

November 4, 2024

VIA EMAIL

Michelle Luplow
EGLE, AQD Lansing District
525 W. Allegan St. First Floor South
Lansing, MI 48933

Dear Michelle Luplow:

VIOLATION NOTICE RESPONSE

Sika Corporation (“Sika”) appreciates the opportunity to respond to the alleged observations noted in the Violation Notice dated October 11, 2024, from the site visit on August 20, 2024, at Sika’s facility located at 1611 Hults Drive Eaton Rapids, MI 48827 (the “Facility”).

Sika’s position is that it is within VOC emission limits at the Facility to support being exempt from PTI for Sika’s current operations. Below are Sika’s responses to the three observations noted from the site visit.

Observation #1

Process Description	Rule/Permit Condition Violated	Comments
Resin products and hardeners formulation process	PTI No. 86-95, SC 16.	Calendar years 2021 – 2023 records indicate exceedances of the 12.1 ton per year VOC emission limit.

VOCs

The records provided for calendar years 2021 – 2023 demonstrate that actual emissions of Volatile Organic Compounds (VOC) from the resin products and hardeners formulation process equipment are emitted at the following rates:

	VOC lbs	VOC tons
2021	99,817	49.9
2022	122,543	61.3
2023	111,752	55.9

Response #1

The above table of VOC tons/ year calculations taken from the notice of violation does not utilize any emissions factor, but rather assumes 100% of material used is VOC which is not correct.


Response #1 continued (Emission Factor) tons/ year calculation

During the inspection on August 20, 2024, Michelle Luplow shared inspection data from November 4, 2015, when Sika was also inspected by the Air Quality Division. In the 2015 inspection report, it is suggested by the Air Quality Division Staff to utilize a 2.0% emissions factor. Using the suggested emissions factor of 2.0%, we are below 12.1 tons per year emission limit referred to in the PTI. The table below shows calculated annual VOC emissions in tons. Attached are updated Excel spreadsheets showing the calculations used to generate the annual emissions data. For all calculations, the 2% emissions factor is used. Actual emissions calculations are based on 2,340 production hours or 9 hours per day, 260 days per year which is reflective of our operations.

Actual VOC Ton per year Emissions factor 2.0%	
2021	1.02
2022	1.27
2023	1.14


VOC annual
2021.Rev.2xlsx.xlsx


VOC annual 2022.
Rev.2xlsx.xlsx


VOC annual 2023
-xlsxRev.2.xlsx

Observation #2

Process Description	Rule/Permit Condition Violated	Comments
Cleaning solvent process	PTI No. 86-95, SC 22.	Sika was unable to provide records of cleaning solvent used.

Cleaning Solvent Usage

In follow-up to this inspection, Sika was unable to produce cleaning solvent usage rate records to determine compliance with the 10,000-gallon cleaning solvent usage rate per 12-month rolling period.

This is a violation of the recordkeeping requirement specified in Special Condition 22 of PTI number 86-95.

Response #2

On August 20, 2024; Tony Doremire sent via email, the Air Emissions Audit Report completed by Cornerstone Environmental to Michelle Luplow. Michelle sent a correspondence email back on August 21, 2024, confirming that she had received and would review the Cornerstone Environmental Audit report. Page 9 of 19 (cleaning operations) contained detailed maximum usage calculations for cleaning solution. Page 19 of 19, Table A-7 of this audit report contained annual usage of cleaning solution for years 2021-2023. The maximum usage in the three-year period was 24,950 lbs. The density of the cleaning solution used is 9.074 lbs. per gallon which calculates to 2,750 gallons (24,950 lbs / 9.074 lbs per gallon = 2,750 gallons).

Table A-7: VOC Emissions Calculations for Cleaning Operations

Emissions from Cleaning Operations

Year	Amount Used (lb/yr)	Density (lb/gal)	VOC Content (g/liter)	VOC Content (lb/gal)	Actual Annual VOC (ton/yr)	PTE VOC (ton/yr)
2021	17,964	9.074	1.086	0.0091	0.009	0.037
2022	24,950	9.074	1.086	0.0091	0.012	0.051
2023	19,960	9.074	1.086	0.0091	0.010	0.041
Maximum	24,950				0.012	0.051

Calculated lbs. used to Gallons used:

YEAR	Amount Used (lb./yr)	Density of product lb./gallon	Calculation Gallons Lbs. / Density	Total Gallons used per year
2021	17,964	9.074	17,964 / 9.074	1,979 Gallons Used
2022	24,950	9.074	24,950 / 9.074	2,750 Gallons Used
2023	19,960	9.074	19,960 / 9.074	2,199 Gallons Used

Observation #3

Process Description	Rule/Permit Condition Violated	Comments
Unpermitted mixing processes	Rule 201	Insufficient exemption demonstrations for various mixing processes onsite.

Rule 201

Historically, Sika has used the Rule 290 exemption to demonstrate that the unpermitted equipment, listed below, is exempt from the need to obtain a permit. During this inspection, Sika provided an audit document, dated December 2023, created by Cornerstone consultants. In this document there is an attempt to demonstrate the equipment is exempt per Rule 290 or Rule 291. These demonstrations were insufficient. This is a violation of Rule 201 of the administrative rules promulgated under Act 451 because Sika cannot adequately demonstrate that the listed equipment is exempt under Rule 290 or Rule 291.

Response #3

Each material was verified on the Michigan Air Toxics System to validate IRS/ ITSL associated with each VOC/ TAC to be considered under exemption Air Rule 291. Styrene has a IRS/ of 2 ug/ m³, all other components reviewed did not have an associated IRS/ but did have a listed ITSL. Each compound evaluated also meet the definition of Volatile Organic Compound (as defined in R 336.1122). Applying Table 23 of the rule, the combined total potential to emit does not exceed the VOC limit of five tons per year. Below is a summary of annual PTE values. Calculations and IRS/ ITSL valuations are contained in the attached Excel spreadsheets.

Year-12 Month data	Styrene Annual PTE	Ethanol Annual PTE	Methyl Methacrylate Annual PTE	Vinyl Toluene Annual PTE	Xylene Annual PTE	Combined Total PTE In Tons
2021	1.71	0.11	0.05	1.87	0.09	3.38 T
2022	2.25	0.12	0.03	2.19	0.15	4.74 T
2023	2.17	0.12	0.01	1.89	0.09	4.28 T



2021 VOC Rule 291
Calculations Per- Usaç



2022 VOC Rule 291
Calculations Per- Usaç



2023 VOC Rule 291
Calculations Per- Usaç

Michelle Luplow
EGLE, AQD Lansing District
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Thank you in advance for your review of this response. Understanding that this contains several pages of information with multiple data sources, please do not hesitate to contact me with any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tony Doremire".

Tony Doremire
Sika Corporation