

#### 3. Compliance Background

AQD previously visited ALCO in 2015 for an inspection, and the facility was found to be in compliance. Prior to the 2015 inspection, the facility was inspected in 2009 during the Subpart UU stack test for its north sheeting line. The facility was in compliance at that time. The facility has no outstanding violations.

#### Facility Walkthrough: Process Overview and Compliance Status

# 1. Two Sheeting Lines - North (Original) and South (New) - Rule 290 and NSPS Subpart UU

ALCO has two sheeting lines which are discussed below. The facility considers the lines exempt from obtaining a Permit to Install per Rule 290 for emission units with limited emissions. The facility provided a record of equipment history at the facility. According to this record, the original asphalt coating line is referred to as Line 2, and the new asphalt coating line is referred to as Line 1. According to the facility's Michigan Air Emissions Reporting System (MAERS) report for 2021, sheeting lines are distinguished as north and south lines.

1.1. North (Original) Sheeting Line 2 – Rule 290 and NSPS Subpart UU AQD visited the north sheeting line. It was not operating during the inspection. The north sheeting line was installed in 1999 or 2000 according to the facility. The line was mothballed in 2017 with the start of the south sheeting line, and then started up again in 2019.

The line appears to be two or three stories tall and several hundred feet in length, with a width of ten feet or so. A rolled carrier sheet of fiberglass or felt appears to be fed through the sheeting line. The sheet takes various turns on rollers as the sheet is fed through the line.

Along the line, the carrier sheet is "dipped" into a cooked mixture of asphalt, rubber, and limestone. Dipping equipment is referred to as a "saturator" according to NSPS Subpart UU. Per 40 CFR 60.471, "saturator" means the equipment in which asphalt is applied to felt to make asphalt roofing products. The term saturator includes the saturator, wet looper, and coater. Rollers apply the mixture evenly along the carrier sheet. The saturator line appears to be subject to NSPS Subpart UU per 40 CFR 60.470. No granules are added along the north sheeting line. There is no aggregate bin anymore. The sheet is then dried, rolled, and packaged into a box for shipping to the customer.

1.2. South (New) Sheeting Line 1 – Rule 290 and NSPS Subpart UU
AQD observed the south sheeting line. This was installed in 2016 and was operational in 2017 according to the facility. The line looks similar to the north line and appears to be considered a "saturator" per the definition in 40 CFR 60.471 so that it is subject to NSPS Subpart UU per 40 CFR 60.470. According to the facility it can achieve a paper feed rate of 150 feet per minute. From talking with facility staff, there is a filter system to control emissions before they exhaust outdoors. The line is similar to the north line in size and process. A saturator applies a cooked mixture of asphalt, rubber, and limestone to the carrier sheet. According to the facility, there is a sand silo (bin) on this new line. On the south sheeting line only, granules can be added to the top of the mixer to provide a granularity to the product.

1.3. Sheeting Line Rule 290 and Rule 278a Exemption Information
On August 19, 2022, AQD sent a letter via email requesting the information in Rule 278a regarding the facility's equipment and the applicable exemptions used by that equipment. AQD requested a response be provided by September 19, 2022. In follow-up correspondence, Weimar explained that the facility's understanding was that their response to EPA inspectors addressed the issue of permit to install exemptions. The facility provided a letter issued by the Air Quality Division to ALCO on November 2, 2009 that discussed how "ALCO Products qualifies for exemption from Air Pollution Control Rule R336.201 (rule 201) as allowed by the provisions of Rule 336.1290 (Rule 290). Although ALCO Products does not have to obtain a permit to install, it will have to comply with all applicable recordkeeping requirements of Rule 290..."

Rule 290 requires recordkeeping. Specifically, Rules 290(2)(c), (d), and (e) are provided below.

- R 336.1290 Permit to install exemptions; emission units with limited emissions Rule 290. (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.
  - (2) The requirements of R 336.1201(1) to obtain a permit to install does not apply to any of the emission units listed in subdivision (a) of this rule, if the conditions listed in subdivisions (b), (c), (d), and (e) of this subrule are met...
    - (c) A description of the emission unit is maintained throughout the life of the unit.
    - (d) Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the emissions meet the emission limits outlined in this rule...
    - (e) The records air maintained on file for the most recent 2-year period and are made available to the department upon request.

AQD will clarify its records request with the facility. At this time AQD has not received Rule 290 records, which were requested as part of the Rule 278a letter sent on August 19, 2022. At this time, AQD will use discretion regarding a violation notice for records not being provided within 30 days per Rule 278a2(2) since there was some confusion over records requested by USEPA and the separate Rule 278a letter from the AQD related to permit exemptions.

1.4. NSPS Subpart UU - Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture

The north (original) sheeting line and new (south) sheeting line appear to be subject to 40 CFR Part 60 Subpart UU - Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture per 40 CFR 60.470. ALCO stack tested their original sheeting line on September 2, 2009 per NSPS Subpart UU.

AQD will not make determinations regarding compliance of NSPS Subpart UU at this time while USEPA's review of requested information remains pending.

2. Mixing Operations - Rule 290

AQD observed mixers in operation in a room located between the two sheeting lines. According to the facility, mixers are where limestone is mixed with rubber via an auger. The mixing room was dusty, and the in-plant environment appeared to have some opacity due to the active mixing.

The facility provided a record of equipment history at the facility. According to this record, the new mixer was added in 2016.

According to the Michigan Air Emissions Reporting System, the facility considers blend tanks exempt from obtaining a Permit to Install per Rule 290 for emission units with limited emissions. As of this inspection report AQD has not received Rule 290 records which were requested as part of the Rule 278a letter sent to the facility via email on August 19, 2022.

#### 3. Storage Tanks – Rule 284(2)(k) and 284(2)(i)

The facility has storage tanks to hold asphalt, oil, rubber, mineral spirits, styrene-butadiene-styrene, and quartz (silica). The facility provided safety datasheets for these materials.

Storage tanks that hold solids appear to be exempt from obtaining a Permit to Install per Rule 284(2)(k) for storage containers of noncarcinogenic solid material, including silos, that only emit particulate matter and are controlled appropriately. These solids are silica, limestone, slag, and styrene-butadiene-styrene.

Storage tanks of liquids appear to be exempt from obtaining a Permit to Install per Rule 284 (2)(i) for the storage, mixing, blending, or transfer operations of VOCs or noncarcinogenic liquids in a vessel with a capacity not greater than 40,000 gallons where the contents have a true vapor pressure of not more than 1.5 psia at the storage conditions. Below are the liquids and VOCs stored at the facility and their vapor pressure. Asphalt vapor pressure was listed as "<1" with no unit given in the facility MSDS for asphalt. The psia vapor pressure for asphalt is based on the staff report from the 2015 inspection.

Product Name	Ingredients	CAS No.	Vapor Pressure	Pressure	Vapor Pressure (kPa)
Product Name		CAS NO.	(mm Hg)	(psia)	(KPa)
	Distillates (petroleum), hydrotreated heavy				
Calsol 5550	naphthenic	64742525	0.08	1.55E-03	0.01
Mineral Spirits 66/3	C9-C15 Cycloalkanes		0.009	1.74E-04	0.0012
Mineral Spirits 66/3	C9-C15 Alkanes		0.009	1.74E-04	0.0012
			"<1" per		
Base Asphalt	Asphalt	8052424	MSDS	0	0

3.1. 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

40 CFR Part 60 Subpart Kb does not appear to be applicable to ALCO due to the vapor pressures of products stored on site. Per 40 CFR 60.110b(b), "This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater

than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa." Vapor pressures of facility products are below 3.5 kPa per the table above.

3.2. 40 CFR Part 63, Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing AQD is not currently delegated authority for 40 CFR Part 63 Subpart AAAAAAA. Therefore, AQD did not evaluate the facility for compliance with this regulation.

### 4. Boilers - Rule 282(2)(b)(i)

AQD did not visit the facility boilers during the August 16, 2022 inspection. Based on the facility's MAERS report for 2021, the following boilers are on site.

Boiler		Installation	Heat Input	
Name	Boiler Description	Date	(MMBtu/hr)	Fuel
EU17				
Boiler #1	North Sheetline Boiler	12/1/1980	2.5	Natural gas
EU18	Boiler servicing north sheet line, mixing tank			
Boiler #2	Dip tank and surge tank	12/1/1980	1.3	Natural gas
	Boiler servicing Mixer, Reactor #2, South			
EU19	Sheetline Holding and dip tank and front			
Boiler #3	tank farm	11/18/2016	5	Natural gas

MAERS reports dating back to 2015 indicate that these boilers used only natural gas through 2021. Boilers appear to be exempt from obtaining a Permit to Install per Rule 282 (2)(b)(i) for fuel burning equipment used for service water heating which burns natural gas and has a heat input less than 50 MMBtu/hr.

- 4.1. 40 CFR Part 63 Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
  Boiler federal standard 40 CFR Part 63 Subpart JJJJJJ for area sources does not appear to apply to boilers 1, 2, and 3 because these are "gas-fired boilers" per the definition in section 40 CFR 63.11237 of the federal standard. MAERS reports dating back to 2015 indicate these boilers only fire natural gas. Per 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR Part 63 Subpart JJJJJJ.
- 4.2. 40 CFR Part 60 Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Federal standard 40 CFR Part 60 Subpart Dc for steam generating units does not appear to apply to boilers 1, 2, and 3 because the heat input capacities of these boilers are each less than 10 MMBtu/hr per 40 CFR 60.40c(a).

#### Conclusion

The facility appears to be in compliance with the limited federal and state rules evaluated to date. AQD will follow up with the facility regarding Rule 290 records and a Rule 278a demonstration. AQD will await USEPA's compliance conclusions regarding NSPS Subpart UU and NESHAP Subpart AAAAAAA.

NAME An DATE 10/26/22 SUPERVISOR JK