



AES-01

AIR EMISSION STATEMENT CERTIFICATION

State Form 52052 (3-05)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Instructions:

- This is a required form for each air emission statement as well as any modifications.
- The certification supplied with a source's permit may be used in lieu of this form
- "Responsible Official" has the same meaning as defined in 326 IAC (34), and is usually designated in the General Information section of the permit.

IDEM - Office of Air Quality
 Technical Support and Modeling Section - Mail Code 61-51
 100 N. Senate Avenue
 Indianapolis, IN 46204-2251
 Telephone: (317) 233-0178 or
 Toll Free: 1-800-451-6027 x30178 (within Indiana)
<http://www.emissions.IN.gov/>

Part A: Contact Information

Part A is intended to provide basic information about the company submitting an Air Emission Statement and information on the Air Emission Statement preparer in case there is a question about the report.

| | | | |
|---|-----------|--|--|
| 1. Company Name: MonoSol LLC | | 2. Source ID: 1812700131 | |
| 3. Mailing Address: 1500 Louis Sullivan Drive | | | |
| City: Portage | State: IN | ZIP Code: 46368 | |
| 4. Name of Emission Statement Preparer: Paul | | Brooks | |
| 5. Title of Emission Statement Preparer(<i>optional</i>): Environmental Coordinator | | | |
| 6. Telephone Number: (219)-716-4017 | | 7. Facsimile Number:(<i>optional</i>): | |
| 8. Electronic Mail Address (<i>optional</i>): paul.brooks@kuraray.com | | | |

Part B: Emissions Summary

Part B is intended to aid in the review of data and to collect information about billable hazardous air pollutants

| Emissions Statement Pollutants (Plant Wide) | Tons Emitted |
|---|--------------|
| Ammonia | 0.7557 |
| Carbon Monoxide (CO) | 19.8376 |
| Condensable Particulate Matter (PM-CON) | 1.3461 |
| Filterable Particulate Matter <10 Microns (PM10-FIL) | 0.4487 |
| Lead (PB) | 0.0001 |
| Nitrogen Dioxide (NO2) | 23.6162 |
| Primary PM2.5, Filterable Portion Only | 0.4487 |
| Sulfur Dioxide (SO2) | 0.1417 |
| Volatile Organic Compounds (VOC) | 66.6189 |
| Part 70 Permit Billable Hazardous Air Pollutants (Plant Wide) | Tons Emitted |
| No Billable Hazardous Air Pollutants reported! | 0.0000 |

Part C: Signature of Responsible Official

I hereby certify that the information in this emission statement is accurate based on reasonable estimates using data available to the prepares and on a reasonable inquiry into records and persons responsible for the operation of the source, and is true, accurate, and complete.

Sven Koehnen

Vice President Product Supply

Name of Responsible Official (*typed or printed*)

Title of Responsible Official

Sven Koehnen

June 27, 2024

Signature of Responsible Official

Date (*month, day, year*)

MonoSol LLC

Plant ID:1812700131

Report for 2023

Location: 1500 Louis Sullivan Dr,Portage,46368

NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Facility Emissions Overview | | |
|-----------------------------|--|------------------|
| Pollutant | Pollutant Description | Emissions (Tons) |
| NH3 | Ammonia | 0.7557 |
| CO | Carbon Monoxide | 19.8376 |
| 7439921 | Lead | 0.0001 |
| NOX | Nitrogen Oxides | 23.6162 |
| PM-CON | Primary PM Condensable Only (All Less Than 1 Micron) | 1.3461 |
| PM10-FIL | Primary PM10, Filterable Portion Only | 0.4487 |
| PM25-FIL | Primary PM2.5, Filterable Portion Only | 0.4487 |
| SO2 | Sulfur Dioxide | 0.1417 |
| VOC | Volatile Organic Compounds | 66.6189 |

| Group ID: L20 | | Group Description: L20 Film Casting Line | | |
|-------------------------------------|---|---|------------------------------------|-----------------------------|
| Percent Quarterly Throughput | | | | |
| Winter: 25 | | Spring: 25 | | Summer: 25 |
| | | | | Fall: 25 |
| Days Per Week: 7 | | Weeks Per Year: 51 | | Hours Per Day: 24 |
| | | | | Hours Per Year: 8568 |
| Process ID: L20 | | Process Description: Process | | |
| SCC: | 30801003 | Stack: | L20 | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L20 Oven | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | |
| Heat Content: | 0 | Diameter: | 2.5 | |
| Sulfur Content: | 0 | Temperature: | 320 | |
| Ash Content: | 0 | Velocity: | 32.59 | |
| Throughput: | 11.1049 Tons | Gas Flow: | 9599 | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) |
| VOC | Material Balance | 0 | 0 | 11.1049 |

MonoSol LLC

Plant ID:1812700131

Report for 2023

Location: 1500 Louis Sullivan Dr,Portage,46368

NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Process ID: NG | | Process Description: Natural Gas | | | |
|-------------------------------------|---|---|------------------------------------|-----------------|--|
| SCC: | 10200602 | Stack: | L20 | | |
| | Industrial | Description: | Line L20 Oven | | |
| | Natural Gas | Stack Type: | Vertical | | |
| | 10-100 Million Btu/hr | Height: | 40 | | |
| Heat Content: | 12.54 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 92.8336 Million Cubic Feet | Gas Flow: | 9599 | | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1485 | |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0279 | |
| CO | EPA Emission Factor | 84 | 0 | 3.8990 | |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.2646 | |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0882 | |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 | |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0882 | |
| NOX | EPA Emission Factor | 100 | 0 | 4.6417 | |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.2553 | |
| Group ID: L21 | | Group Description: L21 Film Casting Line | | | |
| Percent Quarterly Throughput | | | | | |
| Winter: 25 | Spring: 25 | Summer: 25 | Fall: 25 | | |
| Days Per Week: 7 | Weeks Per Year: 51 | Hours Per Day: 24 | Hours Per Year: 8568 | | |
| Process ID: L21 | | Process Description: Process | | | |
| SCC: | 30801003 | Stack: | L21 | | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L21 Oven | | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | | |
| Heat Content: | 0 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 11.1559 Tons | Gas Flow: | 9599 | | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| VOC | Material Balance | 0 | 0 | 11.1559 | |

MonoSol LLC

Plant ID:1812700131

Report for 2023

Location: 1500 Louis Sullivan Dr,Portage,46368

NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Process ID: NG | | Process Description: Natural Gas | | | |
|-------------------------------------|---|---|------------------------------------|-----------------|--|
| SCC: | 10200602 | Stack: | L21 | | |
| | Industrial | Description: | Line L21 Oven | | |
| | Natural Gas | Stack Type: | Vertical | | |
| | 10-100 Million Btu/hr | Height: | 40 | | |
| Heat Content: | 10.5 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 78.0885 Million Cubic Feet | Gas Flow: | 9599 | | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1249 | |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0234 | |
| CO | EPA Emission Factor | 84 | 0 | 3.2797 | |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.2226 | |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0742 | |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 | |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0742 | |
| NOX | EPA Emission Factor | 100 | 0 | 3.9044 | |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.2147 | |
| Group ID: L22 | | Group Description: L22 Film Casting Line | | | |
| Percent Quarterly Throughput | | | | | |
| Winter: 25 | Spring: 25 | Summer: 25 | Fall: 25 | | |
| Days Per Week: 7 | Weeks Per Year: 51 | Hours Per Day: 24 | Hours Per Year: 8568 | | |
| Process ID: L22 | | Process Description: Process | | | |
| SCC: | 30801003 | Stack: | L22 | | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L22 Oven | | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | | |
| Heat Content: | 0 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 11.2744 Tons | Gas Flow: | 9599 | | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| VOC | Material Balance | 0 | 0 | 11.2744 | |

MonoSol LLC

Plant ID:1812700131

Report for 2023

Location: 1500 Louis Sullivan Dr,Portage,46368

NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Process ID: L22_NG | | Process Description: Natural Gas | | | |
|-------------------------------------|---|---|------------------------------------|-----------------|--|
| SCC: | 10200602 | Stack: | L22 | | |
| | Industrial | Description: | Line L22 Oven | | |
| | Natural Gas | Stack Type: | Vertical | | |
| | 10-100 Million Btu/hr | Height: | 40 | | |
| Heat Content: | 10.5 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 78.918 Million Cubic Feet | Gas Flow: | 9599 | | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1263 | |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0237 | |
| CO | EPA Emission Factor | 84 | 0 | 3.3146 | |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.2249 | |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0750 | |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 | |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0750 | |
| NOX | EPA Emission Factor | 100 | 0 | 3.9459 | |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.2170 | |
| Group ID: L23 | | Group Description: L23 Film Casting Line | | | |
| Percent Quarterly Throughput | | | | | |
| Winter: 25 | Spring: 25 | Summer: 25 | Fall: 25 | | |
| Days Per Week: 7 | Weeks Per Year: 51 | Hours Per Day: 24 | Hours Per Year: 8568 | | |
| Process ID: L23 | | Process Description: Process | | | |
| SCC: | 30801003 | Stack: | L23 | | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L23 Oven | | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | | |
| Heat Content: | 0 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 11.2309 Tons | Gas Flow: | 9599 | | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| VOC | Material Balance | 0 | 0 | 11.2309 | |

MonoSol LLC

Plant ID:1812700131

Report for 2023

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NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| | | | | |
|-------------------------------------|---|---|------------------------------------|------------------------|
| Process ID: L23_NG | | Process Description: Natural Gas | | |
| SCC: | 10200602 | Stack: | L23 | |
| | Industrial | Description: | Line L23 Oven | |
| | Natural Gas | Stack Type: | Vertical | |
| | 10-100 Million Btu/hr | Height: | 40 | |
| Heat Content: | 10.5 | Diameter: | 2.5 | |
| Sulfur Content: | 0 | Temperature: | 320 | |
| Ash Content: | 0 | Velocity: | 32.59 | |
| Throughput: | 78.6135 Million Cubic Feet | Gas Flow: | 9599 | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1258 |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0236 |
| CO | EPA Emission Factor | 84 | 0 | 3.3018 |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.2240 |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0747 |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0747 |
| NOX | EPA Emission Factor | 100 | 0 | 3.9307 |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.2162 |
| Group ID: L24 | | Group Description: L24 Film Casting Line | | |
| Percent Quarterly Throughput | | | | |
| Winter: 25 | Spring: 25 | Summer: 25 | Fall: 25 | |
| Days Per Week: 7 | Weeks Per Year: 51 | Hours Per Day: 24 | Hours Per Year: 8568 | |
| Process ID: L24 | | Process Description: Process | | |
| SCC: | 30801003 | Stack: | L24 | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L24 Oven | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | |
| Heat Content: | 0 | Diameter: | 2.5 | |
| Sulfur Content: | 0 | Temperature: | 320 | |
| Ash Content: | 0 | Velocity: | 32.59 | |
| Throughput: | 11.1394 Tons | Gas Flow: | 9599 | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) |
| VOC | Material Balance | 0 | 0 | 11.1394 |

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Plant ID:1812700131

Report for 2023

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NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Process ID: L24_NG | | Process Description: Natural Gas | | | |
|-------------------------------------|---|---|------------------------------------|-----------------|--|
| SCC: | 10200602 | Stack: | L24 | | |
| | Industrial | Description: | Line L24 Oven | | |
| | Natural Gas | Stack Type: | Vertical | | |
| | 10-100 Million Btu/hr | Height: | 40 | | |
| Heat Content: | 10.5 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 77.973 Million Cubic Feet | Gas Flow: | 9599 | | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1248 | |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0234 | |
| CO | EPA Emission Factor | 84 | 0 | 3.2749 | |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.2222 | |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0741 | |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 | |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0741 | |
| NOX | EPA Emission Factor | 100 | 0 | 3.8986 | |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.2144 | |
| Group ID: L25 | | Group Description: L25 Film Casting Line | | | |
| Percent Quarterly Throughput | | | | | |
| Winter: 25 | Spring: 25 | Summer: 25 | Fall: 25 | | |
| Days Per Week: 7 | Weeks Per Year: 51 | Hours Per Day: 24 | Hours Per Year: 8568 | | |
| Process ID: L25 | | Process Description: Process | | | |
| SCC: | 30801003 | Stack: | L25 | | |
| | Rubber and Miscellaneous Plastics Products | Description: | Line L25 Oven | | |
| | Plastic Products Manufacturing | Stack Type: | Vertical | | |
| | Film Production, Die (Flat/Circular) | Height: | 40 | | |
| Heat Content: | 0 | Diameter: | 2.5 | | |
| Sulfur Content: | 0 | Temperature: | 320 | | |
| Ash Content: | 0 | Velocity: | 32.59 | | |
| Throughput: | 9.4144 Tons | Gas Flow: | 9599 | | |
| Material: | VOCs | Input/Output: | Process Material Produced (Output) | | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) | |
| VOC | Material Balance | 0 | 0 | 9.4144 | |

MonoSol LLC

Plant ID:1812700131

Report for 2023

Location: 1500 Louis Sullivan Dr,Portage,46368

NAICS: 326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing

| Process ID: L25_NG | | Process Description: Natural Gas | | |
|---------------------------|---------------------------|---|-------------------------------|-----------------|
| SCC: | 10200602 | Stack: | L25 | |
| | Industrial | Description: | Line L25 Oven | |
| | Natural Gas | Stack Type: | Vertical | |
| | 10-100 Million Btu/hr | Height: | 40 | |
| Heat Content: | 10.5 | Diameter: | 2.5 | |
| Sulfur Content: | 0 | Temperature: | 320 | |
| Ash Content: | 0 | Velocity: | 32.59 | |
| Throughput: | 65.898 Million Cubic Feet | Gas Flow: | 9599 | |
| Material: | Natural Gas | Input/Output: | Process Material Used (Input) | |
| Pollutant | Emission Method | Emission Factor | Overall Ctrl Efficiency | Emissions(Tons) |
| NH3 | EPA Emission Factor | 3.2 | 0 | 0.1054 |
| SO2 | EPA Emission Factor | 0.6 | 0 | 0.0198 |
| CO | EPA Emission Factor | 84 | 0 | 2.7677 |
| PM-CON | EPA Emission Factor | 5.7 | 0 | 0.1878 |
| PM10-FIL | EPA Emission Factor | 1.9 | 0 | 0.0626 |
| 7439921 | EPA Emission Factor | 0.0005 | 0 | 0.0000 |
| PM25-FIL | EPA Emission Factor | 1.9 | 0 | 0.0626 |
| NOX | EPA Emission Factor | 100 | 0 | 3.2949 |
| VOC | EPA Emission Factor | 5.5 | 0 | 0.1812 |