

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: **07 2017 - 008** Project Number: 2016-08-036
Installation Number: 047-0012

Parent Company: Polynt Composites USA Inc.

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

Installation Name: Polynt Composites USA Inc.

Installation Address: 1412 Knox Street, Kansas City, MO 64116

Location Information: Clay County, S23, T50N, R33W

Application for Authority to Construct was made for:
Addition of two resin batch processes. 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.


Prepared by
Sam Anzalone
New Source Review Unit


Director or Designee
Department of Natural Resources

JUL 12 2017

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 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 (12)(A)10. "Conditions required by permitting authority."

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

1. **Superseding Condition**
 - A. The conditions of this permit supersede the following special conditions found in the previously issued construction permit 052000-007B issued by the Air Pollution Control Program.
 - 1) Special Condition 2
 - 2) Special Condition 4.

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 below)

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 |
| EU0450 | ColbaltDrier (12%) Small Storage Tote |

SPECIAL CONDITIONS:

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

| Emission Unit | Description |
|---------------|------------------------------------|
| 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 |
| EU1190 | Gel Coat Dispersion Tank |

SPECIAL CONDITIONS:

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

| Emission Unit | Description |
|---------------|-----------------------------|
| 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 |

- B. Forms developed by Polynt Composites USA, Inc. and approved January 16, 2013 by the Air Pollution Control Program Permits Section shall be used to demonstrate compliance with Special Condition 2.A. Equivalent electronic forms may be used.

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 project emission units listed in Table 2.

Table 2. Emission units installed under project 2016-08-036

| Emission Unit | Description |
|---------------|-----------------------|
| EU1570 | Small Batch Mix Tank |
| EU1170 | Big Batch Mix Tank |
| EU1190 | Big Batch Mix Tank |
| EU1580 | Big Batch Drying Oven |

- B. Forms developed by Polynt Composites USA, Inc. and approved January 16, 2013 by the Air Pollution Control Program Permits Section shall be used to demonstrate compliance with Special Condition 3.A. Equivalent electronic forms may be used.

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. **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: 2016-08-036
Installation ID Number: 047-0012
Permit Number:

072017-008

Installation Address:

Polynt Composites USA Inc.
1412 Knox Street
Kansas City, MO 64116

Parent Company:

Polynt Composites USA Inc.
100 East Cottage Avenue
Carpentersville, IL 60110

Clay County, S23, T50N, R33W

REVIEW SUMMARY

- Polynt Composites USA Inc. has applied for authority to install two resin batch processes.
- The application was deemed complete on September 14, 2016.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are Styrene which has been limited to its SMAL; all other HAPs are indirectly conditioned below their respective SMALs.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- Baghouse is intermittently being used to control the PM, PM₁₀, PM_{2.5} emissions from the equipment in this permit. PM, PM₁₀, PM_{2.5} emissions are considered uncontrolled however.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of HAPs are conditioned below de minimis levels.
- This installation is located in Clay County, a maintenance area for ozone and an attainment area for all other 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 process 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 de minimis levels and all HAPs are under their respective SMALs..
- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
- An Intermediate Operating Permit is required for this installation within 90 days of equipment startup.
- 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 process. The installation is located in North Kansas City. The installation has taken a voluntary limit on HAPs in order to stay below the major source threshold. This installation is operating under an intermediate operation permit OP2007-009 which expired 3/4/2012. Polynt has applied for a renewal that was received 6/22/2011. This installation is a conditioned de minimis source for construction permits.

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

Table 3: Permit History

| Permit Number | Description |
|---------------|--|
| 0397-012 | Installation of four multi-shaft dispersion tanks and conversion of the eight former tanks to other uses |
| 052000-007 | Revision to Permit No. 0397-012 to reflect an increase in the VOC/HAP emission factor |
| 082001-020 | Installation of Polyester Powder Coating Production Facility |
| 052000-007A | Controls modification for Permit No. 052000-007 |
| 052000-007B | Removal of Thermal Oxidizer Controls for Permit No. 052000-007 |
| 052000-007C | Correction to Controls of Baghouse CD-5 in Permit No. 052000-007 |

PROJECT DESCRIPTION

Polynt is adding the production of new inhibitor resins in the small batch area of the plant, referred to the small batch process. This process would include loading operation, mix/charge tank (EU1570) and loadout operation. The inhibitor resins produced will be either used onsite as a raw material to manufacture other resin product or shipped offsite. All of the emissions of this process will be vented to EP15. There are no control devices for the small batch process. The resin product will be manufactured using a batch process, similar to other existing operations at the plant. This process is limited by the batch time and only one product at a time can be made in the mixer (EU-1570). The

small batch process will emit VOCS, PM, PM₁₀, PM_{2.5}, and HAPs.

There are several HAPs associated with the small batch process. However, Polynt is voluntarily taking annual styrene emission limit to stay below the SMAL. This will also indirectly condition all other HAPs below the SMALs.

Polynt is also including a big batch project in this permit, referred to as the big batch process, that commenced operation in January 2016. The big batch process is being included due to the close implementation timeline between the big batch project and the one described above. Polynt did not apply for a permit for the big batch process because the emissions were considered to be below construction permitting insignificant levels.

The big batch process is the production of resin filler that is used on site as a raw material to manufacture other resin products. The big batch project includes a mix/charge tank (EU1170 & EU2290) which has the possibility to be routed through the dust collector (CD5), however to be conservative the particle emissions are considered uncontrolled. The emissions from the tanks will be vented to EP17. The process also includes a drying oven (EU1580). This will be vented to EP20.

Confidential portions of project 2016-08-037 were assigned to project 2016-08-036. This amendment is written such that confidential information is not published. A confidential amendment will not be issued.

This project is not subject to review under 40 CFR 63, *National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing (MACT CCCCCC)*, *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources (MACT VVVVVV)*, *National Emission Standard for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing (MACT HHHHH)*, *National Emission Standard for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (MACT JJJ)*.

The following changes have been made to the equipment list since the last construction permit:

- EU0020 was replaced by EU0015 in 2010. This project was considered exempt by project #2009-10-063.
- EU0030, EU0040, EU0170, EU0180, EU0240, EU0250, EU0260, EU0270, EU0280, EU0290, EU0300, EU0310, EU320, EU0330, EU0480, EU0490, EU0500, EU0510, EU0520, EU0530, EU0540, EU0550, EU0560, EU0570, EU0580, EU0590, EU0600, EU0610, EU0620, EU0630, EU0880, EU0940, EU0950, EU0960, EU0970, EU0980, EU0990, EU1000, EU1010, EU1020, EU1030 have been demolished and removed from the plant.
- EU0050, EU0060, EU0070, EU0080, EU0140, EU0150, EU0160, EU0190, EU0200, EU0210, EU0220, EU0230, EU0340, EU0640, EU0650, EU1120, EU1130, EU1140, EU1150, EU1160, EU1180, EU1200, EU1210, EU1220, EU1230, EU1240, EU1250, EU1260, UE1270, EU1280, EU1290, EU1300, EU1310 have been inactive since 2010 and will require a new construction permit in order to be operated again.

- EU0660, EU0670, EU1320, EU1330, EU1340, EU1350, EU1360, EU1370, EU1380, EU1390, EU1400 have been sold to another company.

All emission unit listed have been removed from the equipment list.

EMISSIONS/CONTROLS EVALUATION

Most of the raw materials are previously permitted and have been used at the facility. The small batch project (EU1570) vents to EP15. The big batch project (EU1170 & EU1190) has the ability to be directed to a dust collector control device (CD5) however for control device flexibility, all emissions are considered uncontrolled. Those emission units vent to EP17. The drying oven and loadout operations (EU1580) vent to EP20.

VOC and volatile HAP emissions are controlled by enclosure and nitrogen blanket. Otherwise, there are no control devices. The VOC emission rate was obtained from testing performed on similar processes. Individual HAP emissions were calculated using the respective HAP weight percent from the raw material MSDS multiplied by the total VOC emission rate.

Haul road potential emissions for receiving all raw materials and products were calculated using the EPA document AP-42, Volume I, Fifth Edition, Section 13.2.2, *Unpaved Roads*, November 2006. Haul road emissions are uncontrolled.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Permit #052009-012B. Existing actual emissions were taken from the installation's 2016 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 4: Emissions Summary (tpy)

| Pollutant | Regulatory <i>De Minimis</i> Levels, SMAL | Existing Potential Emissions | Existing Actual Emissions (2016 EIQ) | Potential Emissions of the Small Batch Process | Potential Emissions of the Big Batch Process | Conditioned Potential Emissions of the Project | New Installation Conditioned Potential |
|--------------------|---|------------------------------------|---|---|---|---|---|
| PM | 25.0 | N/D | 0.048 | 1.67 | 0.06 | N/D | N/A |
| PM ₁₀ | 15.0 | N/D | 1.23 | 0.53 | 0.02 | N/D | N/A |
| PM _{2.5} | 10.0 | N/D | 1.23 | 0.067 | 0.005 | N/D | N/A |
| SO _x | 40.0 | N/D | 0.009 | N/A | 0.001 | N/D | N/A |
| NO _x | 40.0 | N/D | 1.49 | N/A | 0.15 | N/D | N/A |
| VOC | 40.0 | 2.90 | 0.60 | 4.59 | 0.91 | N/D | N/A |
| CO | 100.0 | N/D | 1.26 | N/A | 0.13 | N/D | N/A |
| HAPs | 10.0/25.0 | N/D | N/D | N/D | N/D | N/D | <10.0/25.0 |
| Ethylene Oxide | 0.1 | 1.33E-07 | N/D | N/A | N/A | N/A | N/A |
| Ethyl Benzene | 10 | N/A | N/D | N/A | 0.0197 | N/D | N/A |
| Glycol Ether | 5.0 | 3.33E-05 | N/D | 3.49 | N/A | N/D | N/A |
| Hydroquinone | 1.0 | 4.87E-04 | N/D | 0.02 | N/A | N/D | N/A |
| Styrene | 1.0 | <1.0 | N/D | 3.68 | 0.8 | <1.0 | N/A |
| Methanol | 10.0 | N/A | N/D | 0.09 | N/A | N/D | N/A |
| Methyl Chloride | 10.0 | 6.26E-08 | N/D | N/A | N/A | N/A | N/A |
| MMA | 10.0 | 0.20 | N/D | 4.51 | N/A | N/D | N/A |
| Catechol | 5.0 | N/A | N/D | 0.0042 | N/A | N/D | N/A |
| Cobalt | 0.1 | 2.09E-04 | N/D | N/A | N/A | N/A | N/A |
| Cumene | 10.0 | 9.24E-04 | N/D | N/A | N/A | N/A | N/A |

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 HAPs are conditioned below SMALs levels.

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. For a complete list of applicable requirements for your installation, please consult your operating permit.

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.
- *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
- *Control of Sulfur Dioxide Emissions*, 10 CSR 10-6.261
- *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*, 10 CSR 10-6.405

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 August 12, 2016, received August 18, 2016, designating Polynt Composites USA Inc. as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

| | |
|--|---|
| %percent | Mgal1,000 gallons |
| °Fdegrees Fahrenheit | MWmegawatt |
| acfmactual cubic feet per minute | MHDRmaximum hourly design rate |
| BACTBest Available Control Technology | MMBtuMillion British thermal units |
| BMPsBest Management Practices | MMCFmillion cubic feet |
| BtuBritish thermal unit | MSDSMaterial Safety Data Sheet |
| CAM Compliance Assurance Monitoring | NAAQSNational Ambient Air Quality Standards |
| CASChemical Abstracts Service | NESHAPs National Emissions Standards for Hazardous Air Pollutants |
| CEMS Continuous Emission Monitor System | NO_xnitrogen oxides |
| CFRCode of Federal Regulations | NSPSNew Source Performance Standards |
| COcarbon monoxide | NSRNew Source Review |
| CO₂carbon dioxide | PMparticulate matter |
| CO₂ecarbon dioxide equivalent | PM_{2.5}particulate matter less than 2.5 microns in aerodynamic diameter |
| COMS Continuous Opacity Monitoring System | PM₁₀particulate matter less than 10 microns in aerodynamic diameter |
| CSRCode of State Regulations | ppmparts per million |
| dscfdry standard cubic feet | PSDPrevention of Significant Deterioration |
| EIQEmission Inventory Questionnaire | PTEpotential to emit |
| EPEmission Point | RACTReasonable Available Control Technology |
| EPAEnvironmental Protection Agency | RALRisk Assessment Level |
| EUEmission Unit | SCCSource Classification Code |
| fpsfeet per second | scfmstandard cubic feet per minute |
| ftfeet | SDSSafety Data Sheet |
| GACT Generally Available Control Technology | SICStandard Industrial Classification |
| GHGGreenhouse Gas | SIPState Implementation Plan |
| gpmgallons per minute | SMALScreening Model Action Levels |
| grgrains | SO_xsulfur oxides |
| GWP Global Warming Potential | SO₂sulfur dioxide |
| HAPHazardous Air Pollutant | tphtons per hour |
| hrhour | tpytons per year |
| hphorsepower | VMTvehicle miles traveled |
| lbpound | VOCVolatile Organic Compound |
| lbs/hrpounds per hour | |
| MACTMaximum Achievable Control Technology | |
| µg/m³micrograms per cubic meter | |
| m/smeters per second | |

Appendix B
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 |
| AMINOBIIPHENYL, [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 |

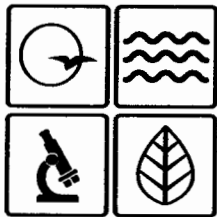
Appendix B
Air Pollution Control Program

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 |
|--|------------|-----------------|-------------|-----|----|---------------------------------------|-----------|-----------------|-------------|-----|----|
| 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 | 87-88-3 | 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 | TETRACHLORODIBENZO-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 | TRICHLOROBENZENE, [1,2,4-] | 120-82-1 | 10 | | Y | N |
| METHYL ISOBUTYL KETONE | 108-10-1 | 10 | | Y | N | TRICHLOROETHANE, [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 | 593-80-2 | 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 | | | | | | |

Appendix B
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

Eric R. Greitens, Governor

Carol S. Comer, Director

JUL 12 2017

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

RE: New Source Review Permit - Project Number: 2016-08-036

Dear Mr. 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, your new source review permit application and your amended operating permit 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.



Recycled paper

Mr. Robert Usab
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Sam Anzalone, 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



Susan Heckenkamp
New Source Review Unit Chief

SH:saj

Enclosures

c: Kansas City Regional Office
PAMS File: 2016-08-036

Permit Number: 07 2017 - 008