

## STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY DETROIT DISTRICT OFFICE



SRN: N8308, Wayne County

May 18, 2023

David Martin, Plant Manager ALCO Products, LLC 580 Old St Jean Street Detroit, Michigan 48214

Dear David Martin:

## **VIOLATION NOTICE**

On April 11, 2023, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an inspection of ALCO Products, LLC (ALCO) located at 580 Old St Jean Street, Detroit, Michigan. The purpose of this inspection was to follow-up on a Rule 290 determination for the two asphalt coating lines and associated mixers at the facility from a previous inspection on August 16, 2022, as well as to determine ALCO's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); and the Michigan Air Pollution Control Rules.

As a result of the inspection, staff observed the following:

	Rule/Permit	
Process Description	Condition Violated	Comments
New Asphalt Coating Line 1, Original Asphalt Coating Line 2, and associated mixers	Rule 201(1)	The two asphalt coating lines and associated mixers are installed and operating absent a Permit to Install, and do not appear to be exempt per Rule 290 from the requirement to obtain a Permit to Install.

ALCO operates two asphalt coating lines that apply a mixture of asphalt, rubber, and limestone onto fiberglass or polyester sheets to produce a flooring or roofing product. Line 1 may also apply a granular surface like sand. Mixers heat, mix, and pipe the mixture to the asphalt coating lines. According to ALCO, Line 2, the older of the two lines, was installed around 1999/2000; Line 1, the newer of the two lines, was installed around 2016/2017 and became operational in 2017; and a new mixer tank was installed in 2016.

Each asphalt coating line and mixer emits air pollutants, including asphalt fumes, and each is installed and operating absent a Permit to Install issued by the AQD pursuant to Rule 201(1). ALCO has heretofore claimed the two asphalt coating lines and associated mixers are exempt from the requirement to obtain a Permit to Install per Rule 290 for

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emission units with limited emissions. However, the equipment does not appear to be exempt from obtaining an air quality Permit to Install per Rule 290 for two reasons.

First, asphalt fumes screening levels are less than allowable Rule 290 thresholds.

Rule 290 was first promulgated in 1993 and then revised in 1995, 1997, and 2016. At its inception, Rule 290 applied exclusively to process or process equipment that only emitted noncarcinogenic volatile organic compounds. With its revision in 1997 the applicability of Rule 290 was expanded to include additional pollutants, including carcinogens. However, no category of volatile organic compound or particulate matter emissions in Rule 290 allow for emissions of a carcinogenic air toxic with a screening level below 0.04 micrograms per cubic meter. In 1997, Rule 290(a)(ii)(D) read as follows:

(D) The emission unit shall not emit any air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 micrograms per cubic meter.

This prohibition is retained within the current rule at Rule 290(2)(a)(ii)(C).

The two asphalt coating lines and their associated mixers process asphaltic bitumen (CAS No. 8052-42-4) and therefore emit asphalt fumes of the same material. Footnote 5 on asphalt fumes in the Michigan Air Toxics Database states that

The polycyclic aromatic hydrocarbons (PAHs) with this footnote are carcinogenic and have potency equivalency factors (PEFs) that quantitate their potency relative to that of benzo(a)pyrene (CAS# 50-32-8). Air emission mixtures of carcinogenic PAHs, including asphalt fumes, should be evaluated additively using these PEFs and the benzo(a)pyrene IRSL and SRSL. The ITSL for benzo(a)pyrene applies only to benzo(a)pyrene and none of the other PAHs.

AQD's history of regulating mixtures of carcinogenic PAHs is further described in the February 7, 2017 AQD document entitled "File for Benzo(a)pyrene and Other Carcinogenic PAHs":

In 1995, the Air Quality Division (AQD) started to regulate B(a)P and carcinogenic PAHs based on the recommendation of the Scientific Advisory Panel (SAP, 1995a; SAP, 1995b). The SAP recommended that the relative potency factors (RPFs) used by EPA (1993) be applied to 6 carcinogenic PAHs that cause cancer in the same way that B(a)P does. The new IUR used above to derive the IRSL and SRSL updates the November 4, 2015 AQD methodology by applying this EPA (2017) IUR. There is no change to the November 4, 2015 expanded number of 15 specific

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PAHs (Table 1), which superseded the approach described by EPA (1993) and confirmed by the SAP.

The expanded list of PAHs (Table 1) is based on California's Office of Environmental Health Hazard Assessment (OEHHA, 2011, 2015) potency equivalency factors (PEFs), which are analogous to the RPFs used by EPA. The general method of assessing the risk of a mixture of PAHs recommended by Michigan's SAP (1995a; SAP, 1995b) based on their relative potency to that of B(a)P is retained. The addressing of asphalt fume PAHs was originally recommended by the SAP (1995b) and was adopted by the AQD; this approach is also being updated by the current B(a)P IUR and PEFs.

The potency of asphalt fumes is therefore evaluated in relation to benzo(a)pyrene. The manner of the evaluation is in the variation of predicted ambient impacts, not in the variation of the screening level, as described in the same February 7, 2017 document:

The combined maximum ambient impacts of all carcinogenic PAHs (as B(a)P equivalents) must be below the IRSL. The SRSL can be used in lieu of the IRSL, if appropriate, pursuant to Rule 225(2).

In 1995, the initial risk screening level for benzo(a)pyrene had already been established at 0.0005 micrograms per cubic meter. The IRSL was modified to 0.0006 micrograms per cubic meter on November 4, 2015, and then to 0.001 micrograms per cubic meter in the February 7, 2017 document.

In summary, since 1995, the AQD has evaluated emissions of asphalt fumes against a baseline IRSL for benzo(a)pyrene, which has always been lower than the 0.04 micrograms per cubic meter minimum allowed under Rule 290 since 1997. As the two asphalt coating lines and their associated mixers emit asphalt fumes and were installed after 1997, this equipment is not eligible to utilize Rule 290 in order to be exempt from the requirement to obtain a Permit to Install under Rule 201(1).

Second, notwithstanding the eligibility of the equipment, it appears that ALCO has not maintained the emissions calculations required under Rule 290. Rule 290 as effective on June 13, 1997 read, in part, "The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the emission units listed in (a) if the conditions listed in (b), (c), and (d) are met."

Subsection Rule 290(c) and (d) read:

(c) 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.

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(d) The records are maintained on file for the most recent 2-year period and are made avail-able to the air quality division upon request.

Rule 290 as updated December 20, 2016, contains similar requirements to maintain records.

AQD requested records associated with Rule 290 in its letter sent August 19, 2022 (attached for reference) following the inspection on August 16, 2022. AQD also requested emissions records Thursday April 13, 2023, following the inspection on April 11, 2023. From the air quality inspection, it appears that the facility has not maintained records as required by Rule 290 and therefore the equipment is not exempt from obtaining a Permit to Install under Rule 290.

Enclosed is a copy of the above cited Rule 290 effective December 20, 2016 and Rule 290 as effective June 13, 1997; Rule 201; screening levels for compounds added in November of 1995 including PAH; the July 20, 1995 Recommendations of the Scientific Advisory Panel; and the February 7, 2017 AQD document entitled "File for Benzo(a)pyrene and Other Carcinogenic PAHs".

Because the two asphalt coating lines and associated mixers are not exempt from obtaining a Permit to Install, ALCO has installed and commenced operation of unpermitted equipment at this facility. The AQD staff advised ALCO via email on April 18, 2023, that this is a violation of Rule 201 of the administrative rules promulgated under Act 451.

A program for compliance may include a completed Permit to Install application for asphalt coating line process equipment and associated mixers. An application form is available by request, or at the following website: www.michigan.gov/air.

Be advised that Rule 201 requires that a permit be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

In addition, please provide a facility-wide Potential to Emit (PTE) demonstration for all pollutants at the source. Information on calculating PTE can be found at http://www/michigan.gov/air. Choose the "Permits" Tab, then "Air Permitting-Potential to Emit" under the Air Permitting Assistance Heading.

Please initiate actions necessary to correct the cited violation and submit a written response to this Violation Notice by June 8, 2023 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violation occurred; an explanation of the causes and duration of the violation; whether the violation is ongoing; a summary of the actions that have been taken and are

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take place; and what steps are being taken to prevent a reoccurrence. proposed to be taken to correct the violation and the dates by which these actions will

Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Jenine Camilleri, Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand

appropriate factual information to explain your position. constitute violations of the applicable legal requirements cited, please provide If ALCO believes the above observations or statements are inaccurate or do not

questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below cooperation that was extended to me during my inspection of ALCO. If you have any Thank you for your attention to resolving the violation cited above and for the

Sincerely,

Sam Liveson
Senior Environmental Engineer
Air Quality Division
313-405-1357

cc: Josh Cupp, ALCO

Crystal Rogers, City of Detroit BSEED
Hosam N. Hassanien, City of Detroit BSEED
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