

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: 152F-039-00	Emission unit name: Solvent Parts Cleaner	List any control devices associated with this emission unit:	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Parts cleaner bath using solvent, fugitive venting			
Manufacturer: Safety-Kleen	Model number: 44	Serial number: N/A	
Construction date: 1962	Installation date: 1962	Modification date(s): 1995	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 32 gallon			
Maximum Hourly Throughput: 1 batch	Maximum Annual Throughput: 8760 batches	Maximum Operating Schedule: 8760 hr/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? NO		If yes, is it fired direct or indirect? N/A	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	1.120	4.91
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emission factors were determined as if there were a vent moving 149ft³ / min of air over the opened solvent enclosure. It was determined that 6.69 lbs / hour are lost through evaporation. Examination of a typical parts cleaning cycle found that the enclosure was open for a total of 10 minute per cycle maximum. Thus a total of 1.12 pph was determined as the maximum emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Mineral spirits parts cleaners are subject to the cold cleaning provisions of 45CSR§21-30. 45CSR 21-30.3.a.4 ~ Provide a permanent, legible, conspicuous label, summarizing the operating requirements. 45 CSR 21-30.3.a.5 ~ Store waste solvent in covered containers. 45 CSR 21-30.3.a.6 ~ Close the cover whenever parts are not being handled in the cleaner. 45 CSR 21-30.3.a.7 ~ Drain the cleaned parts until dripping ceases. 45 CSR 21-30.3.a.8 ~ If used, supply a solvent spray that is solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch. 45 CSR 21-30.3.a.9 ~ Degrease only material that are neither porous nor absorbent. 45 CSR 21-30.60.6.b ~ Comply with the requirements of section 5.2 regarding reports of excess emissions.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

All applicable testing, recordkeeping, and reporting are the same as required by 45CSR§21, Section 30 with the exception that records shall be maintained for a period of 5 years instead of two.

Are you in compliance with all applicable requirements for this emission unit? YES
If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form			
<i>Emission Unit Description</i>			
Emission unit ID number: 152F-043-00	Emission unit name: #2 & #4 Dye Baths and Dryers	List any control devices associated with this 152F-043-MC	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): System to dye nylon filaments			
Manufacturer: DuPont Engineering	Model number: N/A	Serial number: N/A	
Construction date: 2005	Installation date: 2005	Modification date(s): 2012	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 400 pph			
Maximum Hourly Throughput: 400 pph	Maximum Annual Throughput: 1752 tons/yr	Maximum Operating Schedule: 8760 hr/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? NO		If yes, is it fired direct or indirect? N/A	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	0.05	0.22
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	0.35	1.533
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used,		

Applicable Requirements

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation
See Attached List for all Applicable Requirements.**

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate

Monitoring shall be accomplished by performing a Visible Emissions check on the associated stack on a monthly basis. Visible emission checks shall be conducted by personnel trained in the practices and limitations of 40 C.F.R. 60, Appendix A, Method 22 during periods of normal operation of emission sources that vent from the referenced emission points for a sufficient time interval to determine if there is a visible emission. Records of maintenance on this piece of equipment will be maintained in the electronic maintenance system. Records of the monthly visible emissions check will be maintained for a period of five years.

Are you in compliance with all applicable requirements for this emission unit?

YES

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 152F-044-00	Emission unit name: South Melt Grid Burnout	List any control devices associated with this emission unit:
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Exhaust system for equipment maintenance

Manufacturer: Buffalo Forge	Model number: N/A	Serial number: N/A
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Construction date: prior to 1995	Installation date: prior to 1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 2280 CFM

Maximum Hourly Throughput: 136800 CF	Maximum Annual Throughput: 0.5 tons/yr	Maximum Operating Schedule: 240 hr/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? NO	If yes, is it fired direct or indirect? N/A
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	0.5	0.06
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering estimate based upon typical number of cleanings and amount of material left within the grids. This exhaust fan is connected to a common suction ductwork with 152F-044-00 and therefore only is used for half of the total maintenance operations.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See Attached List for all Applicable Requirements.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

For this insignificant source records on the number of burnout cleanings conducted each year will be maintained.

Are you in compliance with all applicable requirements for this emission unit? YES
If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 152F-045-00	Emission unit name: North Melt Grid Burnout	List any control devices associated with this emission unit:
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Exhaust system for equipment maintenance

Manufacturer: Buffalo Forge	Model number: N/A	Serial number: N/A
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Construction date: prior to 1995	Installation date: prior to 1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 2280 CFM

Maximum Hourly Throughput: 136800 CF	Maximum Annual Throughput: 0.5 tons/yr	Maximum Operating Schedule: 240 hr/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? NO	If yes, is it fired direct or indirect? N/A
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Maximum design heat input and/or maximum horsepower rating: N/A	Type and Btu/hr rating of burners: N/A
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	0.5	0.06
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineering estimate based upon typical number of cleanings and amount of material left within the grids. This exhaust fan is connected to a common suction ductwork with 152F-044-00 and therefore only is used for half of the total maintenance operations.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See Attached List for all Applicable Requirements.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

For this insignificant source records on the number of burnout cleanings conducted each year will be maintained.

Are you in compliance with all applicable requirements for this emission unit? YES
If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form			
<i>Emission Unit Description</i>			
Emission unit ID number: 152F-046-13	Emission unit name: Spinner #13	List any control devices associated with this emission unit:	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): System to extrude polymer into abrasive filaments			
Manufacturer: DuPont Engineering	Model number: 40	Serial number: N/A	
Construction date: Prior to 1962	Installation date: Prior to 1962	Modification date(s): 2003	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 200 pph			
Maximum Hourly Throughput: 200 pph	Maximum Annual Throughput: 876 tons/yr	Maximum Operating Schedule: 8760 hr/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? NO		If yes, is it fired direct or indirect? N/A	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)	0.125	0.54
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).		
Engineering estimate based upon emission factors on a per pound of product basis.		

RATIONALE AND JUSTIFICATION

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:

6b) Regulated Air Pollutant:

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION: