

**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

**MISSOURI AIR CONSERVATION COMMISSION**

**PERMIT TO CONSTRUCT**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 082020-008      Project Number: 2020-04-037  
Installation Number: 047-012

Parent Company: Polynt Composites USA Inc.

Parent Company Address: 100 East Cottage Avenue, Carpentersville, Illinois 60110

Installation Name: Polynt Composites USA Inc.

Installation Address: 1412 Knox Street, North Kansas City, Missouri 64116

Location Information: Clay County, S23, T50N, R33W

Application for Authority to Construct was made for:

The installation of a 55 gallon vacuum mixer. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

- 
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.



\_\_\_\_\_  
Director or Designee  
Department of Natural Resources

\_\_\_\_\_  
August 21, 2020  
Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:  
Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
(573) 751-4817

The regional office information can be found at the following website:  
<http://dnr.mo.gov/regions/>

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E). "Conditions required by permitting authority."*

Polynt Composites USA Inc.  
Clay County, S23, T50N, R33W

1. **Superseding Condition**  
The conditions of this permit supersede Special Condition 2 found in the previously issued construction permit 072017-008 issued by the Air Pollution Control Program.
  
2. **HAPs Emission Limitations**
  - A. Polynt Composites USA Inc. shall emit less than 10.0 tons individually and 25.0 tons combined of HAPs in any consecutive 12-month period from the entire installation (see Table 1). Polynt shall include all actual emissions in the limit including SSM emissions as well as any excess emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions.

Table 1: Installation-Wide Emission Units

Emission Unit	Description
EU0010	Natural Gas Fired Boiler (#1)
EU0015	Natural Gas Fired Boiler (#2)
EU0090	Resin/Gel Coat Base Storage Tank
EU0100	Resin/Gel Coat Base Storage Tank
EU0110	Resin/Gel Coat Base Storage Tank
EU0120	Resin/Gel Coat Base Storage Tank
EU0130	Resin/Gel Coat Base Storage Tank
EU0350	Dibasic Ester Storage Tank
EU0360	BYK A-500 Small Storage Tote
EU0370	DMPS Copolymer Small Storage Tote
EU0380	Intermediate Small Storage Tote
EU0390	Sorbitan Monoleate Small Storage Tote
EU0400	Intermediate Small Storage Tote
EU0410	Silicon Resin Solution Small Storage Tote
EU0420	Intermediate Small Storage Tote
EU0430	Quaternary Ammonium Small Storage Tote
EU0440	Intermediate Small Storage Tote

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

Emission Unit	Description
EU0450	ColbaltDrier (12%) Small Storage Tote
EU0460	Ethylene Glycol Small Storage Tote
EU0470	DMMA Small Storage Tote
EU0680	Gel Coat Colorant Dispersion Tank
EU0690	Gel Coat Colorant Dispersion Tank
EU0700	Gel Coat Portable Tank Dispersion
EU0710	Gel Coat Portable Tank Dispersion
EU0720	Gel Coat Portable Tank Dispersion
EU0730	Gel Coat Portable Tank Dispersion
EU0740	Gel Coat Portable Tank Dispersion
EU0750	Gel Coat Portable Tank Dispersion
EU0760	Gel Coat Drum Dispersion
EU0770	Gel Coat Drum Dispersion
EU0780	Gel Coat Drum Dispersion
EU0790	Gel Coat Air Mixer – Pails
EU0800	Gel Coat Air Mixer – Pails
EU0810	Gel Coat Air Mixer – Pails
EU0820	Gel Coat Air Mixer – Pails
EU0830	Gel Coat Air Mixer – Pails
EU0840	Gel Coat Air Mixer – Pails
EU0850	Gel Coat Dispersion Tank
EU0860	Neutral Gel Coat Dispersion Tank
EU0870	Gel Coat Dispersion Tank
EU0890	Gel Coat Drum Dispersion
EU0900	Neutral Gel Coat Dispersion Tank
EU0910	Neutral Gel Coat Dispersion Tank
EU0920	Gel Coat Dispersion Tank
EU0930	Gel Coat Dispersion Tank
EU1040	Gel Coat Storage Tank
EU1050	Gel Coat Storage Tank
EU1060	Gel Coat Storage Tank
EU1070	Gel Coat Storage Tank
EU1080	Gel Coat Dispersion Tank (60)
EU1090	Gel Coat Dispersion Tank (90)
EU1100	Gel Coat Dispersion Tank (60)
EU1110	Gel Coat Dispersion Tank (90)
EU1170	Gel Coat Dispersion Tank

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

Emission Unit	Description
EU1190	Gel Coat Dispersion Tank
EU1410	Small Batch Packaging Area
EU1420	Big Batch Packaging Area
EU1430	Tanker Truck Loading
EU1440	Port Washer
EU1450	Resin Reactor
EU1460	Resin Reactor
EU1470	Resin Thin Tank
EU1480	Resin Thin Tank
EU1490	Resin Thin Tank
EU1500	Monomer Feed Tank
EU1510	Monomer Feed Tank
EU1520	Monomer Feed Tank
EU1530	Monomer Feed Tank
EU1540	Catalyst Feed Tank
EU1550	Catalyst Feed Tank
EU1560	Emergency Generator
EU1570	Small Batch Mix/Charge Tank
EU1580	Big Batch Drying Oven
EU1590	Vacuum Mixer

- B. Forms submitted by Polynt on July 21, 2020 or the electronic equivalent, approved by the Air Pollution Control Program Permit Section, shall be used to demonstrate compliance with Special Conditions 2.A. These forms shall be maintained for not less than five years and made available to any Missouri Department of Natural Resources' personnel upon request.
  
- 3. Styrene Emission Limitation
  - A. Polynt Composites USA Inc. shall emit less than 1.0 tons of styrene in any consecutive 12-month period from the vacuum mixer (EP-30-3).
  
  - B. Forms submitted by Polynt on July 21, 2020 or the electronic equivalent, approved by the Air Pollution Control Program Permit Section, shall be used to demonstrate compliance with Special Conditions 3.A. These forms shall be maintained for not less than five years and made available to any Missouri Department of Natural Resources' (Department) personnel upon request.

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

4. Operational Requirement – Resin, Solvent, Raw Materials
  - A. Polynt Composites USA Inc. shall keep the resins, solvents and raw materials in sealed containers whenever the materials are not in use.
  - B. Polynt Composites USA Inc. shall provide and maintain suitable, easily read, permanent markings on all inks, solvent and cleaning solution containers used with this equipment.
5. Operational Restrictions – Vacuum Mixer  
The capacity of the vacuum mixer (EU-1590) shall not exceed 55 gallons.
6. Record Keeping and Reporting Requirements
  - A. Polynt Composites USA Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.
  - B. Polynt Composites USA Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2020-04-037  
Installation ID Number: 047-012  
Permit Number: 082020-008

Installation Address:  
Polynt Composites USA Inc.  
1412 Knox Street  
North Kansas City, Missouri 64116

Parent Company:  
Polynt Composites USA Inc.  
100 East Cottage Avenue  
Carpentersville, Illinois 60110

Clay County, S23, T50N, R33W

REVIEW SUMMARY

- Polynt Composites USA Inc. has applied for authority to install a 55 gallon drum capacity vacuum mixer for resin production.
- The application was deemed complete on April 24, 2020.
- HAP emissions are expected from the proposed vacuum mixing process. HAPs emitted from this process are cumene, styrene, ethyl benzene, xylene, and cobalt. The HAP of concern is styrene, which has been limited to its respective SMAL value of 1.0 tpy.
- 10 CSR 10-6.070 New Source Performance Standards
  - Subpart VVa does not apply as Polynt does not produce any of the chemicals listed in §60.489.
  - Subpart DDD does not apply as the production project does not include any of the polymers listed in §60.560
  - Subpart VVV does not apply, per §60.740(d)(1).
- 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
  - Subpart VVVVVV does not apply as the HAPs in this project are not listed in Table 1 of this subpart.
  - Subpart BBBB BBB does not apply per the definition of target HAP in §63.11588.
- None of the NESHAPs apply to this installation.
- No air pollution control equipment is being used in association with the vacuum mixer.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of styrene, for the project, are conditioned below the SMAL. Potential emissions of styrene, for the entire installation, are conditioned below the major source level.
- This installation is located in Clay County, an attainment/unclassifiable area for all criteria pollutants.
- This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation is classified as item number 20, Chemical Processing Plants. The installation's major source level is 100 tons per year and fugitive emissions are counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below the SMALs and de minimis levels.
- Composition testing is not required for the product as a part of this permit. Product composition testing had been previously conducted on February 26, 2020 and submitted to MoDNR on July 8, 2020. Testing may be required as part of other state, federal or applicable rules as well.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

#### INSTALLATION DESCRIPTION

Polynt Composites USA Inc. (Polynt) produces resins, gel coats, and powder coating using batch production processes. The installation is located in North Kansas City. A voluntary limit on total HAPs and styrene have been taken by the installation in order to stay below the major source thresholds. This installation is not required to hold an Operating Permit as Polynt has taken limits on all criteria pollutants to remain below 100 tpy in addition to the HAP and styrene limitations. The installation is a conditioned de minimis source for construction permits.

On May 15, 2019, a Determination Letter was issued by the Department stating Polynt Composites USA, Inc. was not required to obtain an operating permit. A recalculation of installation-wide potential to emit determined the unrestricted potential of criteria pollutants are below their respective major source thresholds.

The following NSR permits have been issued to Polynt Composites USA Inc. from the Air Pollution Control Program.






## EMISSIONS/CONTROLS EVALUATION

The potential volatile (VOC and volatile HAP) emissions were calculated using supplied raw material SDSs and mass balance calculations. The resulting product will be polymer resins. In order to cure for use in consumer applications, the resulting product must contain volatile components. [REDACTED]

[REDACTED]. Product VOC mass was subtracted from the raw material VOC mass to determine the mass of VOC emitted per batch, 10.81 lbs. Accounting for batch processing time, the potential hourly volatile emissions are 2.04 lbs per hour or 8.94 tpy. Speciation of the volatile components was done using partial pressure calculations. The partial pressure of the components were calculated multiplying the mole fraction of the particular component by the vapor pressure. Vapor pressure for each component was calculated using the Antoine equation at 140 degrees Fahrenheit, as this is the highest process temperature. The partial pressure of the chemical divided by the total pressure of all chemicals provides the concentration of the particular chemical in the volatile emissions. From this, it was determined the volatile emissions from one batch of PRD-1520 are 97.97% styrene and 94.58% styrene from the EXP-1587 batch.

Styrene emissions are voluntarily conditioned to less than one ton per year. This condition indirectly limits the potential emissions of the other process pollutants. The batch with the lowest percentage of styrene, EXP-1587, was evaluated for the potential emissions for the other pollutants as this would provide the most conservative values.

The emission factors used in the material handling loss analysis to determine particulate emissions (PM, PM<sub>10</sub>, PM<sub>2.5</sub>) were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, 6.4 *Paint and Varnish* (1983). PM<sub>10</sub> and PM<sub>2.5</sub> emissions were obtained from particle size distribution of PM using the CEDAIRS Table.

The following table provides an emissions summary for this project. Existing potential emissions were taken from the Permit Determination letter issued by MDNR on May 15, 2019. Existing actual emissions were taken from the installation's 2019 EIQ. Potential emissions of the project represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Conditioned potential emissions represent the potential emissions with the 1 ton per year styrene limitation.

Table 4: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2019 EIQ)	Potential Emissions of the Project	Conditioned Potential Emissions of the Project	Installation Potential
PM	25.0	N/D	N/A	1.28	0.51	N/D
PM <sub>10</sub>	15.0	48.66	2.18	1.15	0.46	49.12
PM <sub>2.5</sub>	10.0	47.37	2.18	1.14	0.46	48.51
SO <sub>x</sub>	40.0	0.42	0.01	N/A	N/A	0.42
NO <sub>x</sub>	40.0	25.45	1.39	N/A	N/A	25.45
VOC	40.0	35.12	1.82	8.94	1.06	36.18
CO	100.0	17.74	1.17	N/A	N/A	17.74
GHG (CO <sub>2</sub> e)	N/A	N/D	N/A	N/A	N/A	N/D
GHG (mass)	N/A	N/D	N/A	N/A	N/A	N/D
Total HAPs	< 25.0	< 25.0		8.82	1.01	< 25.0
Styrene	< 10.0	< 10.0	1.24	8.75	< 1.0	< 10.0
Xylene	< 10.0	< 10.0	N/D	0.06	0.007	< 10.0

N/A = Not Applicable; N/D = Not Determined

#### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of styrene are conditioned below SMAL values.

#### APPLICABLE REQUIREMENTS

Polynt Composites USA Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

#### GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065
- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
  - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
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- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

#### SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *New Source Performance Regulations*, 10 CSR 10-6.070
  - *None*
- *MACT Regulations*, 10 CSR 10-6.075
  - *None*
- *Emission Standards for Hazardous Air Pollutants*, 10 CSR 10-6.080
  - *None*

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 16, 2020, received April 20, 2020, designating Polynt Composites USA Inc. as the owner and operator of the installation.
- Raw Material SDSs submitted by Polynt
- Product testing data February 26, 2020 submitted July 8, 2020

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> ..... percent	<b>Mgal</b> ..... 1,000 gallons
<b>°F</b> ..... degrees Fahrenheit	<b>MW</b> ..... megawatt
<b>acfm</b> ..... actual cubic feet per minute	<b>MHDR</b> ..... maximum hourly design rate
<b>BACT</b> ..... Best Available Control Technology	<b>MMBtu</b> .... Million British thermal units
<b>BMPs</b> ..... Best Management Practices	<b>MMCF</b> ..... million cubic feet
<b>Btu</b> ..... British thermal unit	<b>MSDS</b> ..... Material Safety Data Sheet
<b>CAM</b> ..... Compliance Assurance Monitoring	<b>NAAQS</b> .... National Ambient Air Quality Standards
<b>CAS</b> ..... Chemical Abstracts Service	<b>NESHAPs</b> National Emissions Standards for Hazardous Air Pollutants
<b>CEMS</b> ..... Continuous Emission Monitor System	<b>NO<sub>x</sub></b> ..... nitrogen oxides
<b>CFR</b> ..... Code of Federal Regulations	<b>NSPS</b> ..... New Source Performance Standards
<b>CO</b> ..... carbon monoxide	<b>NSR</b> ..... New Source Review
<b>CO<sub>2</sub></b> ..... carbon dioxide	<b>PM</b> ..... particulate matter
<b>CO<sub>2e</sub></b> ..... carbon dioxide equivalent	<b>PM<sub>2.5</sub></b> ..... particulate matter less than 2.5 microns in aerodynamic diameter
<b>COMS</b> ..... Continuous Opacity Monitoring System	<b>PM<sub>10</sub></b> ..... particulate matter less than 10 microns in aerodynamic diameter
<b>CSR</b> ..... Code of State Regulations	<b>ppm</b> ..... parts per million
<b>dscf</b> ..... dry standard cubic feet	<b>PSD</b> ..... Prevention of Significant Deterioration
<b>EIQ</b> ..... Emission Inventory Questionnaire	<b>PTE</b> ..... potential to emit
<b>EP</b> ..... Emission Point	<b>RACT</b> ..... Reasonable Available Control Technology
<b>EPA</b> ..... Environmental Protection Agency	<b>RAL</b> ..... Risk Assessment Level
<b>EU</b> ..... Emission Unit	<b>SCC</b> ..... Source Classification Code
<b>fps</b> ..... feet per second	<b>scfm</b> ..... standard cubic feet per minute
<b>ft</b> ..... feet	<b>SDS</b> ..... Safety Data Sheet
<b>GACT</b> ..... Generally Available Control Technology	<b>SIC</b> ..... Standard Industrial Classification
<b>GHG</b> ..... Greenhouse Gas	<b>SIP</b> ..... State Implementation Plan
<b>gpm</b> ..... gallons per minute	<b>SMAL</b> ..... Screening Model Action Levels
<b>gr</b> ..... grains	<b>SO<sub>x</sub></b> ..... sulfur oxides
<b>GWP</b> ..... Global Warming Potential	<b>SO<sub>2</sub></b> ..... sulfur dioxide
<b>HAP</b> ..... Hazardous Air Pollutant	<b>SSM</b> ..... Startup, Shutdown & Malfunction
<b>hr</b> ..... hour	<b>tph</b> ..... tons per hour
<b>hp</b> ..... horsepower	<b>tpy</b> ..... tons per year
<b>lb</b> ..... pound	<b>VMT</b> ..... vehicle miles traveled
<b>lbs/hr</b> ..... pounds per hour	<b>VOC</b> ..... Volatile Organic Compound
<b>MACT</b> ..... Maximum Achievable Control Technology	
<b>µg/m<sup>3</sup></b> ..... micrograms per cubic meter	
<b>m/s</b> ..... meters per second	

## Air Pollution Control Program

### Table of Hazardous Air Pollutants and Screening Model Action Levels

Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM	Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CHLOROPRENE	126-99-8	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y
ACETOPHENONE	98-86-2	1		Y	N	CHROMIUM COMPOUNDS		5	L	N	Y
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CHRYSENE	218-01-9	0.01	V	Y	N
ACROLEIN	107-02-8	0.04		Y	N	COBALT COMPOUNDS		0.1	M	N	Y
ACRYLAMIDE	79-06-1	0.02		Y	N	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N
ACRYLIC ACID	79-10-7	0.6		Y	N	CRESOL, [META-]	108-39-4	1	B	Y	N
ACRYLONITRILE	107-13-1	0.3		Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N
AMINOBIHENYL, [4-]	92-67-1	1	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N
ANILINE	62-53-3	1		Y	N	CUMENE	98-82-8	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y
ANTIMONY COMPOUNDS		5	H	N	Y	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	DIAZOMETHANE	334-88-3	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	DIOXINS/FURANS		6E-07	D,V	Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	DIBENZOFURAN	132-64-9	5	V	Y	N
ASBESTOS	1332-21-4	0	A	N	Y	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N
BENZENE	71-43-2	2		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y
BENZIDINE	92-87-5	0.0003	V	Y	N	DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DICHLOROMETHANE	75-09-2	10		N	N
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y
BERYLLIUM SALTS		2E-05	J	N	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
BROMOFORM	75-25-2	10		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
CAPROLACTAM (Delisted)	105-60-2					DIMETHYL PHTHALATE	131-11-3	10		Y	N
CAPTAN	133-06-2	10		Y	Y	DIMETHYL SULFATE	77-78-1	0.1		Y	N
CARBARYL	63-25-2	10	V	Y	Y	DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
CARBON DISULFIDE	75-15-0	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
CARBON TETRACHLORIDE	56-23-5	1		Y	N	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
CARBONYL SULFIDE	463-58-1	5		Y	N	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
CATECHOL	120-80-9	5		Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
CHLORAMBEN	133-90-4	1		Y	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
CHLORDANE	57-74-9	0.01		Y	Y	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
CHLORINE	7782-50-5	0.1		N	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
CHLOROACETIC ACID	79-11-8	0.1		Y	N	EPICHLOROHYDRIN	106-89-8	2		Y	N
CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
CHLOROBENZENE	108-90-7	10		Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	ETHYL ACRYLATE	140-88-5	1		Y	N
CHLOROFORM	67-66-3	0.9		Y	N	ETHYL BENZENE	100-41-4	10		Y	N

**Air Pollution Control Program**  
**Table of Hazardous Air Pollutants and Screening Model Action Levels**

ETHYL CHLORIDE	75-00-3	10		Y	N	NITROBENZENE	98-95-3	1		Y	N
ETHYLENE GLYCOL	107-21-1	10		Y	N	NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N
ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2					NITROPHENOL, [4-]	100-02-7	5		Y	N
ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N	NITROPROPANE, [2-]	79-46-9	1		Y	N
ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N
ETHYLENE OXIDE	75-21-8	0.1		Y	N	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N
ETHYLENE THIOUREA	96-45-7	0.6		Y	Y	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N
FORMALDEHYDE	50-00-0	2		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N
GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N	PARATHION	56-38-2	0.1		Y	Y
GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y
HEPTACHLOR	76-44-8	0.02		Y	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N
HEXACHLORO BENZENE	118-74-1	0.01		Y	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N
HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N	PHENOL	108-95-2	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N
HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N	PHOSGENE	75-44-5	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N	PHOSPHINE	7803-51-2	5		N	N
HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N	POLYCYLIC ORGANIC MATTER		0.01	V	Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N
HEXANE, [N-]	110-54-3	10		Y	N	PROPIONALDEHYDE	123-38-6	5		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PROPYLENE OXIDE	75-56-9	5		Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N
HYDROQUINONE	123-31-9	1		Y	N	QUINOLINE	91-22-5	0.006		Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	QUINONE	106-51-4	5		Y	N
ISOPHORONE	78-59-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y
LEAD COMPOUNDS		0.01	Q	N	Y	SELENIUM COMPOUNDS		0.1	W	N	Y
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	STYRENE	100-42-5	1		Y	N
MALEIC ANHYDRIDE	108-31-6	1		Y	N	STYRENE OXIDE	96-09-3	1		Y	N
MANGANESE COMPOUNDS		0.8	R	N	Y	TETRACHLORO DIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y
MERCURY COMPOUNDS		0.01	S	N	N	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N
METHANOL	67-56-1	10		Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N
METHOXYCHLOR	72-43-5	10	V	Y	Y	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	TOLUENE	108-88-3	10		Y	N
METHYL CHLORIDE	74-87-3	10		Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N
METHYL ETHYL KETONE (Delisted)	78-93-3					TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N
METHYL HYDRAZINE	60-34-4	0.06		Y	N	TOXAPHENE	8001-35-2	0.01		Y	N
METHYL IODIDE	74-88-4	1		Y	N	TRICHLORO BENZENE, [1,2,4-]	120-82-1	10		Y	N
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	TRICHLOROETHANE, [1,1,1,1-]	71-55-6	10		N	N
METHYL ISOCYANATE	624-83-9	0.1		Y	N	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N
METHYL METHACRYLATE	80-62-6	10		Y	N	TRICHLOROETHYLENE	79-01-6	10		Y	N
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N
METHYLCYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TRIETHYLAMINE	121-44-8	10		Y	N
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TRIFLURALIN	1582-09-8	9		Y	Y
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
MINERAL FIBERS		0	T	N	Y	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
NAPHTHALENE	91-20-3	10	V	Y	N	VINYL ACETATE	108-05-4	1		Y	N
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	VINYL CHLORIDE	75-01-4	0.2		Y	N
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
NICKEL COMPOUNDS		1	U	N	Y	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N
NICKEL REFINERY DUST		0.08	U	N	Y						
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y						

## Air Pollution Control Program Table of Hazardous Air Pollutants and Screening Model Action Levels

Legend	
Group ID	
A	Asbestos
B	Cresols/Cresylic Acid (isomers and mixtures)
C	2,4 - D, Salts and Esters
D	Dibenzofurans, Dibenzodioxins
E	4, 6 Dinitro-o-cresol, and Salts
F	Lindane (all isomers)
G	Xylenes (all isomers and mixtures)
H	Antimony Compounds
I	Arsenic Compounds
J	Beryllium Compounds
K	Cadmium Compounds
L	Chromium Compounds
M	Cobalt Compounds
N	Coke Oven Emissions
O	Cyanide Compounds
P	Glycol Ethers
Q	Lead Compounds (except elemental Lead)
R	Manganese Compounds
S	Mercury Compounds
T	Fine Mineral Fibers
U	Nickel Compounds
V	Polycyclic Organic Matter
W	Selenium Compounds
X	Polychlorinated Biphenyls (Aroclors)
Y	Radionuclides
Notes	The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million





Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

August 21, 2020

Robert Usab  
EHS Manager  
Polynt Composites USA Inc.  
100 East Cottage Avenue  
Carpentersville, Illinois 60110

RE: New Source Review Permit - Project Number: 2020-04-037

Dear Robert Usab:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

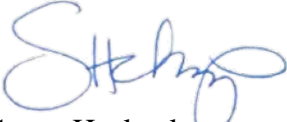


Robert Usab  
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Russell Osborne, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

A handwritten signature in blue ink, appearing to read 'S Heckenkamp', is written over the typed name.

Susan Heckenkamp  
New Source Review Unit Chief

SH:roa

Enclosures

c: Kansas City Regional Office  
PAMS File: 2020-04-037

Permit Number: 082020-008