TITLE V OPERATING PERMIT RENEWAL AND PERMIT MODIFICATION

Program Interest (PI): 17914 / Permit Activity Number: BOP190001

## I. FACILITY INFORMATION

Gentek Building Products Inc is located at 11 Cragwood Rd, Avenel, Middlesex County, NJ 07001 and consists of galvanized steel and aluminum siding manufacturing plant. The facility is owned and operated by Associated Materials Incorporated.

The facility is classified as a major facility based on its potential to emit 89.3 tons per year of volatile organic compounds.

This permit allows individual hazardous air pollutants to be emitted at a rate not to exceed 1.60 tons per year of ethylbenzene, 1.81 tons per year of ethylene glycol, 0.0360 tons per year of formaldehyde, 0.586 tons per year of naphthalene, 2.44 tons per year of xylene.

## **II. AREA ATTAINMENT CLASSIFICATION**

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO2), nitrogen dioxide (NO2), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <a href="https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information">https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information.</a>

## III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility include: two (2) coil coaters and two (2) dryer ovens (7.6 MMBtu/hr and 0.80 MMBtu/hr) equipped with a regenerative thermal oxidizer (RTO) with no less than 95% reduction efficiency for volatile organic compound (VOC) emissions. The facility also includes a wash tank, rinse tank, cleaning tank, mixing room, roll grinder, and a 1.2 MMBtu/hr natural gas fired boiler.

No changes were made to the operating permit through seven-day notice changes, administrative amendments, minor modifications, or significant modifications since the approval of the initial operating permit or the most recent renewal thereof. Please refer to the attached explanation sheet for the structure and configuration of conditions of approval, included in the Facility Specific Requirements section of this permit.

A Facility-Wide Risk Assessment was conducted as part of the review of this permit application and health risk was determined to be acceptable to the Department consistent with NJDEP Technical Manual 1003.

This is a Permit Renewal with Modification and includes the following changes:

PM-2.5 emissions limits for Emission Unit U1001, Coil Coater and Drying Ovens (U1001), were updated consistent with N.J.A.C. 7:27-22.

HAPs emissions limits were updated for U1001. A total HAPs emissions limit of 6.47 tons/year was added, ethylene glycol mono-n-butyl ether emissions were decreased from 3.0 to 1.81 tons/year, xylene emissions were increased from 2.0 to 2.44 tons/year, naphthalene emissions were added at 0.586 tons/year, ethylbenzene emissions were added at 1.60 tons/year, formaldehyde emissions were added at 0.0360 tons/year. Monitoring and recordkeeping requirements for HAPs tons/year emission limits were added for U1001.

VOC hourly emissions rates were updated for U1001. U1001:OS1011 and OS1015, Primer surface coating of metal controlled by RTO, rates were added at 1.20 lb/hr; U1001:OS1012 and OS1016, Backer

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surface coating of metal controlled by RTO, rates were added at 0.700 lb/hr; U1001:OS1013 and OS1017, Topcoat surface coating of metal controlled by RTO, rates were added at 1.60 lb/hr. U1001:OS Summary rate of 33.5 lb/hr was reduced to 3.2 lb/hr. Annual monitoring and recordkeeping requirements were added.

A maximum VOC content of coating of 6.95 lb/gal requirement was added at U1001.

Annual, hourly, and daily coating usage rates were updated for U1001. For the primer surface coating, U1001:OS1011 and 1015, hourly usage was increased from 25 to 39.5 gal/hr; daily usage was increased from 600 to 948 gal/day; annual usage was reduced from 87,500 to 47,374 gal per any consecutive 12 month period. For the backer surface coating, U1001:OS1012 and 1016, hourly usage was increased from 30 to 125.6 gal/hr; daily usage was increased from 720 to 3024 gal/day; annual usage was reduced from 105,000 to 75,332 gal per any consecutive 12 month period. For the topcoat surface coating, hourly usage was increased from 150 to 224.6 gal/hr; daily usage was increased from 3,600 to 5,390 gal/day; annual usage was reduced from 990,000 to 269,510 gal per any consecutive 12 month period.

N.J.A.C. 7:27-6.2(a) particulate emissions limits were corrected. For U1001, the emissions rate was reduced from 5.37 to 2.87 lb/hr. For U1003, Coating Wet Line Section, an emissions rate of 0.67 lb/hr was added. For U3001, 1.2 MMBTU/hr Office heater, the emissions rate was increased from 0.05 to 0.72 lb/hr.

The CO2e was corrected from 4,785 tons/year to 7,161 tons/year.

	Facility's Potential Emissions (tons per year)*									
Allowable	VOC	NOx	CO	SO <sub>2</sub>	TSP	PM10	PM <sub>2.5</sub>	Pb	HAPs	CO <sub>2</sub> e
Emission Limits	(total)				(total)	(total)	(total)		(total)	(total)
Current Permit	89.2	17.5	38.0	0.0300	4.02	4.02	NA	NA	8.50	4,785
Proposed Permit	89.3	14.7	27.5	0.0300	4.29	4.29	4.29	NA	6.47	7,161
Change (+ / -)	+0.100	-2.80	-10.5	NA	+0.270	+0.270	+0.270	NA	-2.03	+2,376

This renewal will also change the allowable emission limits as listed in the following table:

VOC	Volatile Organic Compounds	PM <sub>10</sub>	Particulates under 10 microns
NOx	Nitrogen Oxides	PM <sub>2.5</sub>	Particulates under 2.5 microns
CO	Carbon Monoxide	Pb	Lead
SO <sub>2</sub>	Sulfur Dioxide	HAPs	Hazardous Air Pollutants
TSP	Total Suspended Particulates	CO <sub>2</sub> e	Carbon Dioxide equivalent
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\* Other Any other air contaminant regulated under the Federal Clean Air Act. This permit does not contain any air pollutants under this category.

## IV. CASE-BY-CASE DETERMINATIONS

No case-by-case determinations were required for this permit action.

## V. EMISSION OFFSET REQUIREMENTS

This permit action is not subject to Emission Offset requirements.

## VI. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

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- 1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and
- 2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit.

For the coil coater and drying ovens in U1001, the facility monitors the annual coating usage and annual fuel usage as a surrogate for the annual emissions limits of TSP, PM10, PM2.5. The hourly coating usage is also monitored as a surrogate for the hourly emissions rates of HAPs.

For the dryer in U1002, the facility monitors the hours of operation as a surrogate for the annual emissions limits of NOx.

For the tank heaters in U1006 and U1007 and U3001, the facility monitors the fuel usage as a surrogate for the annual emissions limit of NOx.

For the paint room in U1101, the facility monitors the production rate as a surrogate for the annual emissions limit of VOC.

For the coating operations in U1201, the facility monitors the hours of operation as a surrogate for the short-term emissions limits of particulates.

- 3. In some cases, direct periodic monitoring of emissions and/or surrogate parameters is not required due to one or more of the following:
  - Equipment size and capacity limitations,
  - Subject equipment being permitted at the maximum rated capacity,
  - There is no specific state or Federal standard that applies to this piece of equipment,
  - Not a pollutant of concern for this piece of equipment,
  - Agreements with EPA on the frequency of testing and monitoring for combustion sources.

Based on the above criteria, there is no direct or surrogate monitoring for the following pieces of equipment:

U1106, Cold Cleaning Machine

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#### **APPLICABLE STATE AND FEDERAL RULES**

The facility is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at: <u>http://www.nj.gov/dep/aqm/rules27.html</u>

The facility is also subject to Federal regulations listed below.

NSPS Subpart A: General Provisions

NSPS Subpart TT: Metal Surface Coating

The Greenhouse Gas (GHG) emissions from this facility are 7,161 TPY CO2e and there is no GHG emissions increase. This renewal is not subject to PSD rules at 40 CFR 52.21.

## **VII. FACILITY'S COMPLIANCE STATUS**

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

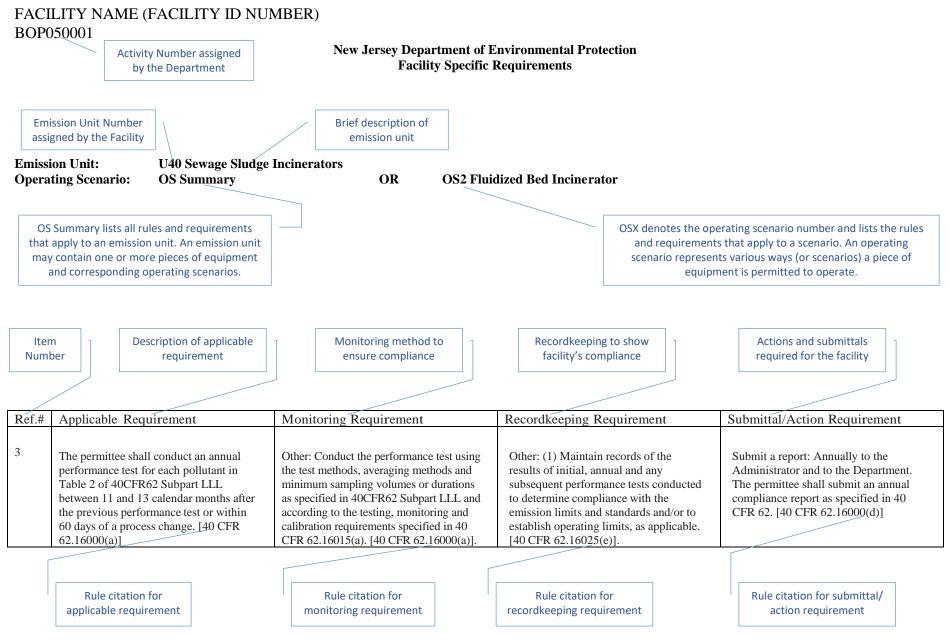
The facility has submitted a timely and complete application to renew their operating permit and an application shield is in effect.

This operating permit also includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Also, prior to the expiration of the five-year period, the facility will be required to apply for a renewal of this operating permit, at which time the Department will evaluate the facility and issue a public notice with its findings.

#### VIII.EXEMPT ACTIVITIES

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.



**Explanation Sheet for Facility Specific Requirements**