

Division for Air Quality
Kentucky Department of Environmental Protection 300 Sower
Boulevard
Frankfort, KY 40601

Submitted via EEC eForms

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**Subject: Conditional Major Operating Permit Renewal Application
Washington Penn Plastics Co. Inc. Frankfort Facility
Permit ID F-21-007
Frankfort, KY, Franklin County**

Dear Sir or Madam:

On behalf of Washington Penn Plastics Co. Inc. (WPP), SE Technologies, LLC (SE) is providing the attached Conditional Major Operating Permit Renewal Application for the WPP Frankfort facility located at 290 Chenault Road, Frankfort, Kentucky 40601. There have been no operational changes at the facility since the submission of the prior permit application and issuance of the current permit.

Written Description of Facility Operations

The facility compounds thermoplastic resins in which virgin or recycled polypropylene and/or polyethylene are purchased in pellet form to be processed through extruders. During the melting of the plastic, various fillers and additives in powder or pellet form are added and mixed to develop the finished products suitable for the customer's specifications.

Typical production consists of transferring the plastic pellets to the extruder feed port, where the material is preheated between 380 and 420 degrees Fahrenheit. As the plastic is moved along the heated extruder barrel, fillers are added to give the plastic the required properties. The compounded plastic is extruded through a die into an underwater cutter box where the plastic strands are then cut into rounded pellets and then transferred in water to a classifier. The classifier separates the in-spec pellets from the out-of-spec pellets by sifting them through a perforated metal screen. Out-of-spec pellets are recycled back into the process. Finally, the finished product is transferred to boxes, hopper trucks, or railcars for shipment.

Corrections to Previous Permit

In the current permit, the description for the control equipment for Emission Unit 07 is incorrect. The mixer, extruder, and pelletizer are controlled by a Donaldson Torit Dust Collector. The cyclone referenced in the permit should be correctly stated as two cyclones in series which service the fluidized bed dewatering station. After the pelletizer, pellets are transferred in a water slurry to the de-watering station, where they are dried, and then are transferred to a sorting machine. Before the air is exhausted through the building's roof, the cyclones are in place to collect any pellets that may become entrained in the drying air of the fluidized bed. In this renewal application WPP has included the cyclones in the list of Insignificant Activities.

List of Applicable Regulations

- 401 KAR 50:038
- 401 KAR 50:045

- 401 KAR 50:055
- 401 KAR 52:030
- 401 KAR 59:010
- 401 KAR 63:020

The following application forms have been uploaded to EEC eForms:

1. DEP7007AI Form - Administrative Information
2. DEP7007B Form - Manufacturing or Processing Operations
3. DEP7007DD Form - Insignificant Activities
4. DEP7007GG Form - Control Equipment
5. DEP7007N Form - Source Emissions Profile
6. DEP7007V Form - Applicable Requirements and Compliance Activities

In addition to the renewal application forms listed above, enclosed please find the following supplemental information:

- Attachment 1 - Potential to Emit Air Emission Calculations
- Attachment 2 - Kentucky Secretary of State Certificate of Authority
- Attachment 3 – Figures
 - Fig. 1 Topographic Map
 - Fig. 2 Facility Layout
 - Fig. 3 Process Flow Diagram
- Attachment 4 - Safety Data Sheets

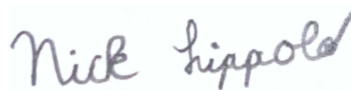
Note, equipment manufacturer specification sheets for emission sources and control equipment have not been included because there has been no change since the previous permit application. Additionally, only example raw material SDS have been included, as there have been no changes since the previous permit application.

If there are any questions regarding the application, our contact information is provided below.

Sincerely,



Meghan Yingling
President
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Nick Lippold
Staff Scientist I
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Email: NLippold@se-env.com

CC: Michael Long, Regional HSE Manager, WPP

WASHINGTON PENN PLASTICS CO., INC.

**Frankfort Facility
Franklin County
Kentucky**

CONDITIONAL MAJOR OPERATING PERMIT RENEWAL APPLICATION

Permit ID F-21-007



500 Mosites Way, Suite 100
Pittsburgh, PA 15205

Conditional Major Operating Permit Renewal Application

Washington Penn Plastics Co., Inc.

**Frankfort Facility
Franklin County, Kentucky**

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Attachment 2 – Kentucky Secretary of State Certificate of Authority

Attachment 3 – Figures: Topo Map; Facility Layout; Process Flow Diagram

Attachment 4 – Safety Data Sheets

ATTACHMENT 1

Potential to Emit Air Emission Calculations

Washington Penn Plastics Frankfort Plant

Frankfort, Kentucky

2026-02-01

Source List

Source ID	Source Name	Rated Capacity	Description
F3	Emission Unit 02	4 tons/hr	Toshiba Co-Rotating Twin Screw Extruder with pelletizer (2000)
F5	Emission Unit 03	4 tons/hr	Farrel Continuous Mixer, extruder with pelletizer (2002)
F7	Emission Unit 04	4 tons/hr	Farrel Continuous Mixer, extruder with pelletizer (2005)
S1 and S2	Emission Unit 06	0.3 tons/hr each, 0.6 tons/hr combined	Twin Screw Extruders with Pelletizer (9/20/2011)
F9	Emission Unit 07	7.5 tons/hr	Fluidized Bed and Co-rotating Extruder (6/1/2011)
EU10	Emission Unit 10	3 tons/hr	Conical Blender (2012)
F0	Emission Unit 11	0.75 tons/hr	CP550 Farrel Continuous Mixer (2019)
FN1-FN15	Exhaust Fans	12,470 cfm	Exhaust of heat (Insignificant Source)
FN16-FN24	Exhaust Fans	19,400 cfm	Exhaust of heat (Insignificant Source)
D1, D1A, D9-D14	Fine Collection Raw Material Resin		Bin filters on the tops of silos (Insignificant Source)
IGG-27F	Burn-Off Oven	0.23 MMBTU/hr	Insignificant Source

Washington Penn Plastics Frankfort Plant

Frankfort, Kentucky

2026-02-01

Facility Wide Total Emissions

Pollutant	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Post-control Emissions lb/hr	Post-control Emissions tpy	Post-control Emissions (+Fugitive) lb/hr	Post-control Emissions (+Fugitive) tpy
PM	390.948	1711.182	12.470	53.447	12.540	53.753
PM2.5	390.637	1710.932	12.159	53.197	12.228	53.503
PM10	390.686	1710.971	12.208	53.237	12.278	53.543
NOx	0.023	0.099	0.023	0.099	0.023	0.099
CO	0.019	0.083	0.019	0.083	0.019	0.083
VOC	4.182	18.317	4.182	18.317	4.234	18.547
SO2	0.000	0.001	0.000	0.001	0.000	0.001
CO2	27.059	118.518	27.059	118.518	27.059	118.518
CH4	0.001	0.002	0.001	0.002	0.001	0.002
N2O	0.000	0.002	0.000	0.002	0.000	0.002
HAPs	0.029	0.125	0.029	0.125	0.029	0.127
CH2O	0.000	0.000	0.000	0.000	0.000	0.000
nHexane	0.000	0.002	0.000	0.002	0.000	0.002

Attachment 1 Potential to Emit Air Emission Calculations
Conditional Major Operating Permit Renewal Application

Washington Penn Plastics Frankfort Plant

Frankfort, Kentucky

2026-02-01

Source Emissions Summary (pounds per hour)

Source ID	Source Name	NOx	VOC	CO	PM2.5	PM10	PM	SO2	CO2	CH4	N2O	nHexane	CH2O	HAPs
F3	Emission Unit 02	0.000	0.849	0.000	0.598	0.598	0.598	0.000	0.000	0.000	0.000	0.000	0.000	0.006
F5	Emission Unit 03	0.000	0.849	0.000	2.390	2.390	2.390	0.000	0.000	0.000	0.000	0.000	0.000	0.006
F7	Emission Unit 04	0.000	0.849	0.000	2.390	2.390	2.390	0.000	0.000	0.000	0.000	0.000	0.000	0.006
S1 and S2	Emission Unit 06	0.000	0.127	0.000	0.627	0.627	0.627	0.000	0.000	0.000	0.000	0.000	0.000	0.001
F9	Emission Unit 07	0.000	1.560	0.000	3.197	3.197	3.197	0.000	0.000	0.000	0.000	0.000	0.000	0.011
EU10	Emission Unit 10	0.000	0.000	0.000	2.556	2.556	2.556	0.000	0.000	0.000	0.000	0.000	0.000	0.000
F001	Emission Unit 11	0.000	0.000	0.000	0.016	0.066	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN1-FN15	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN16-FN24	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D1, D1A, D9-D14	Fine Collection Raw Material Resin	0.000	0.000	0.000	0.005	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IGG-27F	Burn-Off Oven	0.023	0.001	0.019	0.002	0.002	0.002	0.000	27.059	0.001	0.000	0.000	0.000	0.000
F001	Parking areas and roadways	0.000	0.000	0.000	0.016	0.066	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		0.023	4.234	0.019	11.797	11.896	12.420	0.000	27.059	0.001	0.000	0.000	0.000	0.029

Source Emissions Summary (pounds per day) prior to Control

Source ID	Source Name	NOx	VOC	CO	PM2.5	PM10	PM	SO2	CO2	CH4	N2O	nHexane	CH2O	HAPs
F3	Emission Unit 02	0.000	19.968	0.000	292.800	292.800	292.800	0.000	0.000	0.000	0.000	0.000	0.000	0.134
F5	Emission Unit 03	0.000	19.968	0.000	2048.640	2048.640	2048.640	0.000	0.000	0.000	0.000	0.000	0.000	0.134
F7	Emission Unit 04	0.000	19.968	0.000	2048.640	2048.640	2048.640	0.000	0.000	0.000	0.000	0.000	0.000	0.134
S1 and S2	Emission Unit 06	0.000	2.995	0.000	307.296	307.296	307.296	0.000	0.000	0.000	0.000	0.000	0.000	0.020
F9	Emission Unit 07	0.000	37.440	0.000	2646.000	2646.000	2646.000	0.000	0.000	0.000	0.000	0.000	0.000	0.252
EU10	Emission Unit 10	0.000	0.000	0.000	1533.600	1533.600	1533.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000
F001	Emission Unit 11	0.000	0.000	0.000	0.386	1.573	7.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN1-FN15	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN16-FN24	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D1, D1A, D9-D14	Fine Collection Raw Material Resin	0.000	0.000	0.000	114.480	114.480	114.480	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IGG-27F	Burn-Off Oven	0.541	0.030	0.455	0.041	0.041	0.041	0.003	649.412	0.012	0.012	0.010	0.000	0.010
F001	Parking areas and roadways	0.000	0.000	0.000	0.386	1.573	7.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		0.541	100.369	0.455	8992.269	8994.643	9007.226	0.003	649.412	0.012	0.012	0.010	0.000	0.686

Washington Penn Plastics Frankfort Plant

Frankfort, Kentucky

2026-02-01

Source Emissions Summary (tons per year)

Source ID	Source Name	NOx	VOC	CO	PM2.5	PM10	PM	SO2	CO2	CH4	N2O	nHexane	CH2O	HAPs
F3	Emission Unit 02	0.000	3.717	0.000	2.618	2.618	2.618	0.000	0.000	0.000	0.000	0.000	0.000	0.025
F5	Emission Unit 03	0.000	3.717	0.000	10.469	10.469	10.469	0.000	0.000	0.000	0.000	0.000	0.000	0.025
F7	Emission Unit 04	0.000	3.717	0.000	10.469	10.469	10.469	0.000	0.000	0.000	0.000	0.000	0.000	0.025
S1 and S2	Emission Unit 06	0.000	0.558	0.000	2.748	2.748	2.748	0.000	0.000	0.000	0.000	0.000	0.000	0.004
F9	Emission Unit 07	0.000	6.833	0.000	14.004	14.004	14.004	0.000	0.000	0.000	0.000	0.000	0.000	0.046
EU10	Emission Unit 10	0.000	0.000	0.000	11.195	11.195	11.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000
F001	Emission Unit 11	0.000	0.000	0.000	0.013	0.053	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN1-FN15	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FN16-FN24	Exhaust Fans	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D1, D1A, D9-D14	Fine Collection Raw Material Resin	0.000	0.000	0.000	0.021	0.021	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IGG-27F	Burn-Off Oven	0.099	0.005	0.083	0.008	0.008	0.008	0.001	118.518	0.002	0.002	0.002	0.000	0.002
F001	Parking areas and roadways	0.000	0.000	0.000	0.013	0.053	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		0.099	18.547	0.083	51.557	51.636	52.057	0.001	118.518	0.002	0.002	0.002	0.000	0.127

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
Emission Unit 02																						
	F3	4	tons/hr	8760	98% PM2.5	97.10%		3.05 lb/ton					12.200	53.436	0.007	0.031	95.16%	0.591	2.587	0.598	2.618	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% PM10	97.10%		3.05 lb/ton					12.200	53.436	0.007	0.031	95.16%	0.591	2.587	0.598	2.618	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% PM	97.10%		3.05 lb/ton					12.200	53.436	0.007	0.031	95.16%	0.591	2.587	0.598	2.618	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% VOC	0.00%		0.208 lb/ton					0.832	3.644	0.017	0.073	0.00%	0.832	3.644	0.849	3.717	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% Acetaldehyde	0.00%		9.20E-04 lb/ton					0.004	0.016	0.000	0.000	0.00%	0.004	0.016	0.004	0.016	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% MEK	0.00%		3.80E-04 lb/ton					0.002	0.007	0.000	0.000	0.00%	0.002	0.007	0.002	0.007	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% Propionaldehyde	0.00%		1.00E-04 lb/ton					0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F3	4	tons/hr	8760	98% HAPs	0.00%		1.40E-03 lb/ton					0.006	0.025	0.000	0.000	0.00%	0.006	0.025	0.006	0.025	EF from summing aldehyde and MEK EFs, Control from EU07 stack test (Feb 22-24, 2022)
Emission Unit 03																						
	F5	4	tons/hr	8760	98% PM2.5	99.20%		21.34 lb/ton					85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% PM10	99.20%		21.34 lb/ton					85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% PM	99.20%		21.34 lb/ton					85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% VOC	0.00%		0.208 lb/ton					0.832	3.644	0.017	0.073	0.00%	0.832	3.644	0.849	3.717	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% Acetaldehyde	0.00%		9.20E-04 lb/ton					0.004	0.016	0.000	0.000	0.00%	0.004	0.016	0.004	0.016	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% MEK	0.00%		3.80E-04 lb/ton					0.002	0.007	0.000	0.000	0.00%	0.002	0.007	0.002	0.007	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F5	4	tons/hr	8760	98% Propionaldehyde	0.00%		1.00E-04 lb/ton					0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
Emission Unit 04	F5	4	tons/hr	8760	98% HAPs	0.00%		0.00%	1.40E-03 lb/ton				0.006	0.025	0.000	0.000	0.00%	0.006	0.025	0.006	0.025	EF from summing aldehyde and MEK EFs, Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% PM2.5	99.20%		99.20%	21.34 lb/ton				85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% PM10	99.20%		99.20%	21.34 lb/ton				85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% PM	99.20%		99.20%	21.34 lb/ton				85.360	373.877	0.014	0.060	97.22%	2.376	10.409	2.390	10.469	EF from mass balance (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% VOC	0.00%		0.00%	0.208 lb/ton				0.832	3.644	0.017	0.073	0.00%	0.832	3.644	0.849	3.717	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% Acetaldehyde	0.00%		0.00%	9.20E-04 lb/ton				0.004	0.016	0.000	0.000	0.00%	0.004	0.016	0.004	0.016	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% MEK	0.00%		0.00%	3.80E-04 lb/ton				0.002	0.007	0.000	0.000	0.00%	0.002	0.007	0.002	0.007	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
	F7	4	tons/hr	8760	98% Propionaldehyde	0.00%		0.00%	1.00E-04 lb/ton				0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU03 stack test (Feb 22-24, 2022)
Emission Unit 06	F7	4	tons/hr	8760	98% HAPs	0.00%		0.00%	1.40E-03 lb/ton				0.006	0.025	0.000	0.000	0.00%	0.006	0.025	0.006	0.025	EF from summing aldehyde and MEK EFs, Control from EU03 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% PM2.5	97.10%		97.10%	21.34 lb/ton				12.804	56.082	0.007	0.033	95.16%	0.620	2.715	0.627	2.748	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% PM10	97.10%		97.10%	21.34 lb/ton				12.804	56.082	0.007	0.033	95.16%	0.620	2.715	0.627	2.748	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% PM	97.10%		97.10%	21.34 lb/ton				12.804	56.082	0.007	0.033	95.16%	0.620	2.715	0.627	2.748	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% VOC	0.00%		0.00%	0.208 lb/ton				0.125	0.547	0.002	0.011	0.00%	0.125	0.547	0.127	0.558	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% Acetaldehyde	0.00%		0.00%	9.20E-04 lb/ton				0.001	0.002	0.000	0.000	0.00%	0.001	0.002	0.001	0.002	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98% MEK	0.00%		0.00%	3.80E-04 lb/ton				0.000	0.001	0.000	0.000	0.00%	0.000	0.001	0.000	0.001	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
Emission Unit 07	S1 and S2	0.6	tons/hr	8760	98%	Propionaldehyde		0.00%	1.00E-04 lb/ton				0.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000	0.000	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	S1 and S2	0.6	tons/hr	8760	98%	HAPs		0.00%	1.40E-03 lb/ton				0.001	0.004	0.000	0.000	0.00%	0.001	0.004	0.001	0.004	EF from summing aldehyde and MEK EFs, Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	PM2.5		97.10%	14.7 lb/ton				110.250	482.895	0.000	0.000	97.10%	3.197	14.004	3.197	14.004	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	PM10		97.10%	14.7 lb/ton				110.250	482.895	0.000	0.000	97.10%	3.197	14.004	3.197	14.004	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	PM		97.10%	14.7 lb/ton				110.250	482.895	0.000	0.000	97.10%	3.197	14.004	3.197	14.004	EF from mass balance (Statement of Basis PDF), Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	VOC		0.00%	0.208 lb/ton				1.560	6.833	0.000	0.000	0.00%	1.560	6.833	1.560	6.833	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	Acetaldehyde		0.00%	9.20E-04 lb/ton				0.007	0.030	0.000	0.000	0.00%	0.007	0.030	0.007	0.030	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	MEK		0.00%	3.80E-04 lb/ton				0.003	0.012	0.000	0.000	0.00%	0.003	0.012	0.003	0.012	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
	F9	7.5	tons/hr	8760	100%	Propionaldehyde		0.00%	1.00E-04 lb/ton				0.001	0.003	0.000	0.000	0.00%	0.001	0.003	0.001	0.003	EF from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing Table 5, Control from EU07 stack test (Feb 22-24, 2022)
F9	7.5	tons/hr	8760	100%	HAPs		0.00%	1.40E-03 lb/ton				0.011	0.046	0.000	0.000	0.00%	0.011	0.046	0.011	0.046	EF from summing aldehyde and MEK EFs, Control from EU07 stack test (Feb 22-24, 2022)	
Emission Unit 10																						
EU10	3	tons/hr	8760	98%	PM2.5		98.00%	21.3 lb/ton					63.900	279.882	0.026	0.112	96.04%	2.530	11.083	2.556	11.195	EF from mass balance and exit grain loading (Statement of Basis PDF)
EU10	3	tons/hr	8760	98%	PM10		98.00%	21.3 lb/ton					63.900	279.882	0.026	0.112	96.04%	2.530	11.083	2.556	11.195	EF from mass balance and exit grain loading (Statement of Basis PDF)
EU10	3	tons/hr	8760	98%	PM		98.00%	21.3 lb/ton					63.900	279.882	0.026	0.112	96.04%	2.530	11.083	2.556	11.195	EF from mass balance and exit grain loading (Statement of Basis PDF)
Emission Unit 11																						
F0	0.75	tons/hr	8760	98%	PM2.5		99.20%	21.3 lb/ton					15.975	69.971	0.003	0.011	97.22%	0.445	1.948	0.447	1.959	EF from mass balance and exit grain loading (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
	F0	0.75		tons/hr	8760	98% PM10		99.20%	21.3 lb/ton				15.975	69.971	0.003	0.011	97.22%	0.445	1.948	0.447	1.959	EF from mass balance and exit grain loading (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
	F0	0.75		tons/hr	8760	98% PM		99.20%	21.3 lb/ton				15.975	69.971	0.003	0.011	97.22%	0.445	1.948	0.447	1.959	EF from mass balance and exit grain loading (Statement of Basis PDF), Control from EU03 stack test (Feb 22-24, 2022)
Fine Collection Raw Material Resin (bin filters on the tops of silos)																						
	D1, D1A, D9-D14	23.85		tons/hr	8760	100% PM2.5		99.90%	0.2 lb/ton				4.770	20.893	0.000	0.000	99.90%	0.005	0.021	0.005	0.021	EF from AP-42, Table 11.13-1, Storage bins
	D1, D1A, D9-D14	23.85		tons/hr	8760	100% PM10		99.90%	0.2 lb/ton				4.770	20.893	0.000	0.000	99.90%	0.005	0.021	0.005	0.021	EF from AP-42, Table 11.13-1, Storage bins
	D1, D1A, D9-D14	23.85		tons/hr	8760	100% PM		99.90%	0.2 lb/ton				4.770	20.893	0.000	0.000	99.90%	0.005	0.021	0.005	0.021	EF from AP-42, Table 11.13-1, Storage bins
Burn-Off Oven																						
Natural Gas Combustion Emissions																						
	IGG-27F	0.23		MMBTU/hr	8760	100% NOx			100 lb/MMCF		9.80E-04 MMCF/MMBTU		0.023	0.099	0.000	0.000	0.00%	0.023	0.099	0.023	0.099	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% CO			84 lb/MMCF		9.80E-04 MMCF/MMBTU		0.019	0.083	0.000	0.000	0.00%	0.019	0.083	0.019	0.083	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% VOC			5.5 lb/MMCF		9.80E-04 MMCF/MMBTU		0.001	0.005	0.000	0.000	0.00%	0.001	0.005	0.001	0.005	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% PM			7.6 lb/MMCF		9.80E-04 MMCF/MMBTU		0.002	0.008	0.000	0.000	0.00%	0.002	0.008	0.002	0.008	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% PM10			7.6 lb/MMCF		9.80E-04 MMCF/MMBTU		0.002	0.008	0.000	0.000	0.00%	0.002	0.008	0.002	0.008	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% PM2.5			7.6 lb/MMCF		9.80E-04 MMCF/MMBTU		0.002	0.008	0.000	0.000	0.00%	0.002	0.008	0.002	0.008	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% SO2			0.6 lb/MMCF		9.80E-04 MMCF/MMBTU		0.000	0.001	0.000	0.000	0.00%	0.000	0.001	0.000	0.001	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% CO2			120000 lb/MMCF		9.80E-04 MMCF/MMBTU		27.059	118.518	0.000	0.000	0.00%	27.059	118.518	27.059	118.518	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100% CH4			2.3 lb/MMCF		9.80E-04 MMCF/MMBTU		0.001	0.002	0.000	0.000	0.00%	0.001	0.002	0.001	0.002	AP42, Table-1.4

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
	IGG-27F	0.23		MMBTU/hr	8760	100%	N2O		2.2 lb/MMCF		9.80E-04	MMCF/MMBTU	0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100%	HAPs		1.875 lb/MMCF		9.80E-04	MMCF/MMBTU	0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100%	CH2O		0.075 lb/MMCF		9.80E-04	MMCF/MMBTU	0.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000	0.000	AP42, Table-1.4
	IGG-27F	0.23		MMBTU/hr	8760	100%	nHexane		1.8 lb/MMCF		9.80E-04	MMCF/MMBTU	0.000	0.002	0.000	0.000	0.00%	0.000	0.002	0.000	0.002	AP42, Table-1.4
Parking areas and roadways																						
Shipping and Receiving Trucks																						
0.085 mile rd length	F001	0.354	1020	VMT	8760		PM		0.283 lb/VMT				0.100	0.144			0.00%	0.100	0.144	0.100	0.144	AP42, Section 13.2.1
	F001	0.354	1020	VMT	8760		PM10		0.057 lb/VMT				0.020	0.029			0.00%	0.020	0.029	0.020	0.029	AP42, Section 13.2.1
Assume max 500 trucks/month	F001	0.354	1020	VMT	8760		PM2.5		0.014 lb/VMT				0.005	0.007			0.00%	0.005	0.007	0.005	0.007	AP42, Section 13.2.1
2 Forklifts and 1 boom lift																						
0.085 mile rd length	F001	0.425	3723	VMT	8760		PM		0.032 lb/VMT				0.014	0.060			0.00%	0.014	0.060	0.014	0.060	AP42, Section 13.2.1
Assume total 5 trips/hr	F001	0.425	3723	VMT	8760		PM10		0.006 lb/VMT				0.003	0.012			0.00%	0.003	0.012	0.003	0.012	AP42, Section 13.2.1
	F001	0.425	3723	VMT	8760		PM2.5		0.002 lb/VMT				0.001	0.003			0.00%	0.001	0.003	0.001	0.003	AP42, Section 13.2.1
Employee Vehicles																						
30 employees/shift	F001	11.160	6110	VMT	8760		PM		0.019 lb/VMT				0.214	0.059			0.00%	0.214	0.059	0.214	0.059	AP42, Section 13.2.1
0.093 mile rd length	F001	11.160	6110	VMT	8760		PM10		0.004 lb/VMT				0.043	0.012			0.00%	0.043	0.012	0.043	0.012	AP42, Section 13.2.1
1095 shifts/yr	F001	11.160	6110	VMT	8760		PM2.5		0.001 lb/VMT				0.010	0.003			0.00%	0.010	0.003	0.010	0.003	AP42, Section 13.2.1

Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky
2026-02-01

Potential Air Emissions

Emissions Unit	Source Id	Hourly Throughput	Annual Throughput	Throughput Units	Hours per year	Capture Efficiency	Pollutant	Control Efficiency	EF	EF Units	Scaling Factor-1	Scaling Factor-1 Units	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Fugitive Emissions Controlled lb/hr	Fugitive Emissions Controlled tpy	Calculated Overall Control Efficiency	Total Controlled Emissions lb/hr	Total Controlled Emissions tpy	Total Controlled Emissions (+Fugitive) lb/hr	Total Controlled Emissions (+Fugitive) tpy	Estimate Basis
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Notes

Pre-control lb/hr = (Hourly throughput) x (Emission Factor) x (EF Conversion Factor)

Pre-control tpy when Annual Throughput column has a value
Pre-control tpy = (Annual throughput) x (Emission Factor) x (EF Conversion Factor) x (1 ton/2000 lbs)
Pre-control tpy when Annual Throughput column does NOT have a value
Pre-control tpy = (Pre-control lb/hr) x (hours/year) x (1 ton/2000 lbs)
Overall Control Efficiency = 1 - (((Capture Efficiency) x (1 - Control Efficiency) + (1 - Capture Efficiency)))
Post-control lb/hr = (Pre-control lb/hr) x (1 - (Overall Control Efficiency))
Post-control tpy = (Pre-control tpy) x (1 - (Overall Control Efficiency))

Facility Wide Total Emissions

Pollutant	Pre-control Emissions lb/hr	Pre-control Emissions tpy	Post-control Emissions lb/hr	Post-control Emissions tpy	Post-control Emissions (+Fugitive) lb/hr	Post-control Emissions (+Fugitive) tpy
PM2.5	390.637	1710.932	12.159	53.197	12.228	53.503
PM10	390.686	1710.971	12.208	53.237	12.278	53.543
PM	390.948	1711.182	12.470	53.447	12.540	53.753
VOC	4.182	18.317	4.182	18.317	4.234	18.547
NOx	0.023	0.099	0.023	0.099	0.023	0.099
CO	0.019	0.083	0.019	0.083	0.019	0.083
SO2	0.000	0.001	0.000	0.001	0.000	0.001
CO2	27.059	118.518	27.059	118.518	27.059	118.518
CH4	0.001	0.002	0.001	0.002	0.001	0.002
N2O	0.000	0.002	0.000	0.002	0.000	0.002
HAPs	0.029	0.125	0.029	0.125	0.029	0.127
CH2O	0.000	0.000	0.000	0.000	0.000	0.000
nHexane	0.000	0.002	0.000	0.002	0.000	0.002
Acetaldehyde	0.018	0.081	0.018	0.081	0.019	0.082
MEK	0.008	0.033	0.008	0.033	0.008	0.034
Propionaldehyde	0.002	0.009	0.002	0.009	0.002	0.009

Attachment 1 Potential to Emit Air Emission Calculations
Conditional Major Operating Permit Renewal Application
Washington Penn Plastics Frankfort Plant
Frankfort, Kentucky

Emission Factors 2/1/2026

Paved Roads - Trucks

Description	Variable	Units	PM-30	PM-10	PM2.5	Notes
Particle Size Multiplier	k	lb/VMT	0.011	0.0022	0.00054	
Road surface silt loading	sL	g/m^2	0.6	0.6	0.6	
Mean vehicle weight	W	tons	42	42	42	
Number of days per year with precipitation > 0.01 in.	P		140	140	140	AP42, Figure 13.2.1-2
Emission Factor	EF	lb/VMT	0.2828	0.0566	0.0139	

Source = AP42, Section 13.2.1 (Paved Roads) (1/11)

Paved Roads - Forklifts and Boom Lift

Description	Variable	Units	PM-30	PM-10	PM2.5	Notes
Particle Size Multiplier	k	lb/VMT	0.011	0.0022	0.00054	
Road surface silt loading	sL	g/m^2	0.6	0.6	0.6	
Mean vehicle weight	W	tons	5	5	5	
Number of days per year with precipitation > 0.01 in.	P		140	140	140	AP42, Figure 13.2.1-2
Emission Factor	EF	lb/VMT	0.0323	0.0065	0.0016	

Source = AP42, Section 13.2.1 (Paved Roads) (1/11)

Paved Roads - Employee Vehicles

Description	Variable	Units	PM-30	PM-10	PM2.5	Notes
Particle Size Multiplier	k	lb/VMT	0.011	0.0022	0.00054	
Road surface silt loading	sL	g/m^2	0.6	0.6	0.6	
Mean vehicle weight	W	tons	3	3	3	
Number of days per year with precipitation > 0.01 in.	P		140	140	140	AP42, Figure 13.2.1-2
Emission Factor	EF	lb/VMT	0.0192	0.0038	0.0009	

Source = AP42, Section 13.2.1 (Paved Roads) (1/11)

ATTACHMENT 2

Kentucky Secretary of State Certificate of Authority

Commonwealth of Kentucky
Michael G. Adams, Secretary of State

Michael G. Adams
Secretary of State
P. O. Box 718
Frankfort, KY 40602-0718
(502) 564-3490
<http://www.sos.ky.gov>

Certificate of Authorization

Authentication number: 360267
Visit <https://web.sos.ky.gov/ftshow/certvalidate.aspx> to authenticate this certificate.

I, Michael G. Adams, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

WASHINGTON PENN PLASTIC CO., INC.

, a corporation organized under the laws of the state of Pennsylvania, is authorized to transact business in the Commonwealth of Kentucky, and received the authority to transact business in Kentucky on December 29, 1998.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State; and is therefore in good standing.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 2nd day of March, 2026, in the 234th year of the Commonwealth.



Michael G. Adams

Michael G. Adams
Secretary of State
Commonwealth of Kentucky
360267/0466891

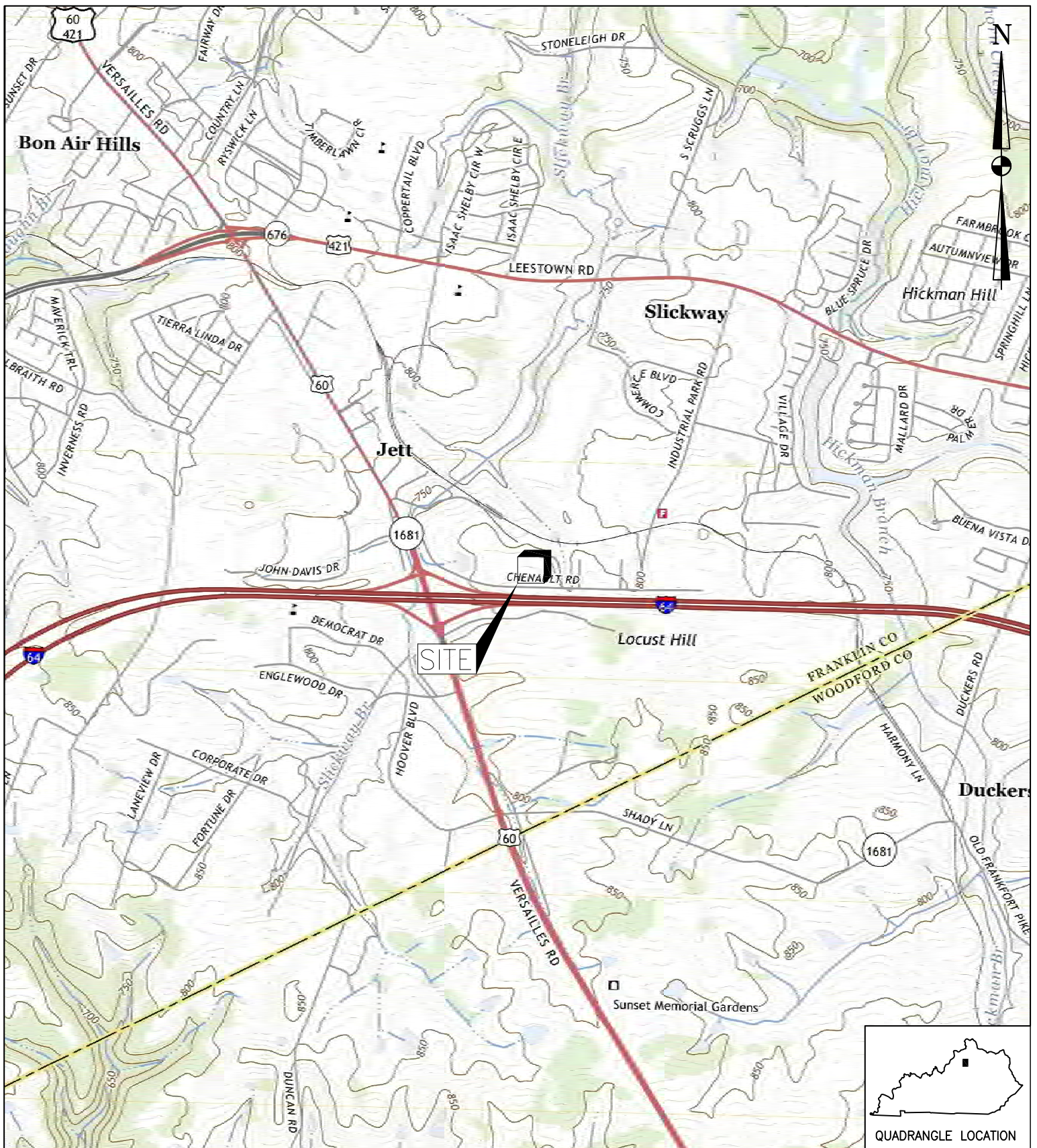
ATTACHMENT 3

Figures:

1-Topographic Map

2- Facility Layout

3- Process Flow Diagram



REFERENCE: USGS 7.5' QUADRANGLE MAP OF: FRANKFORT WEST, KENTUCKY; DATED 2022.

DRAWN BY	DJF
DATE	2/17/2026
CHECKED BY	MY
SET JOB NO.	226035
SET DWG FILE	WPP CHENAULT ROADm01.dwg
DRAWING SCALE	1"=2000'



WASHINGTON PENN PLASTICS

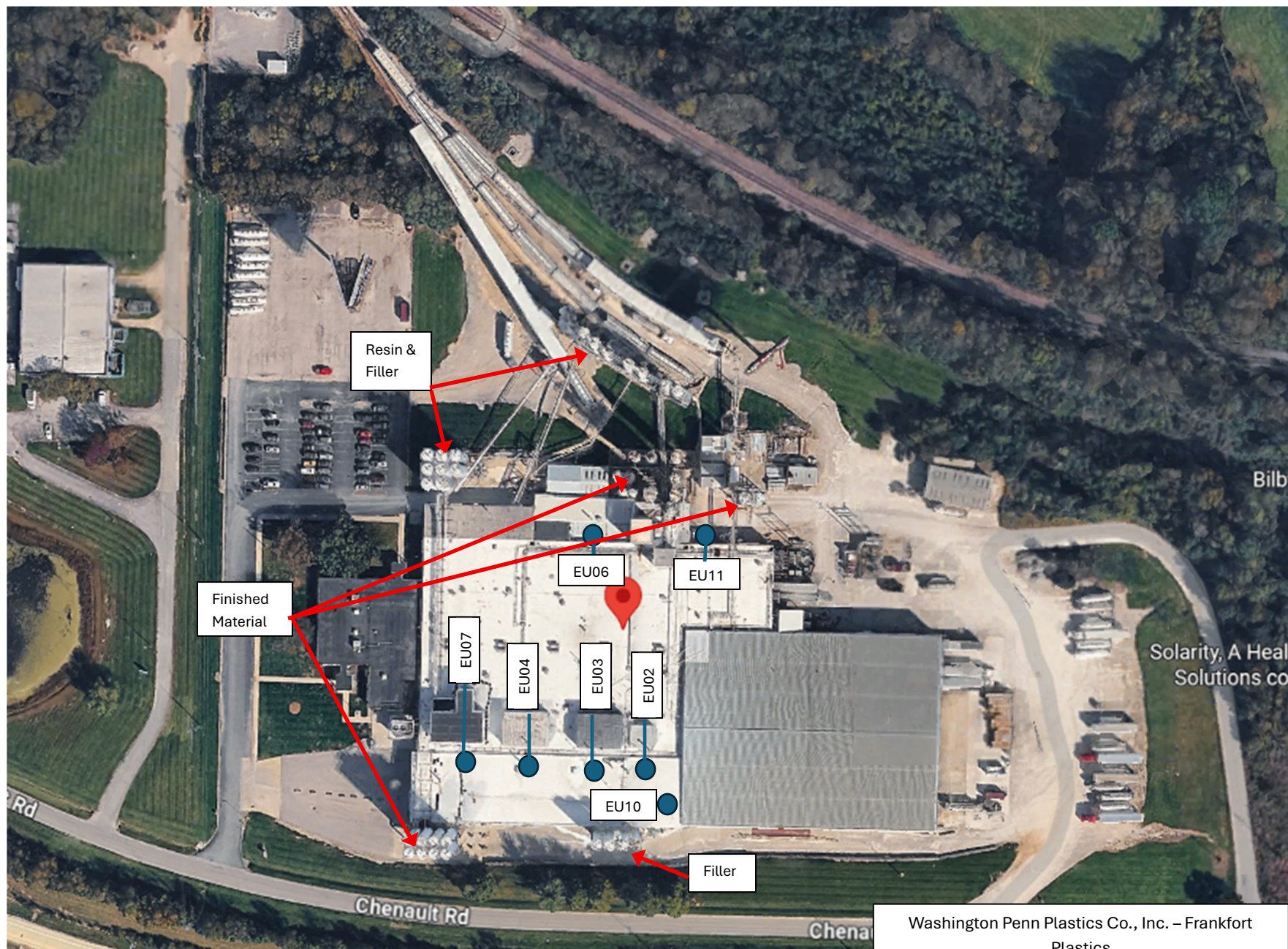
290 CHENAULT ROAD
FRANKFORT, KENTUCKY 40601
SITE LOCATION MAP

DRAWING NO.

FIGURE 1

REV.

0

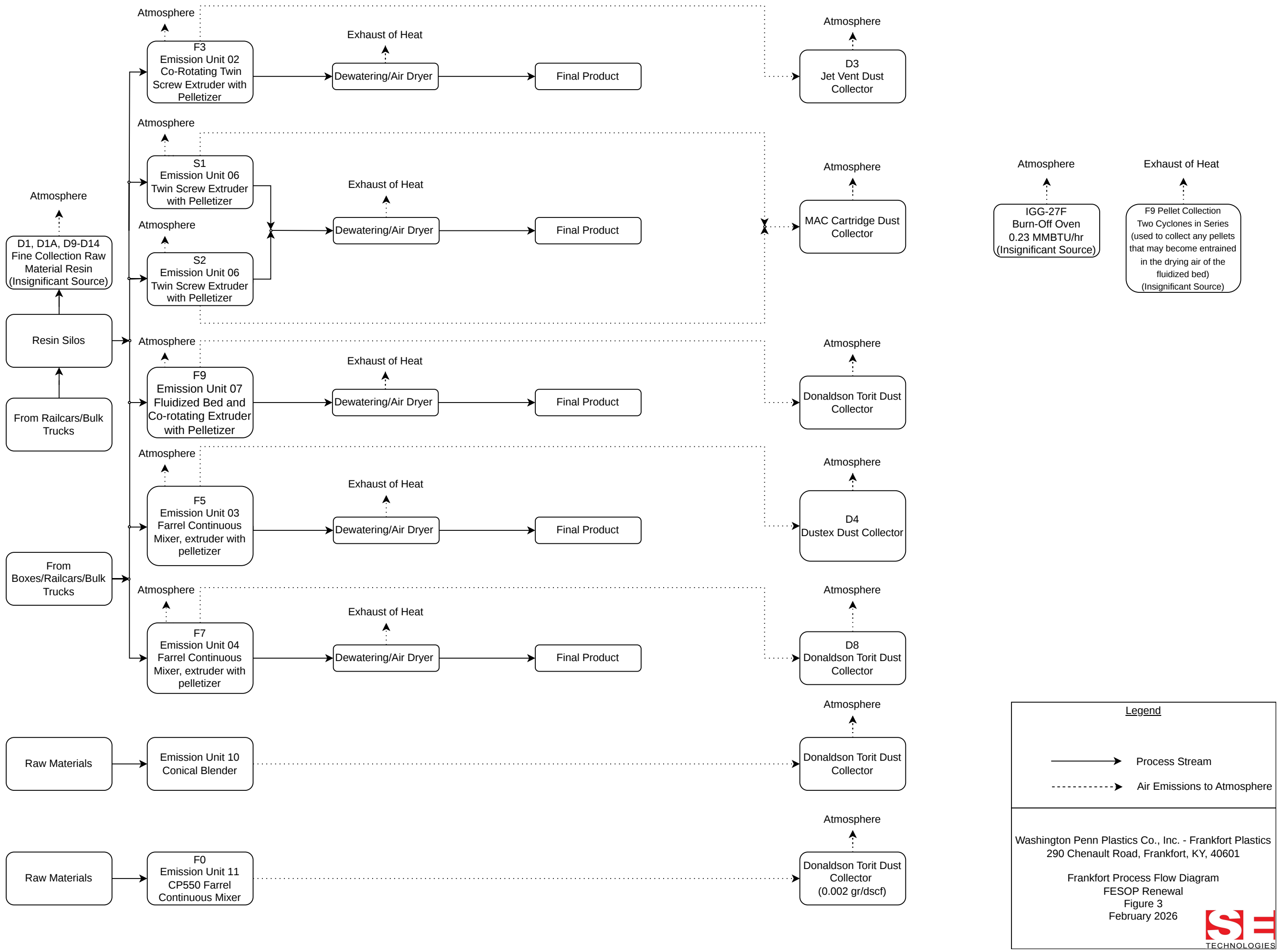


LEGEND

EU10 Emission Unit
 Control Device

Washington Penn Plastics Co., Inc. – Frankfort
 Plastics
 290 Chenault Road, Frankfort, KY 40601
 Frankfort Facility Layout
 FESOP Renewal
 Figure 2
 March 2026





ATTACHMENT 4

Safety Data Sheets

Magnesium Silicate Hydrate

SAFETY DATA SHEET

This SDS complies with OSHA HazCom Standard 29 CFR 1910.1200 (GHS), Canadian Workplace Hazardous Material Information System (WHMIS), Mexico NOM-018-STPS-2015

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Identification

Product Form: Mixture

Chemical Name: Magnesium Silicate Hydrate

Product Name(s):

Flexalc Series: Nanoflex, Nanoflex-D, Performaflex-A, Performaflex D, Performaflex-AD, 610/612, 610D/612D, 815/815D. Clear-Bloc Series: 100, 100-S, C(D), 80, 80-S

Cimtuff Series: 9102, 9103W, 9103, 9103-S, 9103-C, 9107, 9110, 9115

Cimtalco Series: 2, 3, 3-S, 3-C, 7, 10, 15

RP Series: 9310, 9305, 9410, 9405

Aspect Series: Aspect 3, Aspect 7, Aspect 10, Aspect 15

Other: SAS

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Use of Substance/Mixture: Mineral additive for use in paper, paints, ceramics, plastics, personal care, etc.

1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer Information (Corporate):

CIMBAR Performance Minerals

104 North 3rd Avenue

Chatsworth, Ga. 30705

Phone Number: 1-800-852-6868

Fax Number: 1-706-517-0516

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance/Mixture

GHS-US Classification: **Category 2 Carcinogen**

2.2 Label Elements:

GHS-US Labeling:



GHS- US Hazard Statements: H350 May cause cancer

2.3 Other Hazards

Other Hazards not contributing to the classification: Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. 2009 IARC review of crystalline silica found that the polymorph type and specific exposure scenarios may lead to higher risk of chronic illnesses.

2.4 Unknown Acute Toxicity (GHS-US)

Not applicable.

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance
Not applicable

3.2 Mixture:

Component	CAS Number	Composition %	EC Number	Classification
Talc (magnesium silicate hydrate)	14807-96-6	>95	238-877-9	NONE
Quartz	14808-60-7	<0.2	238-878-4	NONE

Full text of hazard classes and H-statements: see Section 16

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures:

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice, show the label where possible.
Inhalation:	Move person to non-contaminated air. If symptoms develop, obtain medical attention.
Skin Contact:	Remove affected clothing and wash the exposed skin area with mild soap and water, followed by warm water rinse. If symptoms develop, obtain medical attention.
Eye Contact	In case of contact with eyes, rinse immediately with plenty of water for several minutes.
Ingestion	Drink plenty of water. Never give liquid to an unconscious person

4.2 Most Important Symptoms and Effects, both Acute and Delayed:

After Inhalation:	May cause irritation to the respiratory tract.
After Skin Contact:	Repeated and/or prolonged exposure skin contact may cause irritation.
After Eye Contact:	May cause eye irritation.

4.3 Indication of any immediate medical attention and special treatment:

No additional information available.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: None known.

5.2 Special Hazards arising from the substance or mixture

Fire Hazard: None known.
Reactivity: Stable under normal conditions.

5.3 Advice for Firefighters

Protection during Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection (N95 minimum).

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, personal protective equipment (PPE) and emergency procedures:

Use proper PPE. NIOSH approved respirators are recommended. Spilled materials may cause slippery conditions when wet. Care should be taken when walking on spills on floor or concrete pads.

6.1.1 For non-emergency personnel

Protective Equipment: Use personal protective equipment as required.

Emergency Procedure: Evacuate unnecessary personnel. Avoid dust formation. Avoid contact with skin and eyes. Do not breathe dust.

6.1.2 For emergency responders

Protective Equipment: Wear suitable protective clothing, gloves, eye or face protection. Where excessive dust may result, wear approved dust respirator.

Emergency Procedures: Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin and eyes. Do not breathe dust. Wear independent breathing equipment.

6.2 Environmental Precautions

Notify authorities if large amounts of the product enter sewers or public waters.

6.3 Methods and material for containment and cleanup

Dry product should be cleaned with a shovel or vacuum cleaning system while wearing the PPE described above. Do not discharge into drains or water contributories. Washing the floor with water is NOT recommended since it may cause slippery conditions. If the floor is already wet, and only in this case, the floor should be thoroughly flushed with water to remove the slippery conditions.

6.4 Reference to other sections

Section 8: Exposure controls/personal protection.

Section 13: Disposal considerations.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling:

Minimize dust generation and assimilation. If excessive dust is generated, provide adequate ventilation, and use proper personal protective equipment.

7.2 Conditions for safe storage:

Keep the product dry and in closed containers. Store it in a cool and well-ventilated area.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

Talc (14807-96-6)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
OSHA	OSHA PEL (mg/m ³)	2 mg/m ³ Respirable Fraction
OSHA	Remark (OSHA)	(3) see Table Z-3

Quartz (fine fraction) 14808-60-7		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ Respirable Fraction
OSHA	OSHA PEL	0.1 mg/m ³
OSHA	Remark (OSHA)	(3) see Table Z-3

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8.2 Exposure Controls

Appropriate engineering controls: Use exhaust ventilation, if possible, to reduce the dust concentration to recommended exposure limits.

Personal Protective Equipment: Avoid unnecessary exposure.

Eye Protection: Wear side shield safety glasses or goggles.

Hand Protection- Rubber gloves are recommended for prolonged exposure.

Respiratory Protection- Use NIOSH approved dust respirators.

Other Information: Do not eat, drink, or smoke during use.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

9.1 Appearance:	White, tan or light grey powder.
9.2 Odor:	Odorless
9.3 pH:	8.5-9.5 (10% Solution)
9.4 Melting Point:	>1300° C
9.5 Flammability (solid, gas):	Not flammable
9.6 Upper/Lower Flammability or Explosive Limits:	Not explosive. Limits not applicable.
9.7 Relative Density:	2.58-2.83 g/cm ³
9.8 Solubility: Solubility in water Solubility in hydrofluoric acid	Negligible Yes
9.9 Decomposition Temperature:	>1000° C
9.10 Explosive Properties:	Not explosive
9.11 Oxidizing Properties:	Non-oxidizing

SECTION 10 - STABILITY & REACTIVITY

10.1 Reactivity: Stable under normal conditions.

10.2 Chemical Stability: Stable under normal conditions.

10.3 Possibility of Hazardous Reactions: None known.

10.4 Conditions to Avoid: Dust formation.

10.5 Incompatible Materials: None.

10.6 Hazardous Decomposition Products: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Acute Toxicity: Not classified.

Skin Corrosion/Irritation: Not classified.

Serious Eye Damage/Irritation: Not classified.

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Carcinogenic Status: May cause cancer (Inhalation) under certain conditions.

Talc (14807-96-6)	
IARC Group	Category 2

SAFETY DATA SHEET

National Toxicology Program (NTP) Status	Not listed by NTP, ACGIH, OSHA, or NIOSH
--	--

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (single exposure): Not classified.

Specific Target Organ Toxicity (repeated exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: May cause irritation to respiratory tract.

Symptoms/Injuries after skin contact: Repeated and/or prolonged skin contact may cause irritation.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity Ecology- General: Not classified.

Talc (14807-96-6)	
LC50 Fish	>100 g/l Brach danio rerio

12.2 Persistence and Degradability

Talc (14807-96-6)	
Persistence and Degradability	Not relevant for inorganic substances

12.3 Bio-accumulative Potential

Talc (14807-96-6)	
Bio-accumulative Potential	Not relevant for inorganic substances

12.4 Mobility in Soil

Talc (14807-96-6)	
Ecology-Soil	No information available

12.5 Other adverse effects: No specific adverse effects known.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Talc is not considered a hazardous waste as defined by the US EPA RCRA (40 CFR 261) regulations. Observe all applicable federal, state and local regulations when handling, storing or disposing of this substance.

13.2 Disposal of Packaging:

Where possible, recycling is preferable to disposal. Recycling and disposal of packaging should be done by an authorized waste management company in compliance with local regulations. Responsibility for proper waste disposal lies with the waste owner.

SECTION 14 - TRANSPORT INFORMATION

14.1 US Department of Transportation (DOT): Not regulated.

14.2 Canadian Transportation of Dangerous Goods: Not regulated.

14.3 Land Transport- ADR/RID: Not regulated.

14.4 Air Transport- IATA/ICAO: Not regulated.

14.5 Maritime Transport- IMDG: Not regulated.

14.6 Harmonized Tariff Code: Talc- crushed or powdered. 2526.20.00.

14.7 EPA TSCA 12(B) Export Notification: Not regulated.

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SECTION 15 - REGULATORY INFORMATION

15.1 US Federal Regulations

This product or mixture does not contain a toxic or chemicals is excess of the applicable minimal concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Talc (14807-96-6)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

Quartz (fine fraction) (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

15.2 US State Regulations

 California Proposition 65: WARNING- This product can expose you to chemicals including silica, crystalline, which is known in the state of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

Quartz (fine fraction) (14808-96-6)			
US-California-Prop 65- Carcinogens List	US- California- Prop 65- Developmental Toxicity	US- California- Prop 65- Reproductive Toxicity (Female)	US- California- Prop 65- Reproductive Toxicity (Male)
Yes	Yes	Yes	No

TALC (14807-96-6)
New Jersey- Right to Know Hazardous Substance List Pennsylvania- Right to Know List Massachusetts- Right to Know List

Quartz (14808-60-7)
New Jersey- Right to Know Hazardous Substance List Pennsylvania- Right to Know List Massachusetts- Right to Know List

15.3 International Regulations:

Canada

TALC	
WHMIS Classification	Class D Division 2 Subdivision 2- Very toxic material causing other toxic effects

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EU Regulations: No additional information available National Regulations

TALC
All naturally occurring components of this product are automatically included in the US-EPA TSCA inventory list per 4- CFR 710.4(b). All other components are on the US-EPA TSCA inventory list. -Generally acceptable for use in vanilla powder and vanilla-vanillin powder under food standards 21 CFR 169.179 and 169-182. -Generally approved for use as a colorant only as components of paper and paperboard in contact with aqueous fatty foods (21 CFR 176.170). -Generally recognized as safe as an anti-caking agent in table salt up to 2% (21 CFR 182.2437). -Generally approved for use as a pigment or colorant in the manufacture of articles which come into contact with food, under the following citations: 21 CFR 174.5(d), 175.105, 175.125, 175.300(b)(3)(xivi), 175.320, 175.380, 175.170(b)(2), 176.180(b)(2), 176.180(b)(1), 176.200, 177.1210, 177.1350, 177.1460, 177.2600(c)(1), 182.70, 182.90. -Generally approved for use in olefin polymers used in the manufacture of articles which come into contact with foods under 21 CFR 177.1520.

TALC (14807-96-6)
Listed on IARC (International Agency for Research on Cancer)

Quartz (fine fraction) (14808-96-6)
Listed on IARC (International Agency for Research on Cancer)

15.4 Other regulations based on domestic or foreign laws: The following inventories have been investigated as to the publicity available portion of the lists.

Component	CAS #	TSCA	DSL\NDL	EINECS (EU)	AICS	KECI	CSNN
Country		USA	Canada	Europe	Aust.	Korea	Taiwan
Talc	14807-96-6	Yes	Yes (DSL)	Yes	Yes	Yes	Yes
Quartz (fine fraction)	14808-60-7	Yes	Yes	Yes	Yes	Yes	Yes

Component	CAS #	ENCS/ISH L	IECSC	PICCS	Swiss ID No.	NZIoC
Country		Japan	China	Philippines	Switzerland	New Zealand
Talc	14807-96-6	Yes	Yes	Yes	Yes	Yes
Quartz (fine fraction)	14808-60-7	Yes	Yes	Yes	Yes	Yes

Chemical Safety Assessment- REACH: Exempted from REACH registration in accordance with Annex V.7

15.5 Other Pertinent Classifications/Regulations:

Clean Air Act: Ozone depleting chemicals (ODC): None

CONEG Approved Packaging: Yes

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SECTION 16 - OTHER INFORMATION

16.1 References and Sources:

Data Sources: US OSHA HazCom (GHS) May 25, 2012.

NFPA (National Fire Protection Association) Ratings:

Health Hazard:	1	Exposure could cause irritation but only minor residual injury even if no treatment is given
Fire Hazard	0	Materials will not burn
Reactivity	0	Normally stable, even under fire exposure conditions, and are not reactive with water

HMIS III Ratings:

Health Hazard:	1	Slight	Irritation or minor reversible injury possible. Chronic Hazard- Chronic (long-term) effects may result from repeated overexposure
Flammability	0	Minimal	Materials will not burn
Physical	E	Minimal	Materials are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.
Personal Protection	E		Safety glasses, gloves, dust respirator

Acronyms:

EPA = Environmental Protection Agency

TSCA = Toxic Substance Control Act

ACGIH = American Conference of Governmental Industrial Hygienists

IARC = International Agency for Research on Cancer

NIOSH = National Institute for Occupational Safety and Health

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

DOT = Department of Transportation

RCRA = Resource Conservation and Recovery Act

Other Information:

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This information could include technical inaccuracies or typographical errors. Changes are periodically added to the information herein; these changes will be incorporated in revisions of the information.

CPM may make improvements and/or changes in the product(s) described in this information at any given time.

Formolene® Polypropylene Copolymer

Safety Data Sheet

according to 1907/2006/EC, Article 31

Date Printed: 03/23/2015

Version 2

Date Reviewed: 03/11/2015

1: Product Identification

- **Product Name:** Formolene® Polypropylene Copolymer
 - **Synonyms:** propene-ethene copolymer, PP-CP
 - **Product Code:** 2----, 3----, 6----
 - **CAS Number:**
9010-79-1
 - **Product Use:** Resin, extrusion and compounding, plastic molding, molded articles, films and coatings.
 - **Manufacturer/Supplier:**
Formosa Plastics Corporation, Texas
201 Formosa Drive
Point Comfort, TX 77978 USA
+1 (361) 987-7000
E-Mail: MSDS@fpcusa.com
 - **Business Division:** Polypropylene
-
- **Emergency Telephone Number:**
In case of a chemical emergency, contact CHEMTREC (24 hrs) at:
+1 (800) 424-9300 (United States, Canada, Puerto Rico, Virgin Islands)
+1 (703) 527-3887 (International & Maritime)

2: Hazard(s) Identification

- **Hazard Classification:**
The product is not classified according to the Globally Harmonized System (GHS) for classification and labeling of chemicals.
 -
 - **Other Hazards:** Molten material may cause thermal burns.
 - **Signal Word:** Not Applicable
-
- **NFPA Ratings (scale 0 - 4):**



- **Additional Information:**
If you do not understand the hazards or safety precautions described in this data sheet, contact your supervisor or safety administrator before handling this product.

3: Composition/Information on Ingredients

- **Chemical Characterization: Substances**
- **CAS No. Description**
9010-79-1 propylene-ethylene copolymer

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Product Name: Formolene® Polypropylene Copolymer

(Contd. from Page 1)

4: First Aid Measures

- **General information:** Provide symptomatic and supportive care.
- **After Inhalation:**
Remove victim to fresh air.
Administer oxygen if breathing is difficult.
Administer artificial respiration if breathing has stopped.
Get medical assistance if irritation or other symptoms develop.
- **After Skin Contact:**
After contact with the molten product, cool rapidly with cold water.
Do not pull solidified product away from the skin.
Get medical attention.
- **After Eye Contact:**
In case of accidental contact, immediately flush eyes with water.
Hold eyelids open to ensure adequate flushing.
Get medical assistance if irritation or other symptoms develop.
- **After Swallowing:**
Administer 1-2 glasses of water to dilute ingested material.
Never give anything by mouth to an unconscious person.
Get medical attention.

5: Firefighting Measures

- **Suitable Extinguishing Agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special Firefighting Hazards:**
Product is supplied as pellets. If product is milled or ground, dust may form an explosive atmosphere when dispersed in air.
- **Protective Equipment:**
In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved self-contained breathing apparatus (SCBA) and full protective clothing.

6: Accidental Release Measures

- **Personal Precautions, Protective Equipment and Emergency Procedures:**
Wear appropriate personal protective equipment during all clean-up activities. See Section 8 for more information.
- **Environmental Precautions:** Keep spilled material out of sewage/drainage systems and waterways.
- **Methods for Containment and Clean-Up:**
Collect spilled material mechanically.
Place waste in an appropriate container for disposal.

7: Handling and Storage

- **Precautions for Safe Handling:** No special measures required.

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Product Name: Formolene® Polypropylene Copolymer

(Contd. from Page 2)

Conditions for Safe Storage:

Store in closed, properly labeled containers.

Protect containers from heat, physical damage, ignition sources and incompatible materials.

Have emergency equipment for fires and spills readily available.

Additional Information:

If you do not understand the hazards or safety precautions described in this data sheet, contact your supervisor or safety administrator before handling this product.

8: Exposure Controls/Personal Protection

· **Occupational Exposure Limits:** Not applicable.

· **Engineering Controls:** None required under normal conditions of use.

· **General Protective and Hygienic Measures:** Wash thoroughly after handling.

· **Respiratory Protection:** None required under normal conditions of use.

· **Hand Protection:**



Work gloves.

· **Eye/Face Protection:**



Safety glasses with side shields.

· **Body Protection:** Protective work clothing

· **Additional Information:**

If unusual exposures are expected, an industrial hygiene review of work practices, engineering controls and personal protective equipment is recommended.

9: Physical/Chemical Properties

- **Form:** Pellets
- **Color:** White
- **Odor:** Odorless
- **pH Value:** Not determined.
- **Melting Point:** 130 °C (266 °F)
- **Flash Point:** 422 °C (792 °F)
- **Autoignition Temperature:** 425 °C (797 °F)
- **Vapor Pressure:** Not determined.
- **Density at 20 °C (68 °F):** 0.9 g/cm³ (7.511 lbs/gal)

(Contd. on Page 4)

FPC

Safety Data Sheet

according to 1907/2006/EC, Article 31

Date Printed: 03/23/2015

Version 2

Date Reviewed: 03/11/2015

Product Name: Formolene® Polypropylene Copolymer

(Contd. from Page 3)

· **Solubility in Water:** Insoluble.

10: Stability and Reactivity

- **Chemical Stability/Reactivity:** Stable under anticipated conditions of use.
- **Possibility of Hazardous Reactions/Incompatible Materials:** No dangerous reactions known.
- **Hazardous Decomposition Products:** No dangerous decomposition products known.

11: Toxicological Information

- **Acute Toxicity:**
- **Skin Irritation:** Not expected to cause skin irritation.
- **Eye Irritation:** Mechanical eye irritation.
- **Sensitization/Allergic Reaction:** No sensitizing effects known.

12: Ecological Information

- **Persistence and Degradability:** No data available.
- **Bioaccumulative Potential:** No data available.

13: Disposal Considerations

- **Disposal Instructions:**
Dispose of waste in accordance with applicable laws and regulations.
Maximize product recovery for reuse or recycling.

14: Transport Information

- **Additional Information:** This product is not regulated as a hazardous material/dangerous good for transportation.

15: Regulatory Information

- **U.S. Superfund Amendments & Reauthorization Act (SARA) 355 (Extremely Hazardous Substances):**
Substance is not listed.
- **U.S. Superfund Amendments & Reauthorization Act (SARA) 313 (Specific Toxic Chemical Listings):**
Substance is not listed.
- **U.S. Toxic Substances Control Act (TSCA):**
Substance is listed.

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Date Reviewed: 03/11/2015

Product Name: Formolene® Polypropylene Copolymer

(Contd. from Page 4)

· California Proposition 65 Carcinogens:

Substance is not listed.

· Canadian Domestic Substances List (DSL):

Substance is listed.

· Canadian Ingredient Disclosure List (limit 0.1%)

Substance is not listed.

· Canadian Ingredient Disclosure List (limit 1%):

Substance is not listed.

· Hazard Pictograms: Not Applicable

· Signal Word: Not Applicable

· Hazard Statements: Not Applicable

· Other Hazards: Molten material may cause thermal burns.

16: Other Information

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· Department Issuing Safety Data Sheet: Corporate Environment, Health & Safety

· Sources & References:

This Safety Data Sheet conforms to regulation 1907/2006/EC (REACH). This product has been classified in accordance with European CLP regulations (1272/2008/EC) and the U.S. Hazard Communication standard (29 CFR 1910.1200).

* - Indicates that data has been updated from the previous version.

Polypropylene (PP) resin

SAFETY DATA SHEET

Polypropylene (PP) resin

Section 1. Identification

GHS product identifier	: Polypropylene (PP) resin
Product code	: SDS# 1800
Other means of identification	: 10-3950, 13-series, 14-series, 100-series, H-series, KL-series, KS-series, KV-series, L-series, N-series, R-series, T-series, TS01, W-series, Experimental PP formulations designated by an "x" in the grade name, PP homopolymer, PP copolymer, PP terpolymer, widespec PP, offgrade PP, and generic prime PP. Covers all commercial and experimental polypropylene homo- and co-polymer products. For product specific information please see our technical and regulatory documents online at www.ineos.com or contact your INEOS account representative.
Product type	: ☒ Pellets. or Flakes.
Recommended use of the chemical and restrictions to use	
Product use	: Industrial applications.
Area of application	: Industrial applications.
Supplier's details	: INEOS Olefins & Polymers USA 2600 South Shore Blvd. #500 League City, Texas 77573
e-mail address of person responsible for this SDS	: rcspolymers@ineos.com
Emergency telephone number (with hours of operation)	: USA:1 (800) 424-9300 Outside USA:+1 703-527-3887 (CHEMTREC)

Section 2. Hazards identification

Classification of the substance or mixture	:  COMBUSTIBLE DUSTS
GHS label elements	
Signal word	:  Warning
Hazard statements	:  No Code(s) - May form combustible dust concentrations in air.
Precautionary statements	
Prevention	:  Not applicable.
Response	:  Not applicable.
Storage	:  Not applicable.
Disposal	:  Not applicable.
Supplemental label elements	: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Section 2. Hazards identification

Hazards not otherwise classified : COMBUSTIBLE DUSTS. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. In the event that combustible dust is generated, the hazard is posed only by the size of the particle not its chemical content because all monomers, additives and pigment are totally encapsulated within the resin and cannot be released in pure form.

No ingredient(s) of unknown acute toxicity is intentionally used in this product.

Section 3. Composition/information on ingredients

Substance/mixture : Polymer

Common name and synonyms : 10-3950, 13-series, 14-series, 100-series, H-series, KL-series, KS-series, KV-series, L-series, N-series, R-series, T-series, TS01, W-series, Experimental PP formulations designated by an "x" in the grade name, PP homopolymer, PP copolymer, PP terpolymer, widespec PP, offgrade PP, and generic prime PP.

Covers all commercial and experimental polypropylene homo- and co-polymer products.

For product specific information please see our technical and regulatory documents online at www.ineos.com or contact your INEOS account representative.

CAS number/other identifiers

CAS number : 9003-07-0/9010-79-1/29160-13-2/25895-47-0

Ingredient name	Other names	%	CAS number
1-Propene, homopolymer	Not available.	0-100	9003-07-0
1-Propene, polymer with ethene	Not available.	0-100	9010-79-1
1-Butene, polymer with 1-propene	Not available.	0-100	29160-13-2
1-Butene, polymer with ethene and 1-propene	Not available.	0-100	25895-47-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : If affected by fumes from heated material, remove from source of exposure and move the affected person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Skin contact** : If burned by contact with hot material, flush skin immediately with large amounts of cold water. If possible, submerge area in cold water. No attempt should be made to detach polymer adhering to the skin or to remove clothing attached with molten material. Thermal burns require immediate medical attention. Cold material: Wash with soap and water.

Section 4. First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : May be combustible at high temperature.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Section 5. Fire-fighting measures

Burning can produce carbon monoxide and/or carbon dioxide and other harmful products. The major decomposition products are low molecular weight oligomers (C6-18) of polypropylene. Degradation products may include trace amounts of acrolein, formaldehyde, aldehydes, and other organic vapors.

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Granules spilled on the floor can cause slipping. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, and sampling from storage tanks.

There is a risk of being splashed with molten materials. Heated material can cause thermal burns. Do not breathe gas, fumes or vapor. When handling hot material, wear heat resistant protective gloves, clothing and face shield that are able to withstand the temperature of the heated product. Pneumatic conveying of powder and pellets can generate large static electrical charges. Electrical discharge in presence of air can cause an explosion. Earth all equipment.

Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Fine dust clouds may form explosive mixtures with air. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

The main hazards are related to pallet stock slippage and forklift truck maneuvers, which can cause injury to personnel. It is highly recommended that adequate procedures covering storage handling of pallets are established and maintained. These procedures must be kept up to date and regularly audited. In most cases, best practice is to stack pallets no more than 2 high. However, facilities responsible for storing the material should perform a site specific risk assessment to determine whether pallets can be stacked safely.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
 Polypropylene (PP) resin 1-Propene, homopolymer	ACGIH TLV (United States). Particulates Not Otherwise Specified TWA: 10 mg/m³ 8 hours. Form: Inhalable Particulates Not Otherwise Specified TWA: 3 mg/m³ 8 hours. Form: Respirable fraction OSHA PEL (United States). Particulates Not Otherwise Specified TWA: 5 mg/m³ 8 hours. Form: Respirable fraction Particulates Not Otherwise Specified TWA: 15 mg/m³ 8 hours. Form: Total ACGIH TLV (United States).

Section 8. Exposure controls/personal protection

	TWA: 10 mg/m³, (nuisance particulates) 8 hours. Form: Inhalable TWA: 3 mg/m³, (nuisance particulates) 8 hours. Form: Respirable fraction OSHA PEL Z3 (United States). TWA: 5 mg/m³, (nuisance particulates) 8 hours. Form: Respirable fraction TWA: 15 mg/m³, (nuisance particulates) 8 hours. Form: Total dust
1-Propene, polymer with ethene	None.
1-Butene, polymer with 1-propene	None.
1-Butene, polymer with ethene and 1-propene	None.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product. Cold material: None required. However, use of adequate ventilation is good industrial practice.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When handling hot material, wear heat resistant protective gloves, clothing and face shield that are able to withstand the temperature of the heated product. Cold material: None required. However, use of adequate ventilation is good industrial practice.

Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When handling hot material, wear heat-resistant protective gloves, clothing and face shield that are able to withstand the temperature of the molten product.
Cold material: None required. However, use of adequate ventilation is good industrial practice.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Pellets./Flakes.]
- Color** : White to yellowish.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : 135 to 167°C (275 to 332.6°F)
- Boiling point** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.85 to 0.965
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : The product is insoluble in water and octanol.
- Auto-ignition temperature** : >340°C (>644°F)
- Decomposition temperature** : >300°C (>572°F)
- Viscosity** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : If heated to more than 300°C, the product may form vapors or fumes which could cause irritation of the respiratory tract, coughing, and shortness of breath. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Section 10. Stability and reactivity

Incompatible materials :  Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Burning can produce carbon monoxide and/or carbon dioxide and other harmful products. The major decomposition products are low molecular weight oligomers (C6-18) of polypropylene. Degradation products may include trace amounts of acrolein, formaldehyde, aldehydes, and other organic vapors.

Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Information on toxicological effects (Listed for the components where information is available.)

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
 Propene, homopolymer	LD50 Oral	Rat	>8 g/kg	-

- : Not available.

Irritation/Corrosion : Not available.

Sensitization : Not available.

Specific target organ toxicity (single exposure) : Not available.

Specific target organ toxicity (repeated exposure) : Not available.

Aspiration hazard : Not available.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
irritation
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Numerical measures of toxicity

Acute toxicity estimates : Not available.

Mutagenicity

Conclusion/Summary : No component of this product at levels greater than or equal to 0.1% is classified by established regulatory criteria as a mutagen.

Carcinogenicity

Conclusion/Summary : None of the components in this product at concentrations greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Classification

Product/ingredient name	OSHA	IARC	NTP
Propene, homopolymer	-	3	-

+: Listed

- : Not applicable.

IARC 1 1, Carcinogenic to humans

IARC 2A 2A, Probably carcinogenic to humans

IARC 2B 2B, Possibly carcinogenic to humans

IARC 3 3, Not classifiable as to its carcinogenicity to humans

IARC 4 4, Probably not carcinogenic to humans

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No component of this product at levels greater than or equal to 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

Section 12. Ecological information

Ecotoxicity

Conclusion/Summary : Wildlife may ingest plastic pellets or bags. Although not toxic, such materials may physically block the digestive system, causing starvation or death.

Persistence and degradability

: Not available.

Bioaccumulative potential

: Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name		-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	 No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

Additional regulatory information may be available through our website, at www.ineos.com.

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

Section 15. Regulatory information

[SARA 302/304](#)

[Composition/information on ingredients](#) : No products were found.

[SARA 304 RQ](#) : Not applicable.

[SARA 311/312](#)

[Classification](#) :  COMBUSTIBLE DUSTS

[Composition/information on ingredients](#)

Name	%	Classification
 Propene, homopolymer	0 - 100	COMBUSTIBLE DUSTS
1-Propene, polymer with ethene	0 - 100	COMBUSTIBLE DUSTS
1-Butene, polymer with 1-propene	0 - 100	COMBUSTIBLE DUSTS
1-Butene, polymer with ethene and 1-propene	0 - 100	COMBUSTIBLE DUSTS

[SARA 313](#)

Not applicable.

Section 16. Other information

[Hazardous Material Information System \(U.S.A.\)](#)

Health		0
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

[National Fire Protection Association \(U.S.A.\)](#)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

[Procedure used to derive the classification](#)

Section 16. Other information

Classification	Justification
Comb. Dusts	On basis of test data

History

- Date of issue/Date of revision** : 09/10/2018
- Date of previous issue** : No previous version.
- Version** : 3
- Key to abbreviations** :
- ATE = Acute Toxicity Estimate
 - BCF = Bioconcentration Factor
 - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 - IATA = International Air Transport Association
 - IBC = Intermediate Bulk Container
 - IMDG = International Maritime Dangerous Goods
 - LogPow = logarithm of the octanol/water partition coefficient
 - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 - UN = United Nations
- References** :
- HCS (U.S.A.)- Hazard Communication Standard
 - International transport regulationsHazardous Substances Database (HSDB) : toxicology data file on the National Library of Medicine's (NLM) Toxicology Data Network (TOXNET).
 - Registry of Toxic Effects of Chemical Substances (RTECS)
 - Commission de la santé et de la sécurité du travail, Service du répertoire toxicologique (CSST) : information on chemical products used in the workplace including WHMIS classification.
 - National Toxicology Program (NTP), Department of Health and Human Services: Report on Carcinogens
 - International Agency for Research on Cancer (IARC), List of Carcinogens
 - Occupational Safety and Health Administration (OSHA) (29 CFR 1910.1001-1052) – Carcinogens
 - National Institute for Occupational Safety and Health; NIOSH Pocket Guide to Chemical Hazards.
 - Aquatic Toxicity Information Retrieval (AQUIRE)

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

ArborCarb 1000CT



IMERYS Marble, Inc., IMERYS Carbonates, LLC.,
ECCA Calcium Products, Inc.

100 Mansell Court East, Suite 300

Roswell, GA – 30076 - USA

Tel: +1 770 594-0660

Fax: +1 770 645-3384

IMERYS Carbonates is a trademark name of IMERYS Group

SAFETY DATA SHEET

Stearate Modified Ground Limestone Products

1. IDENTIFICATION

Product Names:

ArborCarb 1000CT, Fiberlink™ 101S, Fiberlink™ 201S, Filmlink™ 500, Imerseal™ 75, Infusion™, Infusion™ Plus, Kotamite™, Supercoat™

Identified uses: Ground Limestone (calcium carbonate) based additives

Manufacturer: IMERYS Carbonates
100 Mansell Court East, Suite 300, Roswell, GA 30076

Manufacturing Site: Sylacauga, Alabama, USA

Emergency Telephone: +1 (800) 424-9300 CHEMTREC

2. HAZARD(S) IDENTIFICATION

GHS Classification:	Physical and Chemical Hazards:	Not classified.
	Human Health:	Quartz: STOT RE 1 – H372.
	Environment:	Not classified.

GHS Pictogram:



Signal Word: Danger

Hazard Statement: H372 Causes damage to lungs through prolonged or repeated exposure via inhalation.

Precautionary Statements: P260 Do not breathe dust.

P285 In case of inadequate ventilation wear respiratory protection.

P501 Dispose of contents/containers in accordance with local regulations.

Long term exposure to crystalline silica can cause lung injury (silicosis). IARC and NTP have determined that crystalline silica inhaled from occupational sources can cause cancer in humans. Risk of injury is dependent on the duration and level of exposure.

3. COMPOSITION / INGREDIENTS

Ground Limestone (Calcium Carbonate)		>97.5%
CAS No.: 1317-65-3	EC No.:	
GHS Classification:	Not classified.	
Quartz		<1%
CAS No.: 14808-60-7	EC No.: 238-878-4	
GHS Classification:	STOT RE 1 – H372	
Stearate Modifier		~1%
CAS No.: 57-11-4	EC No.:	
GHS Classification:	Not classified.	
Water		<0.5%
CAS No.: 7732-18-5	EC No.:	
GHS Classification:	Not classified.	

4. FIRST-AID MEASURES

Description of first aid measures:

Inhalation:	Remove to fresh air.
Ingestion:	Drink plenty of water. Never give liquid to an unconscious person.
Skin Contact:	Wash skin thoroughly with soap and water.
Eye Contact:	Immediately rinse with water for several minutes.

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)	Not applicable.
Flammability Limit – Lower (%)	Not applicable.
Flammability Limit – Upper (%)	Not applicable.
Flash point (°C)	Not applicable.
Extinguishing Media	The product is non-combustible.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Use proper respiratory and personal protective equipment. MSHA / NIOSH or OSHA / NIOSH approved respirator recommended. Spilled materials may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads.

Spill Clean Up Methods:

Vacuum, pump or scoop spilled material into containers for reclaiming or disposal. Do not discharge into drains, watercourses or onto the ground.

7. HANDLING AND STORAGE

Handling:

Minimize dust generation and accumulation. If excessive dust is generated, provide adequate ventilation and use proper respiratory and personal protective equipment.

Storage:

Store in a cool and well-ventilated place. Store away from acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Standard	TWA (8-hrs)
Limestone	PEL	15 mg/m ³
	ACGIH	2 mg/m ³
Quartz	PEL	0.05 mg/m ³
	ACGIH	0.025 mg/m ³

Component	IDLH
Quartz	25 mg/m ³

ACGIH: American Conference of Governmental Industrial Hygienists.

Engineering Measures:

Use exhaust ventilation, if required, to maintain dust concentration below recommended exposure limits.

Respiratory Equipment:

If respirator is required, use of a MSHA / NIOSH or OSHA / NIOSH approved respirator is recommended.

Hand Protection:

Rubber gloves are recommended for prolonged exposure.

Eye Protection:

Wear side shield safety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder.
Color:	White.
Odor:	Odorless.
Solubility:	Slightly soluble in water.
Boiling point and boiling range:	Not applicable.
Melting point:	Decomposes at ~825°C.
Flash point:	Not applicable.
Auto Ignition Temperature (°C):	Not applicable.
Flammability Limit – Lower (%):	Not applicable.
Flammability Limit – Upper (%):	Not applicable.

10. STABILITY AND REACTIVITY

Reaction with:	Acids.
Stability:	No particular stability concerns. Not applicable.
Conditions to Avoid:	Avoid contact with acids.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Acute Toxicity (Oral LD50)	6450 mg/kg Rat
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12. ECOLOGICAL INFORMATION

Ecotoxicity:	The product is not expected to be hazardous to the environment.
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13. DISPOSAL CONSIDERATIONS

Disposal Methods:	Under RCRA (40 CFR 261) ground limestone is a non-hazardous waste. Dispose of waste material in accordance with all local, state and federal requirements.
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14. TRANSPORT INFORMATION

Environmentally Hazardous Substance / Marine Pollutant
No

15. REGULATORY INFORMATION

OSHA Hazard Communications Standard, 29 CFR 1910.1200: Material is considered hazardous. See Section 2.

RCRA: Material is not defined as a hazardous waste per 40 CFR 261.

CERCLA: Material is not reportable under CERCLA; local requirements may vary.

SARA: 311/312 Hazard Categories – Immediate and Delayed Health; 313 Reportable Ingredients – none.

California Proposition 65: This product contains chemicals known to the State of California to cause cancer.

EU REACH Regulations: Exempted in accordance with Annex V.7

WHMIS: Imerys' ground limestone products do meet the criteria for WHMIS classification and are thus not included on the disclosure list

Additional regulatory information available on request

16. OTHER INFORMATION

HEALTH	1
FLAMMABILITY	0
PHYSICAL	0
PERSONAL PROTECTION	E

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Revision Date 04/18/2016
SDS No: V2-6

Irgafos® 168 FF

Safety data sheet

Page: 1/11

BASF Safety data sheet
Date / Revised: 24.07.2024
Product: **Irgafos® 168 FF**

Version: 4.2

(30484363/SDS_GEN_AU/EN)

Date of print: 05.02.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:
Irgafos® 168 FF

Use: stabilizer

Not recommended use: The product is not recommended to be used in contact with mucous membranes, abraded skin, or blood; or for the manufacture of implants for the human body as it has not been tested for these applications.

For detailed regulatory information please request a Food Contact Certificate (FCC).

Manufacturer/supplier:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Contact address:

BASF Australia Limited (ABN 62 008 437 867)
Level 12, 28 Freshwater Place Southbank
Victoria 3006
AUSTRALIA
Telephone: +61 3 8855-6600
Telefax number: +61 3 8855-6511

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:

No need for classification according to GHS criteria for this product.

Label elements and precautionary statement:

BASF Safety data sheet
Date / Revised: 24.07.2024
Product: **Irgafos® 168 FF**

Version: 4.2

(30484363/SDS_GEN_AU/EN)

Date of print: 05.02.2025

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards which do not result in classification:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

The product is under certain conditions capable of dust explosion.

The product does not contain a substance above legal limits fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

Phenol, 2,4-bis(1,1-dimethylethyl)-, phosphite (3:1)
CAS Number: 31570-04-4

4. First-Aid Measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, foam

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Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:
Avoid whirling up the material/product because of the danger of dust explosion.

Specific hazards:
harmful vapours
Generation of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:
Avoid dust formation. Use personal protective clothing.

Environmental precautions:
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of.
Avoid raising dust.

7. Handling and Storage

Handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:
Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: Dust explosion class 2 (Kst-value 200 up to 300 bar m s⁻¹).

Storage

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

The packed product is not damaged by low temperatures or by frost.
The packed product will not be damaged by high temperatures.

8. Exposure controls and personal protection

Components with occupational exposure limits

No substance specific occupational exposure limits known.

The nuisance dust limit value is to be kept.

Particles, not otherwise specified, respirable

TWA value 3 mg/m³ (ACGIHTLV), Respirable particles

Particles, not otherwise specified, inhalable

TWA value 10 mg/m³ (ACGIHTLV), Inhalable particles

TWA value 10 mg/m³ (AU NOEL), Inhalable dust

Where no specific exposure standard has been assigned and the substance is both of inherently low toxicity and free from toxic impurities, exposure to dusts should be maintained below 10 mg/m³, measured as inhalable dust (8-hour TWA).

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wearing of closed work clothing is required additionally to the stated personal protection equipment.

Handle in accordance with good industrial hygiene and safety practice.

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9. Physical and Chemical Properties

Form:	granules, crystalline	
Colour:	white	
Odour:	odourless	
Odour threshold:	not determined	
pH value:	6 (1 %(m), 20 - 25 °C) (as suspension)	
Melting point:	185.2 °C	(Directive 92/69/EEC, A.1)
boiling temperature:	> 400 °C (1,013 hPa)	(OECD Guideline 103)
Flash point:	> 150 °C	(DIN 51584)
Evaporation rate:	The product is a non-volatile solid.	
Flammability (solid/gas):	not highly flammable	(Directive 84/449/EEC, A.10)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Ignition temperature:	400 °C	
Thermal decomposition:	> 350 °C	(Isoperibolic (Lütolf oven))
Self ignition:	not self-igniting	Test type: Self-ignition at high temperatures. (Method: Directive 84/449/EEC, A.16)
	not self-igniting	Test type: Spontaneous self-ignition at room-temperature.
Self heating ability:	It is not a substance capable of spontaneous heating.	
Minimum ignition energy:	No data available.	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	
Vapour pressure:	< 0.0000085 hPa (20 °C)	(measured)
Density:	1.021 g/cm ³ (20 °C)	(OECD Guideline 109)

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Bulk density:	approx. 320 kg/m ³	
Solubility in water:	< 0.005 mg/l (20 °C)	
Hygroscopy:	not applicable	
Partitioning coefficient n-octanol/water (log Pow):	> 6 (20 - 25 °C)	(calculated)
Adsorption/water - soil:	log KOC: 11.33 Adsorption to solid soil phase is expected.	(calculated)
Viscosity, dynamic:	not determined	
Molar mass:	646.93 g/mol	

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:

Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Thermal decomposition: > 350 °C (Isoperibolic (Lütolf oven))

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

Dust explosion hazard.

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

Reactivity:

No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological Information

Routes of exposure**Acute oral toxicity**

Experimental/calculated data:

LD50rat (oral): > 6,000 mg/kg (similar to OECD guideline 401)

Acute oral toxicity

LD50mouse (oral): > 6,000 mg/kg (OECD Guideline 401)

Acute inhalation toxicity

(by inhalation): No data available.

Acute dermal toxicity

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

No mortality was observed.

Assessment of acute toxicity

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
(Further) symptoms and / or effects are not known so far

Irritation

Assessment of irritating effects:

Not irritating to eyes and skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Maurer optimisation test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with microorganisms and mammals.

Carcinogenicity

Assessment of carcinogenicity:

In long-term studies in rats in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

No adverse effects were observed after repeated exposure in animal studies.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

No neurotoxic effects in a specific test carried out on chicken.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. No toxic effects have been observed in studies with sediment dwelling organisms.

Toxicity to fish:

LC50 (96 h) > 100 mg/l, *Brachydanio rerio* (OECD 203; ISO 7346; 84/449/EWG, C.1, static)

The LC50 is higher than the solubility limit. The product has low solubility in the test medium. An aqueous dispersion has been tested. The details of the toxic effect relate to the nominal concentration. Limit concentration test only (LIMIT test).

Aquatic invertebrates:

EC0 (24 h) > 180 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility. No toxic effects occur within the range of solubility. Nominal concentration.

Aquatic plants:

EC50 (72 h) > 75.2 mg/l (biomass), *Scenedesmus subspicatus* (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration. The value meets the highest applied test concentration. The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility.

No observed effect concentration (72 h) 75.2 mg/l (biomass), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration. The value meets the highest applied test concentration. The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility.

Microorganisms/Effect on activated sludge:

EC50 (3 h) > 100 mg/l, activated sludge (OECD Guideline 209, aquatic)

Nominal concentration.

Chronic toxicity to fish:

No data available.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), ≥ 2 mg/l, *Daphnia magna* (OECD Guideline 211, semistatic)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

No observed effect concentration (28 d), 1000 mg/kg, *Lumbriculus variegatus* (OECD Guideline 225, static)

No effects at the highest test concentration. Nominal concentration. Limit concentration test only (LIMIT test).

Assessment of terrestrial toxicity:

No effects at the highest test concentration.

Other terrestrial non-mammals:

No data available.

Mobility

Assessment transport between environmental compartments:

The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is expected.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Poorly biodegradable. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Elimination information:

< 10 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic, activated sludge) Poorly biodegradable.

Assessment of stability in water:

In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis):

In contact with water the substance will hydrolyse slowly.

Bioaccumulation potential

Assessment bioaccumulation potential:
Does not significantly accumulate in organisms.

Bioaccumulation potential:
Bioconcentration factor: (15 d), Brachydanio rerio (other)
Accumulation in organisms is not to be expected.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Uncontaminated packaging can be re-used.
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Domestic transport:

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
	Marine pollutant: no
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
Proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable

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Special precautions for user None known

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Not Scheduled

Registration status:

AICIS, AU

Listed in AIC.

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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1. Identification

Product identifier used on the label

Irganox® 1076

Recommended use of the chemical and restriction on use

Recommended use*: Antioxidant / Stabilizer

Unsuitable for use: The product has not been tested and is therefore not recommended to be used in contact with mucous membranes, abraded skin, or blood; or for the manufacture of implants for the human body. For detailed regulatory information please request a Food Contact Certificate (FCC).

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Synonyms: Sterically hindered phenol

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Signal Word:

Warning

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Hazard Statement:

May form combustible dust concentration in air.

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam

Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Closed containers should only be opened in well-ventilated areas. Avoid dust formation. Do not use any sparking tools.

Protection against fire and explosion:

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Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Dust explosion class: Dust explosion class 2 (Kst-value 200 up to 300 bar m s-1).

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Storage temperature: < 40 °C

The packed product is not damaged by low temperatures or by frost.

Protect from temperatures above: 40 °C

The packed product must be protected against exceeding the indicated temperature.

8. Exposure Controls/Personal Protection

Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Wear chemical resistant protective gloves.

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: granules, fine

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Odour:	odourless	
Odour threshold:	No data available.	
Colour:	white	
pH value:	5.7 (1 %(m), 20 - 25 °C) (as suspension)	
Melting point:	50 - 55 °C	
Boiling point:	not applicable	
Sublimation point:	No data available.	
Flash point:	273 °C	(DIN 51584)
Flammability:	not highly flammable	
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Autoignition:	> 250 °C The product has not been tested. The statement has been derived from the properties of the individual components.	
Vapour pressure:	26.6 Pa (250 °C)	
Density:	1.02 g/cm ³ (25 °C)	
Relative density:	1.012	(OECD Guideline 109)
Bulk density:	260 - 320 g/l	
Partitioning coefficient n- octanol/water (log Pow):	> 6 (20 - 25 °C)	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	> 350 °C	
Viscosity, dynamic:	not relevant	
Viscosity, kinematic:	not relevant	
Particle size:	D50 40.2 µm	(measured)
% volatiles:	0.5 %	
Solubility in water:	practically insoluble	
Molar mass:	530.87 g/mol	
Evaporation rate:	The product is a non-volatile solid.	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
not fire-propagating

Dust explosivity characteristics:
Kst: 242 m.bar/s
Revaluation 2015

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Dust explosion class:

Dust explosion class 2 (Kst-value 200 up to 300 bar m s⁻¹) (St 2)

Formation of Remarks:

flammable gases:

Forms no flammable gases in the presence of water.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Dust explosion hazard.

Conditions to avoid

Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 350 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Inhalation

Type of value: LC50

Species: rat

Value: > 1,800 mg/m³ (OECD Guideline 403)

Exposure time: 4 h

Dermal

Type of value: LD50

Species: rabbit

Value: > 2,000 mg/kg

Assessment other acute effects

Assessment of STOT single:

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Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit

Result: non-irritant

Eye

Species: rabbit

Result: non-irritant

Sensitization

Assessment of sensitization: Human data do not fully exclude a skin sensitizing potential. Skin sensitizing effects were not observed in animal studies.

other

Species: guinea pig

Result: Non-sensitizing.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: May affect the liver as indicated in animal studies.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in a test with mammals.

Based on the ingredients, there is no suspicion of a mutagenic effect.

Genetic toxicity in vitro: Ames-test negative

Genetic toxicity in vivo: Cytogenetic assay hamster negative

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Reproduction

Experimental/calculated data: rat

NOAEL Mat.: > 5,000 ppm

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Development

rat

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NOAEL Mat.: > 1,000 mg/kg

Other Information

Contact allergenic properties have not been observed in test animals (guinea pigs). In humans workroom temperatures of about 40°C and profuse sweating might exacerbate potential irritancy and rashes may develop.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) > 100 mg/l, Fish

Aquatic invertebrates

EC50 > 100 mg/l, Daphnia magna

Aquatic plants

EC50 (72 h) > 30 mg/l, Scenedesmus sp.

Tested above maximum solubility. No toxic effects occur within the range of solubility. No effects at the highest test concentration.

Chronic toxicity to fish

No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) $\geq$ 2 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

activated sludge/EC50 (3 h): > 100 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants. Well eliminable from water by adsorption on activated sludge.

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Elimination information

Not readily biodegradable (by OECD criteria).

Primary degradation.

Information on Stability in Water (Hydrolysis)

$t_{1/2}$ 7.2 a (25 °C), (calculated, pH 7)

In contact with water the substance will hydrolyse slowly.

Bioaccumulative potential

Assessment bioaccumulation potential

Accumulation in organisms is not to be expected.

Bioaccumulation potential

Bioconcentration factor: < 100, Cyprinus carpio (OPPTS 850.1730 (EPA Guideline))

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is expected.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

Safety Data Sheet

Irganox® 1076

Revision date : 2018/08/15
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15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

Cosmetic TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including METHANOL, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

BASF Risk Assessment, CA Prop. 65:

A risk assessment indicates CA Proposition 65 Safe Harbor criteria are not exceeded when the product is used for Plastic Additives.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2018/08/15

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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Safety Data Sheet

Irganox® 1076

Revision date : 2018/08/15

Page: 11/11

Version: 7.0

(30119547/SDS_GEN_US/EN)

TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET

Black Color Concentrate

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier/Material's Name: Black Color Concentrate
Product Code: **Tech Master 630024**
Product Use/Description: Pigment concentrates for polymer.
Supplier/Manufacturer: Tech Blend S.E.C.
707 Pierre-Tremblay Blvd.
Saint-Jean-sur-Richelieu, Québec
Canada, J2X 5G5
Emergency Telephone Number: 1-800-931-1757
Revision date: 06 April, 2016

SECTION 2 - HAZARD IDENTIFICATION

Hazard classification of the substance or mixture: This product is not classified as hazardous.
Hazard pictograms: No pictogram is used
Signal word: No signal word is used
Hazard statements: No hazard statement.
Precautionary statements: No precautionary statement.

Other hazards:

Eye contact: Mechanical irritation is possible

Skin contact: Molten polymer may cause thermal burns

Ingestion: Ingestion is not a likely route of exposure

Inhalation: Inhalation of process fumes and vapors may cause irritation in the respiratory system

Note: The Carbon Black it is fully encapsulated in a matrix of High Molecular Weight Polymer so little dust exposure may occur during the handling and processing.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	% (w/w)	Hazard Identification
Carbon Black	1333-86-4	28-32	Not classified as hazardous
Polypropylene	9003-07-0	72-68	Not classified as hazardous

Note: The others components don't contribute to the hazard classification for the product.

SECTION 4 - FIRST AID MEASURES

Eye contact: Immediately flush eyes with plenty of water for two to three minutes keeping eyelid open. Remove any contact lenses and continue flushing for 15 minutes.

Skin contact: If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin.

Ingestion: Ingestion is not a likely route of exposure.

Inhalation: Inhalation of process fumes and vapours may cause irritation in the respiratory system. If symptoms are experienced, move victims to fresh air.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Do not use a heavy water stream. A heavy water stream may spread burning dust.

Special hazards arising from the substance or mixture: Accumulation of dust may represent an explosion or a fire hazard. Eliminate all sources of ignition. Product may burn slowly releasing Carbon Dioxide, Carbon Monoxide, and other toxic fumes.

Advice for Firefighters: A self-contained-breathing-apparatus is required for fire fighting personnel to protect against the toxic fumes released during the combustion. Closed containers may rupture with pressure build up caused by heat. Use water spray to cool fire exposed surfaces and avoid this situation.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Contain spill, preventing it from entering sewer lines or waterways. Pick up product and place it into a secure container. Use appropriate safety equipment.

Personal Protective Equipment: Refer to section 8.

Environmental precautions: Keep out of waterways.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Use a mechanical ventilation to avoid accumulating dust. Eliminate all sources of ignition. Keep container closed, when not in use. Dust may cause a fire and even explode. It is important that protective equipment requirements are being followed.

Conditions for safe storage, including any incompatibilities: Store in a well-ventilated area away from Strong oxidizing agents and sources of ignition.

SECTION 8 - EXPOSURE CONTROLS / PERSONNAL PROTECTION

Control parameters:

Exposure Limits: No data available for the product. PEL-TWA (OSHA) is 3.5 mg/m³ for Carbon black.

Exposure controls:

Appropriate engineering controls: If process generates dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Respiratory protection: If dust, smoke or fumes are generated in processing or handling, wear appropriate approved respiratory protection to keep concentration below the permissible exposure limit

Skin and body protection: To prevent any contact, wear impervious protective clothing such as neoprene or butyl rubber gloves, apron, boots or whole bodysuit as appropriate, when handling dry material. Use thermal resistant gloves when handling molten material.

Eye and face protection: Safety glasses or goggles are recommended.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color and Odor: Black / Slight odour

Odor Threshold: Not available.

Melting/Freezing Point: 90-140°C

Flash Point: Not available

Vapor Pressure: Not available

Evaporation Rate: Not available

Solubility in Water: Insoluble

Auto-ignition Temperature: Not available

Appearance: Black pellet at 20°C and 101.3kPa

pH: Not available

Density (water = 1): 1.25

Boiling Point: Not available.

Flammability (solid, gas): Not available

Vapor Density (air = 1): Not available

Coef. Oil/Water Distribution: Not available

% Volatile by Volume: Not available

Decomposition Temperature: Not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage and handling conditions (see section 7).

Chemical stability: Stable under normal ambient conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Open flames, sparks and avoid generating dust.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: During a fire, Carbon Monoxide, Carbon Dioxide, and other toxic fumes.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: No data available for the product. Oral LD₅₀ is > 8000 mg/kg for Carbon black

Acute Inhalation Toxicity: No data available for the product. Inhalation LC₅₀ not available for Carbon black.

Carcinogenicity: No data for the product. Carbon black is listed by IARC (group 2B) as possible carcinogenic to human, but when encapsulated in a plastic matrix, risk of exposure is reduced.

Effects of single exposure to Product: No data for the product. For Carbon Black, organ-specific toxicity is not to be expected after single exposure.

Effects of repeated exposure to Product: No data for the product. For Carbon Black, organ-specific toxicity is not to be expected after repeated exposure.

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: No data available for the product. For Carbon Black LC₅₀ (96h) > 1000 mg/l (zebrafish)

Persistence & Degradability: No data available for the product. Carbon Black is neither photodegradable nor biodegradable

Bio-accumulative Potential: No data available for the product. Bioaccumulation of carbon black is not expected based on its insolubility in organic solvents and in water.

Mobility in Soil: No data available for the product. Bioaccumulation of carbon black is not expected based on its insolubility in organic solvents and in water.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Use approved disposal methods in accordance with all federal, provincial, state and local waste disposal regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT: Not regulated for transport

TDG (Canada): Not regulated for transport

SECTION 15 - REGULATORY INFORMATION

TSCA: All components in this product appear on the TSCA inventory

Canada DSL: All components in this product appear on DSL.

SECTION 16 - OTHER INFORMATION

Prepared by: Tech Blend
Telephone number: 1-800-931-1757
Preparation date: 30 June, 2014
Revision date: 06 April, 2016

While the information contained is believed to be reliable as of the date of issue, such information is nonetheless of a general nature. The material described can be hazardous if not handled, stored and processed properly. Tech Blend must reply upon the user to use the information supplied herein, together with all other appropriate information from other sources, to develop appropriate work and practices. All statements and suggestions are made without warranty, express or implied, regarding the completeness or accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use of the material. In addition, Tech Blend must rely upon the user to exercise standard precautions integral to fabricating operations, for example, without limiting the generality of the foregoing, avoiding cross-contamination of different resins and exercising care in the selection and use of additives, materials and products not supplied by Tech Blend.

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007AI**Administrative Information**

- ☐ Section AI.1: Source Information
☐ Section AI.2: Applicant Information
☐ Section AI.3: Owner Information
☐ Section AI.4: Type of Application
☐ Section AI.5: Other Required Information
☐ Section AI.6: Signature Block
☐ Section AI.7: Notes, Comments, and Explanations

Additional Documentation

☐ Additional Documentation attached

Source Name: Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #: 21- 073-00026

Permit #: F-21-007

Agency Interest (AI) ID: 1392

Date: Feb-26

Section AI.1: Source Information

Physical Location	Street:	<u>290 Chenault Road</u>		
Address:	City:	<u>Frankfort</u>	County:	<u>Franklin</u>
			Zip Code:	<u>40601</u>
Mailing Address:	Street or P.O. Box:	<u>290 Chenault Road</u>		
	City:	<u>Frankfort</u>	State:	<u>Kentucky</u>
			Zip Code:	<u>40601</u>

Standard Coordinates for Source Physical Location

Longitude: 38.174996 (decimal degrees) **Latitude:** -84.808341 (decimal degrees)

Primary (NAICS) Category: Polypropylene resins manufacturing **Primary NAICS #:** 325211

Classification (SIC) Category:		<u>Plastics Products, Not Elsewhere Classified</u>		Primary SIC #:	<u>3089</u>
Briefly discuss the type of business conducted at this site:		Polypropylene and/or polyethylene pellets are processed through extruders, where fillers and additives in powder or pellet form are added and mixed to develop finished products with customer-specified properties/specifications.			
Description of Area Surrounding Source:	☐ Rural Area ☐ Industrial Park ☐ Residential Area ☐ Urban Area ☐ Industrial Area ☒ Commercial Area	Is any part of the source located on federal land?	☐ Yes ☒ No	Number of Employees:	110
Approximate distance to nearest residence or commercial property:	<u>515 ft</u>	Property Area:	<u>18.1 acres</u>	Is this source portable?	☐ Yes ☒ No
What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?					
NPDES/KPDES:	☒ Currently Hold	☐ Need	☐ N/A		
Solid Waste:	☒ Currently Hold	☐ Need	☐ N/A		
RCRA:	☒ Currently Hold	☐ Need	☐ N/A		
UST:	☐ Currently Hold	☐ Need	☒ N/A		
Type of Regulated Waste Activity:	☒ Mixed Waste Generator ☒ Generator ☐ Recycler ☐ Other: _____ ☐ U.S. Importer of Hazardous Waste ☐ Transporter ☐ Treatment/Storage/Disposal Facility ☐ N/A				

Section AI.2: Applicant Information

Applicant Name:	<u>Michael Long</u>		
Title: (if individual)			
Mailing Address:	Street or P.O. Box:	<u>480 Johnson Road</u>	
	City:	State:	Zip Code:
	<u></u>	<u>Pennsylvania</u>	<u>15301</u>
Email: (if individual)	<u>michael.long@audia.com</u>		
Phone:	<u>724-206-4966</u>		

Technical Contact

Name:	<u>Michael Long</u>		
Title:	<u>Regional HSE Manager</u>		
Mailing Address:	Street or P.O. Box:	<u>480 Johnson Road</u>	
	City:	State:	Zip Code:
	<u>Washington</u>	<u>Pennsylvania</u>	<u>15301</u>
Email:	<u>michael.long@audia.com</u>		
Phone:	<u>724-206-4966</u>		

Air Permit Contact for Source

Name:	<u>Michael Long</u>		
Title:	<u>Regional HSE Manager</u>		
Mailing Address:	Street or P.O. Box:	<u>480 Johnson Road</u>	
	City:	State:	Zip Code:
	<u>Washington</u>	<u>Pennsylvania</u>	<u>15301</u>
Email:	<u>michael.long@audia.com</u>		
Phone:	<u>724-206-4966</u>		

Section AI.3: Owner Information☐ **Owner same as applicant****Name:** Washington Penn Plastics Co., Inc. - Frankfort Plastics**Title:** _____**Mailing Address:** **Street or P.O. Box:** 290 Chenault Road
City: Frankfort **State:** Kentucky **Zip Code:** 40601**Email:** _____**Phone:** 724-228-1260**List names of owners and officers of the company who have an interest in the company of 5% or more.****Name****Position**Johnny NetzloffPresident

Section AI.4: Type of Application

Current Status:	☐ Title V	☒ Conditional Major	☐ State-Origin	☐ General Permit	☐ Registration	☐ None
Requested Action: (check all that apply)	☐ Name Change	☐ Initial Registration	☐ Significant Revision	☐ Administrative Permit Amendment		
	☒ Renewal Permit	☐ Revised Registration	☐ Minor Revision	☐ Initial Source-wide Operating Permit		
	☐ 502(b)(10) Change	☐ Extension Request	☐ Addition of New Facility	☐ Portable Plant Relocation Notice		
	☐ Revision	☐ Off Permit Change	☐ Landfill Alternate Compliance Submittal	☐ Modification of Existing Facilities		
	☐ Ownership Change	☐ Closure				
Requested Status:	☐ Title V	☒ Conditional Major	☐ State-Origin	☐ PSD	☐ NSR	☐ Other: _____

Is the source requesting a limitation of potential emissions?☒ Yes ☐ No

Pollutant:	Requested Limit:	Pollutant:	Requested Limit:
☒ Particulate Matter	90 tpy	☐ Single HAP	_____
☐ Volatile Organic Compounds (VOC)	_____	☐ Combined HAPs	_____
☐ Carbon Monoxide	_____	☐ Air Toxics (40 CFR 68, Subpart F)	_____
☐ Nitrogen Oxides	_____	☐ Carbon Dioxide	_____
☐ Sulfur Dioxide	_____	☐ Greenhouse Gases (GHG)	_____
☐ Lead	_____	☐ Other	_____

For New Construction:**Proposed Start Date of Construction:**
(MM/YYYY)**Proposed Operation Start-Up Date:** (MM/YYYY)**For Modifications:****Proposed Start Date of Modification:**
(MM/YYYY)**Proposed Operation Start-Up Date:** (MM/YYYY)Applicant is seeking coverage under a permit shield. ☒ Yes ☐ No

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.

Section AI.5 Other Required Information

Indicate the documents attached as part of this application:

- | | |
|--|--|
| ☐ DEP7007A Indirect Heat Exchangers and Turbines | ☐ DEP7007CC Compliance Certification |
| ☒ DEP7007B Manufacturing or Processing Operations | ☒ DEP7007DD Insignificant Activities |
| ☐ DEP7007C Incinerators and Waste Burners | ☐ DEP7007EE Internal Combustion Engines |
| ☐ DEP7007F Episode Standby Plan | ☐ DEP7007FF Secondary Aluminum Processing |
| ☐ DEP7007J Volatile Liquid Storage | ☒ DEP7007GG Control Equipment |
| ☐ DEP7007K Surface Coating or Printing Operations | ☐ DEP7007HH Haul Roads |
| ☐ DEP7007L Mineral Processes | ☐ Confidentiality Claim |
| ☐ DEP7007M Metal Cleaning Degreasers | ☐ Ownership Change Form |
| ☒ DEP7007N Source Emissions Profile | ☒ Secretary of State Certificate |
| ☐ DEP7007P Perchloroethylene Dry Cleaning Systems | ☒ Flowcharts or diagrams depicting process |
| ☐ DEP7007R Emission Offset Credit | ☐ Digital Line Graphs (DLG) files of buildings, roads, etc. |
| ☐ DEP7007S Service Stations | ☒ Site Map |
| ☐ DEP7007T Metal Plating and Surface Treatment Operations | ☒ Map or drawing depicting location of facility |
| ☒ DEP7007V Applicable Requirements and Compliance Activities | ☒ Safety Data Sheet (SDS) |
| ☐ DEP7007Y Good Engineering Practice and Stack Height Determination | ☐ Emergency Response Plan |
| ☐ DEP7007AA Compliance Schedule for Non-complying Emission Units | ☐ Other: _____ |
| ☐ DEP7007BB Certified Progress Report | |

Section AI.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

Authorized Signature

Date

Type or Printed Name of Signatory

Title of Signatory

*Responsible official as defined by 401 KAR 52:001.

Section AI.7: Notes, Comments, and Explanations

Section A1.5 Other Required Information

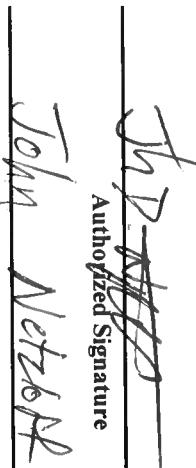
Indicate the documents attached as part of this application:

- | | |
|--|--|
| ☐ DEP7007A Indirect Heat Exchangers and Turbines | ☐ DEP7007CC Compliance Certification |
| ☒ DEP7007B Manufacturing or Processing Operations | ☒ DEP7007DD Insignificant Activities |
| ☐ DEP7007C Incinerators and Waste Burners | ☐ DEP7007EE Internal Combustion Engines |
| ☐ DEP7007F Episode Standby Plan | ☐ DEP7007FF Secondary Aluminum Processing |
| ☐ DEP7007J Volatile Liquid Storage | ☒ DEP7007GG Control Equipment |
| ☐ DEP7007K Surface Coating or Printing Operations | ☐ DEP7007HH Haul Roads |
| ☐ DEP7007L Mineral Processes | ☐ Confidentiality Claim |
| ☐ DEP7007M Metal Cleaning Degreasers | ☐ Ownership Change Form |
| ☒ DEP7007N Source Emissions Profile | ☒ Secretary of State Certificate |
| ☐ DEP7007P Perchloroethylene Dry Cleaning Systems | ☒ Flowcharts or diagrams depicting process |
| ☐ DEP7007R Emission Offset Credit | ☐ Digital Line Graphs (DLG) files of buildings, roads, etc. |
| ☐ DEP7007S Service Stations | ☒ Site Map |
| ☐ DEP7007T Metal Plating and Surface Treatment Operations | ☒ Map or drawing depicting location of facility |
| ☒ DEP7007V Applicable Requirements and Compliance Activities | ☒ Safety Data Sheet (SDS) |
| ☐ DEP7007Y Good Engineering Practice and Stack Height Determination | ☐ Emergency Response Plan |
| ☐ DEP7007AA Compliance Schedule for Non-complying Emission Units | ☐ Other: _____ |
| ☐ DEP7007BB Certified Progress Report | |

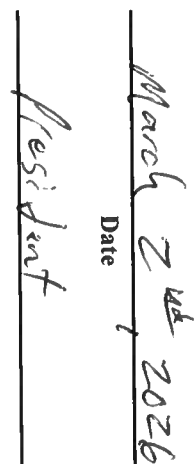
Section A1.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

Authorized Signature



Date



Type or Printed Name of Signatory



Title of Signatory



*Responsible official as defined by 401 KAR 52:001.

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
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DEP7007B

Manufacturing or Processing Operations

- ☐ Section B.1: Process Information
☐ Section B.2: Materials and Fuel Information
☐ Section B.3: Notes, Comments, and Explanations

Additional Documentation

☐ Complete DEP7007AI, DEP7007V, and DEP7007GG.

☐ Attach a flow diagram

☐ Attach SDS

Source Name:

Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #:

21- 073-00026

Permit #:

F-21-007

Agency Interest (AI) ID:

1392

Date:

Feb-26

Section B.1: Process Information

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)
F3	Emission Unit 02	Co-Rotating Twin Screw Extruder with pelletizer	F3	Emission Unit 02	Toshiba	N/A	2000	Batch	0.5 (or lower) to 3
F5	Emission Unit 03	Continuous Mixer, extruder with pelletizer	F5	Emission Unit 03	Farrel	N/A	2002	Batch	0.5 (or lower) to 3
F7	Emission Unit 04	Continuous Mixer, extruder with pelletizer	F7	Emission Unit 04	Farrel	N/A	2005	Batch	0.5 (or lower) to 3
S1	Emission Unit 06	Twin Screw Extruder with Pelletizer	S1	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3
S2	Emission Unit 06	Twin Screw Extruder with Pelletizer	S2	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3
F9	Emission Unit 07	Fluidized Bed and Co-rotating Extruder	F9	Emission Unit 07	NFM	N/A	6/1/2011	Batch	0.5 (or lower) to 3

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)
Conical Blender	Emission Unit 10	Conical Blender	Conical Blender	Emission Unit 10	No change from previous application	N/A	2012	Batch	0.5 (or lower) to 3
F0	Emission Unit 11	Continuous Mixer	F0	Emission Unit 11	Farrel	CP550	2019	Batch	0.5 (or lower) to 3

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007B**Manufacturing or Processing Operations**

- ☐ Section B.1: Process Information
☐ Section B.2: Materials and Fuel Information
☐ Section B.3: Notes, Comments, and Explanations

Additional Documentation

☐ Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG.

☐ Attach a flow diagram

☐ Attach SDS

Source Name:

Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #:

21- 073-00026

Permit #:

F-21-007

Agency Interest (AI) ID:

1392

Date:

Feb-26

Section B.1: Process Information

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
F3	Emission Unit 02	Co-Rotating Twin Screw Extruder with pelletizer	F3	Emission Unit 02	Toshiba	N/A	2000	Batch	0.5 (or lower) to 3	8 to 48+
F5	Emission Unit 03	Continuous Mixer, extruder with pelletizer	F5	Emission Unit 03	Farrel	N/A	2002	Batch	0.5 (or lower) to 3	8 to 48+
F7	Emission Unit 04	Continuous Mixer, extruder with pelletizer	F7	Emission Unit 04	Farrel	N/A	2005	Batch	0.5 (or lower) to 3	8 to 48+
S1	Emission Unit 06	Twin Screw Extruder with Pelltizer	S1	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3	8 to 48+
S2	Emission Unit 06	Twin Screw Extruder with Pelltizer	S2	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3	8 to 48+
F9	Emission Unit 07	Fluidized Bed and Co-rotating Extruder	F9	Emission Unit 07	NFM	N/A	6/1/2011	Batch	0.5 (or lower) to 3	8 to 48+

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
Conical Blender	Emission Unit 10	Conical Blender	Conical Blender	Emission Unit 10	No change from previous application	N/A	2012	Batch	0.5 (or lower) to 3	8 to 48+
F0	Emission Unit 11	Continuous Mixer	F0	Emission Unit 11	Farrel	CP550	2019	Batch	0.5 (or lower) to 3	8 to 48+

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007B**Manufacturing or Processing Operations**

- ☐ Section B.1: Process Information
☐ Section B.2: Materials and Fuel Information
☐ Section B.3: Notes, Comments, and Explanations

Additional Documentation

☐ Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG.

☐ Attach a flow diagram

☐ Attach SDS

Source Name:

Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #:

21- 073-00026

Permit #:

F-21-007

Agency Interest (AI) ID:

1392

Date:

Feb-26

Section B.1: Process Information

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
F3	Emission Unit 02	Co-Rotating Twin Screw Extruder with pelletizer	F3	Emission Unit 02	Toshiba	N/A	2000	Batch	0.5 (or lower) to 3	8 to 48+
F5	Emission Unit 03	Continuous Mixer, extruder with pelletizer	F5	Emission Unit 03	Farrel	N/A	2002	Batch	0.5 (or lower) to 3	8 to 48+
F7	Emission Unit 04	Continuous Mixer, extruder with pelletizer	F7	Emission Unit 04	Farrel	N/A	2005	Batch	0.5 (or lower) to 3	8 to 48+
S1	Emission Unit 06	Twin Screw Extruder with Pelletizer	S1	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3	8 to 48+
S2	Emission Unit 06	Twin Screw Extruder with Pelletizer	S2	Emission Unit 06	Berstoff/Krauss Maffaei	N/A	9/20/2011	Batch	0.5 (or lower) to 3	8 to 48+
F9	Emission Unit 07	Fluidized Bed and Co-rotating Extruder	F9	Emission Unit 07	NFM	N/A	6/1/2011	Batch	0.5 (or lower) to 3	8 to 48+

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
Conical Blender	Emission Unit 10	Conical Blender	Conical Blender	Emission Unit 10	No change from previous application	N/A	2012	Batch	0.5 (or lower) to 3	8 to 48+
F0	Emission Unit 11	Continuous Mixer	F0	Emission Unit 11	Farrel	CP550	2019	Batch	0.5 (or lower) to 3	8 to 48+

Section B.2: Materials and Fuel Information

**Maximum yearly fuel usage rate only applies if applicant request operating restrictions through federally enforceable limitations.*

Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Maximum Quantity of Each Raw Material Input		Total Process Weight Rate for Emission Unit (tons/hr)	Name of Finished Materials	Maximum Quantity of Each Finished Material Output		Fuel Type	Maximum Hourly Fuel Usage Rate		Maximum Yearly Fuel Usage Rate		Sulfur Content (%)
				(Specify Units/hr)				(Specify Units/hr)			(Specify Units)		(Specify Units)	
F3	Emission Unit 02	Additives, filler, resins, pigments	Additives: 0.28 Filler: 3.2 Resin: 3.2 Pigments: 0.4	tons/hr	4	Polypropylene/polyethylene pellets	4	tons/hr	N/A					
F5	Emission Unit 03	Additives, filler, resins, pigments	Additives: 0.28 Filler: 3.2 Resin: 3.2 Pigments: 0.4	tons/hr	4	Polypropylene/polyethylene pellets	4	tons/hr	N/A					
F7	Emission Unit 04	Additives, filler, resins, pigments	Additives: 0.28 Filler: 3.2 Resin: 3.2 Pigments: 0.4	tons/hr	4	Polypropylene/polyethylene pellets	4	tons/hr	N/A					
S1	Emission Unit 06	Additives, filler, resins, pigments	Additives: 0.021 Filler: 0.24 Resin: 0.24 Pigments: 0.03	tons/hr	0.3	Polypropylene/polyethylene pellets	0.3	tons/hr	N/A					
S2	Emission Unit 06	Additives, filler, resins, pigments	Additives: 0.021 Filler: 0.24 Resin: 0.24 Pigments: 0.03	tons/hr	0.3	Polypropylene/polyethylene pellets	0.3	tons/hr	N/A					
F9	Emission Unit 07	Additives, filler, resins, pigments	Additives: 0.525 Filler: 6 Resin: 6 Pigments: 0.75	tons/hr	7.5	Polypropylene/polyethylene pellets	7.5	tons/hr	N/A					
Conical Blender	Emission Unit 10	Additives	Additives: 0.21	tons/hr	3	Raw additive mixes	3	tons/hr	N/A					
F0	Emission Unit 11	Additives, filler, resins, pigments	Additives: 0.0525 Filler: 0.6 Resin: 0.6 Pigments: 0.075	tons/hr	0.75	Polypropylene/polyethylene pellets	0.75	tons/hr	N/A					

Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Maximum Quantity of Each Raw Material Input		Total Process Weight Rate for Emission Unit <i>(tons/hr)</i>	Name of Finished Materials	Maximum Quantity of Each Finished Material Output		Fuel Type	Maximum Hourly Fuel Usage Rate		Maximum Yearly Fuel Usage Rate		Sulfur Content (%)
				<i>(Specify Units/hr)</i>				<i>(Specify Units/hr)</i>			<i>(Specify Units)</i>		<i>(Specify Units)</i>	

Ash Content (%)

Ash Content (%)

Section B.3: Notes, Comments, and Explanations

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007N Source Emissions Profile ___ Section N.1: Emission Summary ___ Section N.2: Stack Information ___ Section N.3: Fugitive Information ___ Section N.4: Notes, Comments, and Explanations ___ Complete DEP7007N
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Source Name:	Washington Penn Plastics Co., Inc. - Frankfort Plastics
KY EIS (AFS) #:	21- 073-00026
Permit #:	F-21-007
Agency Interest (AI) ID:	1392
Date:	Feb-26

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hour
													Uncontrolled Potential (lb/hr)
F3	Emission Unit 02	F3	Emission Unit 02	Jet Vent Dust Collector	D3	S02	4 tons/hr	PM, PM10, PM2.5	3.05 lb/ton	Mass balance	98.00%	97.10%	(4 tons/hr) * (3.05 lb/ton) = 12.2 lb/hr
F3	Emission Unit 02	F3	Emission Unit 02	N/A	N/A	S02	4 tons/hr	VOC	0.208 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.208 lb/ton) = 0.832 lb/hr
F3	Emission Unit 02	F3	Emission Unit 02	N/A	N/A	S02	4 tons/hr	HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	0.0014 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.0014 lb/ton) = 0.0056 lb/hr
F5	Emission Unit 03	F5	Emission Unit 03	Dustex Dust Collector	D4	S03	4 tons/hr	PM, PM10, PM2.5	21.34 lb/ton	Mass balance	98.00%	99.20%	(4 tons/hr) * (21.34 lb/ton) = 85.36 lb/hr
F5	Emission Unit 03	F5	Emission Unit 03	N/A	N/A	S03	4 tons/hr	VOC	0.208 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.208 lb/ton) = 0.832 lb/hr

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hour
													Uncontrolled Potential (lb/hr)
F5	Emission Unit 03	F5	Emission Unit 03	N/A	N/A	S03	4 tons/hr	HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	0.0014 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.0014 lb/ton) = 0.0056 lb/hr
F7	Emission Unit 04	F7	Emission Unit 04	Donaldson Torit Dust Collector	D8	S04	4 tons/hr	PM, PM10, PM2.5	21.34 lb/ton	Mass balance	98.00%	99.20%	(4 tons/hr) * (21.34 lb/ton) = 85.36 lb/hr
F7	Emission Unit 04	F7	Emission Unit 04	N/A	N/A	S04	4 tons/hr	VOC	0.208 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.208 lb/ton) = 0.832 lb/hr
F7	Emission Unit 04	F7	Emission Unit 04	N/A	N/A	S04	4 tons/hr	HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	0.0014 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(4 tons/hr) * (0.0014 lb/ton) = 0.0056 lb/hr
S1 and S2	Emission Unit 06	S1 and S2	Emission Unit 06	MAC Cartridge Dust Collector	N/A	S06	0.6 tons/hr combined	PM, PM10, PM2.5	21.34 lb/ton	Mass balance	98.00%	97.10%	(0.6 tons/hr) * (21.34 lb/ton) = 12.804 lb/hr
S1 and S2	Emission Unit 06	S1 and S2	Emission Unit 06	N/A	N/A	S06	0.6 tons/hr combined	VOC	0.208 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(0.6 tons/hr) * (0.208 lb/ton) = 0.125 lb/hr
S1 and S2	Emission Unit 06	S1 and S2	Emission Unit 06	N/A	N/A	S06	0.6 tons/hr combined	HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	0.0014 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	98.00%	0.00%	(0.6 tons/hr) * (0.0014 lb/ton) = 8.4E-4 lb/hr
F9	Emission Unit 07	F9	Emission Unit 07	Donaldson Torit Dust Collector	N/A	S07	7.5 tons/hr	PM, PM10, PM2.5	14.7 lb/ton	Mass balance	100.00%	97.10%	(7.5 tons/hr) * (14.7 lb/ton) = 110.25 lb/hr
F9	Emission Unit 07	F9	Emission Unit 07	N/A	N/A	S07	7.5 tons/hr	VOC	0.208 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	100.00%	0.00%	(7.5 tons/hr) * (0.208 lb/ton) = 1.56 lb/hr

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hour
													Uncontrolled Potential (lb/hr)
F9	Emission Unit 07	F9	Emission Unit 07	N/A	N/A	S07	7.5 tons/hr	HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	0.0014 lb/ton	AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5	100.00%	0.00%	(7.5 tons/hr) * (0.0014 lb/ton) = 0.0105 lb/hr
Conical Blender	Emission Unit 10	Conical Blender	Emission Unit 10	Donaldson Torit Dust Collector	N/A	S10	3 tons/hr	PM, PM10, PM2.5	21.3 lb/ton	Mass balance and exit grain loading	98.00%	98.00%	(3 tons/hr) * (21.3 lb/ton) = 63.9 lb/hr
F0	Emission Unit 11	F0	Emission Unit 11	Donaldson Torit Dust Collector (0.002 gr/dscf)	N/A	S11	0.75 tons/hr	PM, PM10, PM2.5	21.3 lb/ton	Mass balance and exit grain loading	98.00%	99.20%	(0.75 tons/hr) * (21.3 lb/ton) = 15.975 lb/hr

Additional Documentation		
007AI		
Daily Emissions		
Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
(4 tons/hr) * (3.05 lb/ton) * (1 - 0.9516) = 0.591 lb/hr	53.4	2.6
(4 tons/hr) * (0.208 lb/ton) * (1 - 0) = 0.832 lb/hr	3.6	3.6
(4 tons/hr) * (0.0014 lb/ton) * (1 - 0) = 0.0056 lb/hr	0.03	0.03
(4 tons/hr) * (21.34 lb/ton) * (1 - 0.9722) = 2.376 lb/hr	373.9	10.4
(4 tons/hr) * (0.208 lb/ton) * (1 - 0) = 0.832 lb/hr	3.6	3.6

ly Emissions	Annual Emissions	
	Uncontrolled Potential (<i>tons/yr</i>)	Controlled Potential (<i>tons/yr</i>)
(4 tons/hr) * (0.0014 lb/ton) * (1 - 0) = 0.0056 lb/hr	0.03	0.03
(4 tons/hr) * (21.34 lb/ton) * (1 - 0.9722) = 2.376 lb/hr	373.9	10.4
(4 tons/hr) * (0.208 lb/ton) * (1 - 0) = 0.832 lb/hr	3.6	3.6
(4 tons/hr) * (0.0014 lb/ton) * (1 - 0) = 0.0056 lb/hr	0.03	0.03
(0.6 tons/hr) * (21.34 lb/ton) * (1 - 0.9516) = 0.620 lb/hr	56.1	2.7
(0.6 tons/hr) * (0.208 lb/ton) * (1 - 0) = 0.125 lb/hr	0.55	0.55
(0.6 tons/hr) * (0.0014 lb/ton) * (1 - 0) = 8.4E-4 lb/hr	0.01	0.01
(7.5 tons/hr) * (14.7 lb/ton) * (1 - 0.971) = 3.197 lb/hr	482.9	14
(7.5 tons/hr) * (14.7 lb/ton) * (1 - 0) = 1.56 lb/hr	6.8	6.8

ly Emissions	Annual Emissions	
	Uncontrolled Potential <i>(tons/yr)</i>	Controlled Potential <i>(tons/yr)</i>
Controlled Potential <i>(lb/hr)</i>		
$(7.5 \text{ tons/hr}) * (14.7 \text{ lb/ton}) * (1 - 0) = 0.0105 \text{ lb/hr}$	0.05	0.05
$(3 \text{ tons/hr}) * (21.3 \text{ lb/ton}) * (1 - 0.9604) = 2.530 \text{ lb/hr}$	279.9	11.1
$(0.75 \text{ tons/hr}) * (21.3 \text{ lb/ton}) * (1 - 0.9722) = 0.445 \text{ lb/hr}$	70.0	2.0

Section N.2: Stack Information**UTM Zone:**

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (° F)	Exit Velocity (ft/sec)
S02	F3, D3	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	9,305	67.9	71.1
S03	F5, D4	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	6,655	63.3	35.3
S04	F7, D8	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	6,655	63.3	35.3
S06	S1, S2, MAC Cartridge Dust Collector	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	9,305	67.9	71.1
S07	F9, Donaldson Torit Dust Collector	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	9,305	67.9	71.1
S10	Conical Blender, Donaldson Torit Dust Collector	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	6,788	58	81
S11	F0, Donaldson Torit Dust Collector	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	6,655	63.3	35.3

Section N.3: Fugitive Information**UTM Zone:**

Emission Unit #	Emission Unit Name	Process ID	Area Physical Data		Area UTM Coordinates		Area Release Data	
			Length of the X Side (ft)	Length of the Y Side (ft)	Northing (m)	Easting (m)	Release Temperature (°F)	Release Height (ft)
F3	Emission Unit 02	F3	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
F5	Emission Unit 03	F5	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
F7	Emission Unit 04	F7	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
S1 and S2	Emission Unit 06	S1 and S2	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
F9	Emission Unit 07	F9	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
Conical Blender	Emission Unit 10	F10	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application
F0	Emission Unit 11	F0	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application

Section N.4: Notes, Comments, and Explanations

In Sheet N.1, the controlled potential emissions in lb/hr uses the overall control efficiency and does not include fugitive emissions.

In Sheet N.1, the controlled potential emissions in tons/yr uses the overall control efficiency and does not include fugitive emissions.

In Sheet N.2 and Sheet N.3, the UTM Zone for this facility is 16N.

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007V

Applicable Requirements and Compliance Activities

- ☐ Section V.1: Emission and Operating Limitation(s)
☐ Section V.2: Monitoring Requirements
☐ Section V.3: Recordkeeping Requirements
☐ Section V.4: Reporting Requirements
☐ Section V.5: Testing Requirements
☐ Section V.6: Notes, Comments, and Explanations

Additional Documentation

☐ Complete DEP7007AI

Source Name: Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #: 21- 073-00026

Permit #: F-21-007

Agency Interest (AI) I 1392

Date: Feb-26

Section V.1: Emission and Operating Limitation(s)

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
F3	Toshiba Co-Rotating Twin Screw Extruder with pelletizer	401 KAR 59:010	PM, PM10, PM2.5	8.48 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (jet vent dust collector); initial testing to verify control device efficiency

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
F5	Farrel Continuous Mixer, extruder with pelletizer	401 KAR 59:010	PM, PM10, PM2.5	8.48 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (Dustex dust collector); initial testing to verify control device efficiency
F7	Farrel Continuous Mixer, extruder with pelletizer	401 KAR 59:010	PM, PM10, PM2.5	8.48 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (Donaldson Torit dust collector); initial testing to verify control device efficiency
S1 and S2	Twin Screw Extruders with Pelletizer	401 KAR 59:010	PM, PM10, PM2.5	2.62 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (MAC cartridge dust collector); initial testing to verify control device efficiency
F9	Fluidized Bed and Co-rotating Extruder	401 KAR 59:010	PM, PM10, PM2.5	12.5 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (Donaldson Torit dust collector); initial testing to verify control device efficiency

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
Conical Blender	Conical Blender	401 KAR 59:010	PM, PM10, PM2.5	7.09 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (Donaldson Torit dust collector); initial testing to verify control device efficiency
F0	CP550 Farrel Continuous Mixer	401 KAR 59:010	PM, PM10, PM2.5	3.00 lb/hr		Per 401 KAR 52:030, Section 10, for PM emissions, the control device must be operated at all times that the emission unit is operating	Use of control device (Donaldson Torit dust collector, 0.002 gr/dscf); initial testing to verify control device efficiency

Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
F3	Toshiba Co-Rotating Twin Screw Extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
F5	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.
F7	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
S1 and S2	Twin Screw Extruders with Pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.
F9	Fluidized Bed and Co-rotating Extruder	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
Conical Blender	Conical Blender	PM, PM10, PM2.5	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.
F0	CP550 Farrel Continuous Mixer	PM, PM10, PM2.5	401 KAR 52:030, Section 10	Stack emissions opacity, differential pressure drop, filter material	No less than once per week during facility operation, a visual observation of the opacity of emissions at each stack must be performed. If visible, US EPA Reference Method 9 must be used to determine opacity; as a baseline, 24 observations must be taken at intervals of 15 seconds (six minutes total). The observer for this facility is delegated by Michael Long. If Method 9 cannot be performed, a corrective action must be done to remove visible emissions. A pressure drop monitoring device to continuously monitor differential pressure across this unit's control device is installed, properly calibrated, maintained routinely, and operated. This is to ensure that the pressure drop stays within recorded performance values or per the manufacturer's specification. Michael Long delegates responsibilities for maintenance of the device and performing routine monitoring, respectively. Semiannually, the filter material for this emission unit undergoes a visual inspection for defects such as cracks, tears, and splits. Michael Long delegates responsibility for performing these observations.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring

Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
F3	Toshiba Co-Rotating Twin Screw Extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.
F5	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.
F7	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.
S1 and S2	Twin Screw Extruders with Pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
F9	Fluidized Bed and Co-rotating Extruder	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.
Conical Blender	Conical Blender	PM, PM10, PM2.5	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.
F0	CP550 Farrel Continuous Mixer	PM, PM10, PM2.5	401 KAR 52:030, Section 10	Stack emissions opacity, filter material	Records are kept of the weekly stack emissions opacity observations. These include the date, time, observer's initials, if any emissions were reported, and all Method 9 readings recorded. These records are retained for five years after creation. Records are kept of the semiannual filter material inspections. Any defects and replacements are noted. These records are retained for five years after creation.

Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
F3	Toshiba Co-Rotating Twin Screw Extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.
F5	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
F7	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.
S1 and S2	Twin Screw Extruders with Pelletizer	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
F9	Fluidized Bed and Co-rotating Extruder	PM, PM10, PM2.5, VOC, HAPs (acetaldehyde, methyl ethyl ketone, propionaldehyde)	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.
Conical Blender	Conical Blender	PM, PM10, PM2.5	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
F0	CP550 Farrel Continuous Mixer	PM, PM10, PM2.5	401 KAR 52:030, Section 26 401 KAR 52:030, Section 22 401 KAR 52:030, Section 21 401 KAR 52:030, Section 3(1)(d)	Stack emissions opacity, differential pressure drop, and filter material Semi-annual emissions Annual compliance for emission unit Subject emissions information	Summary reports of the opacity, pressure drop, and filter material inspection are submitted at least every six months to the Frankfort Regional Office. Semi-annual emissions reports are submitted by January 30th and July 30th every year. Opacity monitoring is reported as well, per 401 KAR 59:005, General Provisions, Section 3(3). Annual compliance certifications are submitted by January 30th every year to the Frankfort Regional Office. A DEP 7007CC form is completed to determine if each emission unit complies with the terms and conditions outlined in the permit, including condition identification, compliance status, continuous or intermittent compliance, and the method used for determining compliance status. If a Kentucky Emissions Inventory System (KYEIS) emissions survey is received, then the information to determine subject emissions is provided to the Division within 30 days of the survey's mailing date.

Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
F3	Toshiba Co-Rotating Twin Screw Extruder with pelletizer	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. The F9 source test was used to represent the control efficiency of F3's control device because both emission units are co-rotating extruders that utilize cartridge type filters and dust collector controls.
F5	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. A source test, dated February 23-24, 2022, was done on this unit and its control device by Alliance Source Testing, LLC to determine the PM emission rate from F5 and the control efficiency of its Dustex dust collector. Three test runs were completed; test locations were at ambient conditions with source temperatures below 85 degF, so US EPA Reference Test Method 17 was employed for PM testing. The inlet and outlet filterable PM concentrations were measured, determining an average inlet PM emission rate of 5.44 lb/hr, an average outlet PM emission rate of 0.04 lb/hr, and an average control efficiency of 99.2%.
F7	Farrel Continuous Mixer, extruder with pelletizer	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. The F5 source test was used to represent the control efficiency of F7's control device because both emission units are continuous mixers/extruders with pelletizers that utilize cartridge type filters and dust collector controls.
S1 and S2	Twin Screw Extruders with Pelletizer	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. The F9 source test was used to represent the control efficiency of S1 and S2's control devices because both emission units are extruders that utilize cartridge type filters and dust collector controls.

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
F9	Fluidized Bed and Co-rotating Extruder	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. A source test, dated February 22, 2022, was done on this unit and its control device by Alliance Source Testing, LLC to determine the PM emission rate from F9 and the control efficiency of its Donaldson Torit dust collector. Three test runs were completed; test locations were at ambient conditions with source temperatures below 85 degF, so US EPA Reference Test Method 17 was employed for PM testing. The inlet and outlet filterable PM concentrations were measured, determining an average inlet PM emission rate of 3.55 lb/hr, an average PM outlet emission rate of 0.05 lb/hr, and an average control efficiency of 97.1%.
Conical Blender	Conical Blender	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. A source test, dated February 23, 2022, was done on this unit and its control device by Alliance Source Testing, LLC to determine the PM emission rate from the conical blender and the control efficiency of its Donaldson Torit dust collector. Three test runs were completed; test locations were at ambient conditions with source temperatures below 85 degF, so US EPA Reference Test Method 17 was employed for PM testing. The inlet and outlet filterable PM concentrations were measured, determining an average inlet PM emission rate of 0.13 lb/hr, an average PM outlet emission rate of 0.04 lb/hr, and an average control efficiency of 56.8%.
F0	CP550 Farrel Continuous Mixer	PM, PM10, PM2.5	401 KAR 50:055, Section 2(1)(a)	Control efficiency of respective control device	Within 180 days (and at such times requested by the Cabinet per 401 KAR 50:045, Section 1) of permit issuance, performance testing using US EPA Reference Method 5 or 17 for PM emissions must be done for the control device. The F5 source test was used to represent the control efficiency of F0's control device because both emission units are continuous mixers that utilize cartridge type filters and dust collector controls.

Section V.6: Notes, Comments, and Explanations

In Section V.2 of this form, observer and maintenance responsibilities may change daily and/or over time, so WPP's regional HSE manager (Michael Long) is listed for providing these duties.

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007DD**Insignificant Activities**

___ Section DD.1: Table of Insignificant Activities

___ Section DD.2: Signature Block

___ Section DD.3: Notes, Comments, and Explanations

Source Name:**Washington Penn Plastics Co., Inc. - Frankfort Plastics****KY EIS (AFS) #:****21- 073-00026****Permit #:****F-21-007****Agency Interest (AI) ID:****1392****Date:****Feb-26****Section DD.1: Table of Insignificant Activities**

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA1 (FN1-FN15)	Exhaust heat from facility; 12,470 cfm	N/A	None apply	0 tpy
IA2 (FN16-FN24)	Exhaust heat from facility; 19,400 cfm	N/A	None apply	0 tpy
IA3 (D1, D1A, D9-D14)	Fine collection of raw material resin; 23.85 tons/hr	N/A	401 KAR 59:010	PM2.5, PM10, PM: 0.0209 tpy
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	PM2.5, PM10, PM: 0.0075 tpy
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	NOx: 0.0988 tpy, CO: 0.0830 tpy, VOC: 0.0054 tpy, SO2: 0.0006 tpy, CO2: 118.5176 tpy

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	CH4: 0.0023 tpy, N2O: 0.0022 tpy, HAPs: 0.0019 tpy, CH2O: 0.0001 tpy, n-Hexane: 0.0018 tpy
IA5	Two cyclones in series to collect any pellets that may become entrained in the drying air of the fluidized bed; 7.5 tons/hr	F9 Pellet Collection	None apply	0 tpy

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

By:

Authorized Signature

Date

Type/Print Name of Signatory

Title of Signatory

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007GG Control Equipment	Additional Documentation ___ Complete Sections GG.1 through GG.12, as applicable ___ Attach manufacturer's specifications for each control device ___ Complete DEP7007AI
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Source Name:	Washington Penn Plastics Co., Inc. - Frankfort Plastics
KY EIS (AFS) #:	21- 073-00026
Permit #:	F-21-007
Agency Interest (AI) ID:	1392
Date:	Feb-26

Section GG.1: General Information - Control Equipment																
Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/ Serial #	Date Installed	Inlet Gas Stream Data For <u>All</u> Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers <u>Only</u>			Equipment Operational Data For <u>All</u> Control Devices		
						Temperature (° F)	Flowrate (scfm @ 68 ° F)	Average Particle Diameter (μ m)	Particle Density (lb/ft ³) or Specific Gravity	Gas Density (lb/ft ³)	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in. H ₂ O)	Pollutants Collected/ Controlled	Pollutant Removal (%)
D3	Jet Vent Dust Collector	N/A	Griffin	N/A	2000	75.8	8,175	No change from previous application	No change from previous application	0.0711				No change from previous application	PM	97.1
D4	Dust Collector	N/A	Dustex	N/A	2002	63.1	7,172	No change from previous application	No change from previous application	0.0742				No change from previous application	PM	99.2
D8	Dust Collector	N/A	Donaldson Torit	N/A	2005	63.1	7,172	No change from previous application	No change from previous application	0.0742				No change from previous application	PM	99.2
N/A	Cartridge Dust Collector	N/A	MAC	N/A	9/20/2011	75.8	8,175	No change from previous application	No change from previous application	0.0711				No change from previous application	PM	97.1
N/A	Dust Collector	N/A	Donaldson Torit	N/A	6/1/2011	75.8	8,175	No change from previous application	No change from previous application	0.0711				No change from previous application	PM	97.1
N/A	Dust Collector	N/A	Donaldson Torit	N/A	2012	50.4	9,158	No change from previous application	No change from previous application	0.076				No change from previous application	PM	98.0
N/A	Dust Collector	N/A	Donaldson Torit	N/A	2019	63.1	7,172	No change from previous application	No change from previous application	0.0742				No change from previous application	PM	99.2

Section GG.2: Flare Source Information

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	Type of Flare (e.g. steam-assisted, air- assisted, nonassisted)	Process Gas Flowrate (<i>acfm</i>)	Net Heating Value of Stream(s) (Btu/scf)	Removal Efficiency (%)	Flare Rated Capacity (MMBtu/hr)

Section GG.3: Cyclone

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Cyclone	Identify Number of Cyclones: Single <u>or</u> Multiple	Identify Type: High-Efficiency, Conventional, <u>or</u> High-Throughput	Inlet Height (ft)	Inlet Width (ft)	Bottom Cone Height (ft)	Body Height (ft)	Body Diameter (ft)	Dust Outlet Tube Diameter (ft)	Gas Outlet Tube Diameter (ft)	Vortex Finder Height (ft)

Section GG.4: Electrostatic Precipitator (ESP)													
Control Device ID #	Identify all Emission Units and Control Devices that Feed to ESP	Identify Type: Dry negative corona, Wet negative corona <u>or</u> Wet positive corona	Number of Stages	Number of Plates per Stage	Plate Spacing (in)	ESP Total Width (ft)	ESP Total Height (ft)	Collection Plate Height (ft)	Length of Collection Plate (ft)	Particle Migration (Drift) Velocity (specify units)	Particle Resistivity (specify units)	Primary and Secondary Voltage Across Plates (volts)	Primary and Secondary Current (amperes)

Section GG.5: Scrubber																			
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Scrubber	Identify Type of Scrubber: Venturi, Packed Bed, Spray Tower, <u>or</u> Other (specify)	For Venturi Scrubbers:	For Packed Bed Scrubbers:		For Spray Towers:		Identify Type of Flow: Concurrent, Countercurrent, <u>or</u> Crossflow	Length in Direction of Gas Flow (<i>ft</i>)	Cross-Sectional Area (<i>ft</i> ²)	Venturi Throat Velocity (<i>ft/s</i>)	Mist Eliminator			Scrubbing Liquid				
			Identify Throat Type: Fixed <u>or</u> Adjustable	Identify Packing Type	Packing Height (<i>in</i>)	Number of Nozzles	Nozzle Pressure (<i>psig</i>)					Identify Type: Mesh <u>or</u> Vane	Cross-Sectional Area (<i>ft</i> ²)	Pressure Drop (<i>in. H₂O</i>)	Chemical Composition	Flowrate (<i>gal/min</i>)	Fresh Liquid Makeup Rate (<i>gal/min</i>)	Describe Disposal Method of Scrubber Effluent	

Section GG.6: Filter														
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Filter	Identify Type of Filter Unit: Baghouse, Cartridge Collector, or Other (specify)	Identify Type of Filtering Material: Fabric, Paper, Synthetic, or Other (specify)	Total Filter Area (ft ²)	Effective Air-to-Filter Ratio (acfm/ft ²)	Continuous Monitoring Instrumentation (e.g. COMS, BLDS, none)	Additional Materials Introduced into the Control System (e.g. lime, carbon)		Identify Cleaning Method: Shaker, Pulse Air, Reverse Air, Pulse Jet, or Other (specify)	Identify Gas Cooling Method: Ductwork, Heat Exchanger, Bleed-in Air, Water Spray, or Other (specify)	For Ductwork:		For Bleed-in Air:	For Water Spray:
							Material	Injection Rate (lb/hr)			Length (ft)	Diameter (ft)	Flowrate (scfm @ 68 °F)	Flowrate (gal/min)
D3	F3, D3	Baghouse	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
D4	F5, D4	Cartridge pulse	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
D8	F7, D8	Pyramid hopper	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
N/A	S1, S2, MAC Cartridge Dust Collector	Cartridge pulse	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
N/A	F9, Donaldson Torit Dust Collector	Pyramid hopper	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
N/A	Conical Blender, Donaldson Torit Dust Collector	Pyramid hopper	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A
N/A	F0, Donaldson Torit Dust Collector	Pyramid hopper	No change from previous application	No change from previous application	No change from previous application	None	No change from previous application		No change from previous application	No change from previous application	No change from previous application	No change from previous application	No change from previous application	N/A

Section GG.7: Afterburner/Incinerator/Oxidizer

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Afterburner/Incinerator/Oxidizer	Identify Type: Afterburner, Incinerator, Oxidizer, <u>or</u> Other (specify)	Number of Burners	Burner Rating (BTU/hr)	Dimensions of Combustion Chamber (specify units)	Residence Time (sec)	Combustion Chamber Temperature (° F)	Type of Catalyst (if applicable)	Type of Heat Exchanger (if applicable)	Auxiliary Fuel							Composition and Quantities of Combusted Waste
										Identify Fuel Type	Higher Heating Value (MMBtu/scf)	Hourly Fuel Usage (scf/hr)	% Sulfur (Maximum)	% Sulfur (Average)	% Ash (Maximum)	% Ash (Average)	

Section GG.8: Adsorber											
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Adsorber	Identify Adsorbate	Identify Adsorbent: Activated carbon, Activated alumina, Silica Gel, Synthetic Polymers, Zeolite, <u>or</u> Other (specify)	Dimensions of Each Bed				Type of Regeneration: Replacement, Steam, <u>or</u> Other (specify)	Regeneration Time <i>(minutes)</i>	Method of Regeneration: Alternate Use of Beds, Source Shutdown, <u>or</u> Other (specify)	Time On-line Before Regeneration <i>(minutes)</i>
				Thickness in Direction of Gas Flow <i>(in)</i>	Cross-Sectional Area <i>(in²)</i>	Weight of Adsorbent per Bed <i>(lb)</i>	Number of Beds				

Section GG.9: Condenser										
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Condenser	Identify Type of Condenser: Spray Tower, Jet Ejector, Barometric, Single-Pass Shell-and-Tube, <u>or</u> Multi-Pass Shell-and-Tube (if multi-pass, indicate number of passes)	Identify Type of Coolant: Water, Brine, Liquid Nitrogen, CFC/HFC, <u>or</u> Other (specify)	Coolant Temperature		Coolant Liquid Flowrate <i>(gpm)</i>	Coolant Gas Flowrate <i>(scfm @ 68 °F)</i>	Condensing Surface Area <i>(specify units)</i>	Outlet Gas Temperature <i>(°F)</i>	Outlet Gas Composition
				Inlet <i>(°F)</i>	Outlet <i>(°F)</i>					

Section GG.10: Selective Catalytic Reduction (SCR) / Selective Non-catalytic Reduction (SNCR)

Control Device ID #	Identify all Emission Units and Control Devices that Feed to SCR/SNCR	Type (SCR/SNCR)	Gas Composition	Injection Grid Design (e.g. honeycomb)	Design Temperature Range		Reagent			Maximum Design Ammonia Slip (ppm)	SCR <u>Only</u>			
					Min (°F)	Max (°F)	Type	Injection Rate			Catalyst			
								Min (lb/hr)	Max (lb/hr)		Composition	Volume (ft ³)	Weight (lb)	Replacement Schedule

Section GG.11: Other Control Equipment

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Control Equipment	Type of Control Equipment (provide description and a diagram with dimensions)

Section GG.12: Notes, Comments, and Explanations

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007DD

Insignificant Activities

Section DD.1: Table of Insignificant Activities
Section DD.2: Signature Block
Section DD.3: Notes, Comments, and Explanations

Source Name:

Washington Penn Plastics Co., Inc. - Frankfort Plastics

KY EIS (AFS) #:

21-073-00026

Permit #:

F-21-007

Agency Interest (AI) ID:

1392

Date:

Feb-26

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA1 (FN1-FN15)	Exhaust heat from facility; 12,470 cfm	N/A	None apply	0 tpy
IA2 (FN16-FN24)	Exhaust heat from facility; 19,400 cfm	N/A	None apply	0 tpy
IA3 (D1, D1A, D9-D14)	Fine collection of raw material resin; 23.85 tons/hr	N/A	401 KAR 59:010	PM2.5, PM10, PM: 0.0209 tpy
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	PM2.5, PM10, PM: 0.0075 tpy
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	NOx: 0.0988 tpy, CO: 0.0830 tpy, VOC: 0.0054 tpy, SO2: 0.0006 tpy, CO2: 118.5176 tpy

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA4 (IGG-27F)	Burn-off oven to remove baked-on material; 0.23 MMBTU/hr	IGG-27F	401 KAR 63:020	CH4: 0.0023 tpy, N2O: 0.0022 tpy, HAPs: 0.0019 tpy, CH2O: 0.0001 tpy, n-Hexane: 0.0018 tpy
IA5	Two cyclones in series to collect any pellets that may become entrained in the drying air of the fluidized bed; 7.5 tons/hr	F9 Pellet Collection	None apply	0 tpy

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

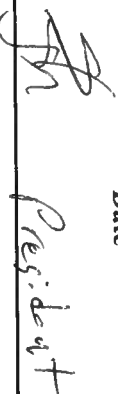

Authorized Signature

By:


John Netzel

Type/Print Name of Signatory


Date


President

Title of Signatory

Sears, Dylan (EEC)

From: Meghan Yingling <myingling@se-env.com>
Sent: Wednesday, May 6, 2026 5:17 PM
To: Sears, Dylan (EEC)
Cc: Nick Lippold; Ross, Dakota D (EEC); Bittner, Zachary P (EEC)
Subject: RE: AI 1392 N Form

This Message Originated from Outside the Organization

You have not previously corresponded with this sender.

[Report Suspicious](#)

Hi Dylan,

After revisiting the application, because the plastic pellets are heated to temperatures between 380 and 420 °F, Test Run No. 1 was selected because it occurred at a melt temperature of 400°F.

Thank you for your time.

Kind regards,
Meghan

Meghan Yingling

President



SE Technologies, LLC | 500 Mosites Way, Suite 100 | Pittsburgh, PA 15205
412-221-1100, ext. | 412-654-2285 cell | myingling@se-env.com | <http://www.se-env.com>

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From: Meghan Yingling
Sent: Tuesday, May 5, 2026 11:57 AM
To: Dylan Sears <dylan.sears@ky.gov>
Cc: Nick Lippold <NLippold@se-env.com>; Dakota D Ross <dakota.ross@ky.gov>; Zachary P Bittner <Zachary.Bittner@ky.gov>
Subject: Re: AI 1392 N Form

Hi Dylan,

Not a disturbance at all. We'll look into your question in more detail. But an initial response is that I believe we maintained the same factor as used in the previous application. But again, we will review in more detail and confirm.

Kind regards,

Meghan

Meghan Yingling

President

SE Technologies, LLC

[500 Mosites Way](#)

[Suite 100](#)

[Pittsburgh, PA 15205](#)

Office: [412-221-1100, ext. 2225](#)

Mobile: [412-654-2285](#)

Email: myingling@se-env.com

Website: www.se-env.com



On May 5, 2026, at 10:34 AM, Sears, Dylan (EEC) <dylan.sears@ky.gov> wrote:

Hello and good morning and sorry for disturbing you, regarding the emission factors found in the DEP7007N Form from AWMA Journal Vol 49: Development of Emission Factors for Polypropylene Processing, Table 5 for AI 1392. We are curious as to the justification using test run No. 1 and not 2 or 3.

Dylan Sears
EETI
Division for Air Quality
Chemical Section
300 Sower Boulevard, 2nd floor
Frankfort, KY 40601
502-782-6866