

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: LOPAREX, LLC

Facility Location: 2000 Industrial Park Road, Iowa City, IA 52240

Air Quality Operating Permit Number: 01-TV-005R2-M001

Expiration Date: June 12, 2021

Permit Renewal Application Deadline: December 12, 2020

EIQ Number: 92-2346

Facility File Number: 52-01-037

Responsible Official

Name: David Behr

Title: Operations Manager

**Mailing Address: 2000 Industrial Park Road,
Iowa City, IA 52240**

Phone #: 319-341-5015

Permit Contact Person for the Facility

Name: Tyler VanDee

Title: Safety Manager

**Mailing Address: 2000 Industrial Park Road,
Iowa City, IA 52240**

Phone #: 319-341-5051

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

Table of Contents

I. Facility Description and Equipment List	4
II. Plant - Wide Conditions.....	7
III. Emission Point Specific Conditions	10
IV. General Conditions.....	77
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	
V. Appendix A: NSPS and NESHAP	89

Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: LOPAREX, LLC

Permit Number: 01-TV-005R2-M001

Facility Description: Paper Coating & Laminating (SIC 2672)

Equipment List

A. Line 003

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
003-1	003-1	Corona Treater	01-A-1362-S2
003-2	003-2	Electron Beam Cure #1	01-A-1363-S3
003-3	003-3	Electron Beam Cure #2	01-A-1364-S1
003-5	003-5	Ultraviolet Lamp	01-A-1365-S1

B. Line 008

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
008-1	008-1A	Primer Coater	01-A-1247-S2
	008-1B	Primer Coating Dryer	
008-3	008-3	Extrusion Coater	85-A-059-P4
008-4	008-4	Print Treater	01-A-1248

C. Line 012

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
012-1A	012-1C	Press Printer	06-A-310-S1
	012-1D	Infrared Oven	
012-1	012-1A	Primer Coater 1	82-A-002-S6
	012-1B	Primer Dryer 1	
012-2	012-2	Extruder Laminator 1	97-A-603-S3
012-3	012-3	Primer Coater 2 and Primer Dryer 2	97-A-604-S3
012-4	012-4	Extruder Laminator 2	97-A-605-S3
012-5a	012-5-1a	Infeed Corona Treater (7.5 kW)	13-A-364
	012-5-1b	Infeed Corona Treater (7.5 kW)	
012-5b	012-5-2	Extruder #1 Treater (7.5 kW)	13-A-365
012-5c	012-5-3	Extruder #2 Treater (7.5 kW)	13-A-366-S1
	012-5-4	Rewind Treater	

D. Line 014

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
014-1	014-1	Print Treater	NA
014-3C	014-3C	Dryer 1, Zone 3	97-A-675-S2
014-5C	014-5C	Dryer 2, Zone 3	97-A-676-S2
014-6	014-6	Mixing Booth	15-A-322
014/016	014-2	Coating Booth Floor Sweep	82-A-003-S6
	014-3A	Natural Gas Combustion For Dryer 1	
	014-3B	Silicon Coating Drying	
	014-5A	Natural Gas Combustion For Dryer 2	
	014-5B	Silicon Coating Dryer	
	016-2	Coater Floor Sweep	
	016-3A	Natural Gas Combustion For Dryer	
	016-3B	Silicon Coating Dryer	
	016-3C	Dryer, Zone 3	
	022-2	Rod Coating Head	
022-3	Arch Type Dryer Oven		

E. Line 022

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
022-3 (bypass)	022-2	Rod Coating Head	11-A-482-S2
	022-3	Arch Type Dryer Oven – natural gas	
022-1	022-1	Mixing Room	11-A-480
022-4	022-4	Corona Treater (4.5 kW)	11-A-481-S1

F. Line 015

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
015-1	015-1a	Ink Application	14-A-664
	015-1b	Ink Dryer (2 MMBtu/hr)	
015-2	015-2	Mix Booth	NA

G. Line 016

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
016-1	016-1a	Corona Treater (5 kW/hr)	14-A-665-S2
	016-1b	Flame Treater (0.5 MMBtu/hr)	
016-4	016-4	Mix Booth	15-A-323

H. Line 017

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
017-1	017-1	Print Treater	09-A-358-P2
017-2 017-BP	017-2	Coater Floor Sweep	09-A-359-P2 09-A-360-P2
	017-3a	Silicone Coating Dryer, Zone 1	
	017-3b	Silicone Coating Dryer, Zone 2	
017-3	017-3c	Silicone Coating Dryer, Zone 3	09-A-361-P2
017-4	017-3d	Silicone Coating Dryer, Zone 4	09-A-362-P3
017-5	017-4	Mix Booth	09-A-363-P3
017-6	017-5	Auxiliary Heater (10.57 MMBtu/hr)	14-A-666

I. Line 018

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
018-1	018-1	Print Treater	09-A-364-P2
018-2 018-BP	018-2	Coater Floor Sweep	09-A-365-P2 09-A-366-P2
	018-3a	Silicone Coating Dryer, Zone 1	
	018-3b	Silicone Coating Dryer, Zone 2	
018-3	018-3c	Silicone Coating Dryer, Zone 3	09-A-367-P2
018-4	018-3d	Silicone Coating Dryer, Zone 4	09-A-368-P2
018-5	018-4	Mix Booth	09-A-369-P2
018-6	018-5	Auxiliary Heater (10.57 MMBtu/hr)	14-A-667

J. Miscellaneous

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
1T	1T	Heptane Storage Tank	01-A-089
2T	2T	Isopropyl Alcohol Storage Tank	01-A-090
3T	3T	Tolusol 40 Storage Tank	01-A-091
4T	4T	Tolusol 40 Storage Tank	01-A-092
C1	C1	Paper Trimmer #1	82-A-005-S1
C2	C2	Paper Trimmer #2	85-A-058-S1

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-SH	Facility Space Heaters
EU-W1	Maintenance Welding

II. Plant-Wide Conditions

Facility Name: LOPAREX LLC
Permit Number: 01-TV-005R2-M001

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: June 13, 2016
Ending on: June 12, 2016

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

NSPS

Emission Units subject to 40 CFR Part 60 Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations are listed in the table below. These emission units shall comply with all applicable operational limits and requirements of the subpart.

NESHAP

Emission units EU-017-5 and EU-018-5, at this facility are subject to 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. Applicable subpart DDDDD requirements are incorporated into the Emission-Point Specific Conditions Section. The facility shall also comply with all applicable requirements from 40 CFR 60 subpart A (General Provisions).

Emission Units subject to 40 CFR 63 Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating and 40 CFR Subpart KK – National Emission Standards for the Printing and Publishing Industry are listed in the following table.

Table A: NSPS & NESHAP

Emission Point	Emission Unit	Description	NSPS	NESHAP
EP-003-1	EU-003-1	Corona Treater	RR	JJJJ
EP-003-2	EU-003-2	Electron Beam Curing #1	RR	JJJJ
EP-003-3	EU-003-3	Electron Beam Curing #2	RR	JJJJ
EP-003-5	EU-003-5	UV Cure	RR	JJJJ
EP-008-1	EU-008-1A	Primer Coater		JJJJ
	EU-008-1B	Primer Coating Dryer		JJJJ
EP-012-1A	EU-012-1C	Press Printer		KK
	EU-012-1D	Infrared Oven		KK
EP-012-1	EU-012-1A	Primer Coater 1		KK
	EU-012-1B	Primer Dryer 1		KK
EP-012-2	EU-012-2	Extruder Laminator 1		KK
EP-012-3	EU-012-3	Primer Coater and Dryer 2		KK
EP-012-4	EU-012-4	Extruder Laminator 2		KK
EP-014-1	EU-014-1	Print Treater		JJJJ
EP-014-3C	EU-014-3C	Silicon Coating Dryer 1, Zone 3		JJJJ
EP-014-5C	EU-014-5C	Silicon Coating Dryer 2, Zone 3		JJJJ
EP-014/016	EU-014-2	Floor Sweep From Coating Booth		JJJJ
	EU-014-3A	Silicon Coating Dryer 1, Zone 1		JJJJ
	EU-014-3B	Silicon Coating Dryer 1, Zone 2		JJJJ
	EU-014-5A	Silicon Coating Dryer 2, Zone 1		JJJJ
	EU-014-5B	Silicon Coating Dryer 2, Zone 2		JJJJ
	EU-016-2	Floor Sweep From Coating Booth		JJJJ
	EU-016-3A	Silicon Coating Dryer 3, Zone 1		JJJJ
	EU-016-3B	Silicon Coating Dryer 3, Zone 2		JJJJ
	EU-016-3C	Silicon Coating Dryer 3, Zone 3		JJJJ
	EP-022-3	EU-022-2	Rod Coating Head	RR
EU-022-3		Arch Type Dryer Oven	RR	JJJJ
EP-022-3	EU-022-2	Bypass: Rod Coating Head	RR	JJJJ
	EU-022-3	Bypass: Arch Type Dryer Oven	RR	JJJJ
EP-022-4	EU-022-4	Corona Treater	RR	JJJJ
EP-015-1	EU-015-1a	Ink Application		KK
	EU-015-1b	Ink Dryer (2 MMBtu/hr)		KK
EP-016-1	EU-016-1a	Corona Treater		JJJJ
	EU-016-1b	Flame Treater		JJJJ
EP-016-4	EU-016-4	Mixing Area for Silicon Coatings		JJJJ
EP-017-1	EU-017-1	Print Treater	RR	JJJJ
EP-017-2 & EP-017-BP	EU-017-2	Coating Booth Floor Sweep	RR	JJJJ
	EU-017-3A	Silicon Coating Oven, Zone 1	RR	JJJJ
	EU-017-3B	Silicon Coating Oven, Zone 2	RR	JJJJ
EP-017-3	EU-017-3C	Silicon Coating Oven, Zone 3	RR	JJJJ
EP-017-4	EU-017-3D	Silicon Coating Oven, Zone 4	RR	JJJJ
EP-018-1	EU-018-1	Print Treater	RR	JJJJ
EP-018-2 & EP-018-BP	EU-018-2	Coating Booth Floor Sweep	RR	JJJJ
	EU-018-3A	Silicon Coating Oven, Zone 1	RR	JJJJ
	EU-018-3B	Silicon Coating Oven, Zone 2	RR	JJJJ
EP-018-3	EU-018-3C	Silicon Coating Oven, Zone 3	RR	JJJJ
EP-018-4	EU-018-3D	Silicon Coating Oven, Zone 4	RR	JJJJ

III. Emission Point-Specific Conditions

Facility Name: LOPAREX LLC
 Permit Number: 01-TV-005R2-M001

Emission Point ID Numbers: See Table: Coating Line 003

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Coating Line 003

Table: Coating Line 003

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
003-1	003-1	Coater #3 Corona Treater	NA	Electric Current	10 kW/hr	01-A-1362-S2
003-2	003-2	Coater #3 Electron Beam Cure #1		Water Based Coatings	13.85 gal/hr	01-A-1363-S3
003-3	003-3	Coater #3 Electron Beam Cure #2		Silicon Coatings	13.85 gal/hr	01-A-1364-S1
003-5	003-5	Coater #3 Ultraviolet Lamp		Silicon Coatings	13.85 gal/hr	01-A-1365-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity (For EP 003-3 and EP 003-5)

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits: 01-A-1364-S1 and 01-A-1365-S1
 567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 36.4 tpy ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits: 01-A-1364-S1 and 01-A-1365-S1

⁽²⁾ The limit is for the entire coating line per rolling twelve-month period.

Pollutant: Ozone (EP 003-1 Only)

Emission Limit(s): 0.71 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-1362-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Only coatings that can be cured by radiation shall be utilized on this line.
2. The amount of coating applied on this line (Line 003) shall not exceed 121,300 gallons per rolling twelve-month period.
3. The VOC content of the coatings employed shall not exceed 0.6 pounds per gallon.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A log of all materials, as applied, used in the coating line and their respective VOC content (in lb/gal).
2. Determine the cumulative amount of coating material used in the coating line (Line 003) on a rolling 12-month basis for each month of operation.
3. A copy of the Material Safety Data Sheet (MSDS) for each material used in this coating line.

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 003

NSPS

These emission units are subject to the requirements of 40 CFR Part 60, Subpart RR, "Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations". These units are not subject to the VOC emission limits of §60.442(a) as the amount of VOC input to the coater will not exceed 45 Mg (49.5 tons) per any rolling 12-month period. However, these units are subject to the requirements of all other applicable sections of this subpart. If the amount of VOC input exceeds 45 Mg (49.5 tons) per 12-month period, the coating line will become subject to §60.442(a). See Appendix A for the web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

These emission units are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for the web link to the rule.

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 003
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	Stack Height (feet)	Stack Opening (inches)	Stack Exhaust Rate (scfm)	Stack Temperature (°F)	Discharge Type	Authority For Requirement
003-1	33	14	2,500	100	Vertical Unobstructed	01-A-1362-S2
003-2	26	14 x 14	2,100	100	Vertical Unobstructed	01-A-1363-S3
003-3	23	14	2,500	100	Vertical Unobstructed	01-A-1364-S1
003-5	23	14	2,500	100	Vertical Unobstructed	01-A-1365-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 008-1

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Coating Line 008-1

Table: Coating Line 008-1

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
008-1A	Line 008 Primer Coater	NA	Primer	76 lb/hr	01-A-1247-S2
008-1B	Line 008 Primer Coating Dryer		Natural Gas	3.5 MMBtu/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-1247-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 01-A-1247-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-1247-S2
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The dryer is limited to firing on natural gas only.
2. The amount of coating materials used in the Primer Coater, EU 008-1A, shall not exceed 303,795 pounds per twelve (12) month rolling period.
3. The VOC content of any coating material used in the Primer Coater, EU 008-1A, shall not

exceed 7.9%, by weight.

4. This Coating Line, Line 8, is subject to all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating).

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The permit holder, owner and operator of the facility shall maintain records on the identification, the VOC content, and the HAP content of all coating materials used in the Primer Coater, EU-008-1A.
2. The permit holder, owner and operator of the facility shall record the amount of coating materials used in the Primer Coater, EU-008-1A, for each month and calculate the twelve-month rolling total used in the emission unit.
3. The permit holder, owner and operator of the facility shall retain Material Safety Data Sheets (MSDS) or other documentation specifying the VOC content and the total HAP content of all coating materials used in the affected emission unit.
4. Line 8 is subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating).

Authority for Requirement: Iowa DNR Construction Permit 01-A-1247-S2

NESHAP

These emission units are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for the web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 26

Stack Opening, (inches, dia.): 14

Exhaust Flow Rate (scfm): 2,950

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1247-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values

stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 008-3

Associated Equipment

Associated Emission Unit ID Number: 008-3

Emission Unit vented through this Emission Point: 008-3

Emission Unit Description: Line 8, Extrusion Coater

Raw Material/Fuel: Polyethylene & Polypropylene Resin

Rated Capacity: 1.14 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter <10µm

Emission Limit(s): 3.29 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 5.5 ton/yr ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4

⁽²⁾ The VOC limit is 5.5 tons per any rolling, 12-month period.

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. This emission unit Extrusion Coater, EU 008-3, shall only process/extrude polyethylene resin, polypropylene resin or a blend of these polyethylene and polypropylene resins.
2. The amount of resin processed in this emission unit Extrusion Coater, EU 008-3, shall not exceed 19,972,800 pounds per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner and operator of the facility shall maintain records on the identification of all resins processed in the Extrusion Coater, EU 008-3.
2. The owner and operator of the facility shall record the amount of resin used in the Extrusion Coater, EU 008-3, for each month and calculate the twelve-month rolling total resin extruded in the emission unit.
3. The permit holder, owner and operator of the facility shall retain Material Safety Data Sheets (MSDS) or other documentation all resins processed in the affected emission unit.

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 47

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 5,000

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 85-A-059-P4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 008-4

Associated Equipment

Associated Emission Unit ID Number: 008-4

Emission Unit vented through this Emission Point: 008-4

Emission Unit Description: Line 8, Print Treater

Raw Material/Fuel: Electricity

Rated Capacity: 10 kW/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Ozone

Emission Limit(s): 1.3 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 01-A-1248

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

None at this time

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 37

Stack Opening, (inches, dia.): 9

Exhaust Flow Rate (scfm): 1,400

Exhaust Temperature (°F): 82

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1248

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 012-1A

Associated Equipment

Associated Emission Unit ID Numbers: See Table: 012 Press Printer & Infrared Oven

Table: 012 Press Printer & Infrared Oven

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
012-1C	Line 12 Press Printer	NA	Ink	90 lb/hr	06-A-310-S1
012-1D	Line 12 Infrared Oven		Ink	90 lb/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 776.0 tpy ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1

⁽²⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permit.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. These emission units are limited to firing on natural gas only.

2. Total VOC emissions for Lines 012, 014, and 016 shall be calculated and recorded as required in the Reporting and Recordkeeping below.
3. The amount of VOC-containing print materials used in the Press Printer, EU 012-01C, shall not exceed 360,000 pounds per twelve (12) month rolling period.
4. The VOC content of any print material used in the Press Printer, EU 012-01C, shall not exceed 15.0%, by weight.
5. This Line 012 Press Printer is subject to all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart KK (National Emission Standards for the Printing and Publishing Industry).

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
3. The permit holder, owner and operator of the facility shall maintain records on the identification, the VOC content, and the HAP content of all coating materials used in the Press Printer, EU 012-01C.
4. The permit holder, owner and operator of the facility shall record the amount of coating materials used in the Press Printer, EU 012-01C, for each month and calculate the twelve-month rolling total used in the emission unit.
5. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 012, 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
6. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
 - b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.
7. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:

- a. The total emissions of VOC (tons) from Line 022; and
- b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

8. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
9. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).
10. This emission unit is subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart KK (National Emission Standards for the Printing and Publishing Industry).

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1

NESHAP

These emission units are subject to 40 CFR Subpart KK – National Emission Standards for the Printing and Publishing Industry. As per 40 CFR §63.821(b), should the facility comply with the criteria of paragraphs of 40 CFR §63.821(b)(1) or (b)(2) the facility would be subject only to the requirements of §§63.829(e) and 63.830(b)(1) of Subpart KK. See Appendix A for the web link to the rule.

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1
40 CFR 63 Subpart KK
567 IAC 23.1(4)"ak"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 39.25

Stack Opening, (inches, dia.): 15

Exhaust Flow Rate (scfm): 4,125

Exhaust Temperature (°F): 70

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-310-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Coating Line 012

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Coating Line 012

Table: Coating Line 012

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
012-1	012-1A	Primer Coater 1	NA	Coating	10.0 gal/hr	82-A-002-S6
	012-1B	Primer Dryer 1		Natural Gas	3.5 MMBtu/hr	
012-2	012-2	Extruder Laminator 1	NA	Polyethylene resin	1,320 lbs/hr	97-A-603-S3
012-3	012-3	Primer Coater & Dryer 2	NA	Primer/ Natural Gas	3.5 MMBtu/hr	97-A-604-S3
012-4	012-4	Extruder Laminator 2	NA	Polyethylene resin	1,278 lbs/hr	97-A-605-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 012
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 012
567 IAC 23.3(2) "a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 776.0 tpy ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit in Table: Coating Line 012

⁽²⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permit.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

All units:

Process throughput:

1. Total VOC emissions for Lines 012, 014, and 016 shall be calculated and recorded as required in the Reporting and Recordkeeping below.
2. This emission unit is subject all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating).
3. The facility may choose to include the emission units subject to Subpart JJJJ in the operating limits of NESHAP Subpart KK (National Emission Standards for the Printing and Publishing Industry) as per 40 CFR §63.3300(b).

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 012

EU 012-1B and 012-3 only

1. The fuel used in the emission units, Primer Dryer 1 and Primer Dryer 2, shall be limited to natural gas only.

Authority for Requirement: Iowa DNR Construction Permit 82-A-002-S6 & 97-A-604-S3

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
3. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 012, 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
4. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
 - b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.
5. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:

- a. The total emissions of VOC (tons) from Line 022; and
- b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

6. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
7. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).
8. The Line 12 Primer & Dryer are subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating).
9. The facility may choose to include the emission units subject to Subpart JJJJ in the applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart KK (National Emission Standards for the Printing and Publishing Industry).

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 012

NESHAP

These emission units are subject to 40 CFR Subpart KK – National Emission Standards for the Printing and Publishing Industry. As per 40 CFR §63.821(b), should the facility comply with the criteria of paragraphs of 40 CFR §63.821(b)(1) or (b)(2) the facility would be subject only to the requirements of §§63.829(e) and 63.830(b)(1) of Subpart KK. See Appendix A for the web link to the rule.

Authority for Requirement: Iowa DNR Construction Permits in Table: Coating Line 012
40 CFR 63 Subpart KK
567 IAC 23.1(4)"ak"

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
012-1	33	24	2,000	120	Vertical Obstructed	82-A-002-S6
012-2	41	24	5,000	100	Vertical Unobstructed	97-A-603-S3
012-3	33	20	2,000	120	Vertical Unobstructed	97-A-604-S3
012-4	49	24	5,000	100	Vertical Unobstructed	97-A-605-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Print Treaters Line 012

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Print Treaters Line 012

Table: Print Treaters Line 012

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
012-5a	012-5-1a	Infeed Corona Treater	NA	Electricity	7.5 kW	13-A-364
	012-5-1b	Infeed Corona Treater		Electricity	7.5 kW	
012-5b	012-5-2	Extruder #1 Treater		Electricity	7.5 kW	13-A-365
012-5c	012-5-3	Extruder #2 Treater		Electricity	7.5 kW	13-A-366-S1
	012-5-4	Rewind Treater		Electricity	10 kW	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission point shall not exceed the levels specified below.

Emission Point	Emission Unit	Opacity	Particulate Matter	Ozone	Authority for Requirement
012-5a	012-5-1a	40% ⁽¹⁾	0.1 gr/dscf	0.6 lb/hr	13-A-364
	012-5-1b				
012-5b	012-5-2			0.3 lb/hr	13-A-365
012-5c	012-5-3			0.7 lb/hr	13-A-366-S1
	012-5-4				

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

None at this time

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
012-5a	33	8	720	85	Vertical obstructed	13-A-364
012-5b	33	8	720	85	Vertical obstructed	13-A-365
012-5c	33	8	720	85	Vertical obstructed	13-A-366-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 014-1

Associated Equipment

Associated Emission Unit ID Numbers: 014-1

Emission Unit vented through this Emission Point: 014-1

Emission Unit Description: 014 Print Treater

Raw Material/Fuel: Electricity

Rated Capacity: 5 kW/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission unit at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NESHAP

This emission unit is subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for the web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Line 014 Dryers

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Line 014 Dryers

Table: Line 014 Dryers

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
014-3C	014-3C	Line 014, Dryer 1, Zone 3	None	Natural Gas	2.5 MMBtu/hr	97-A-675-S2
014-5C	014-5C	Line 014 Dryer 2, Zone 3	None	Natural Gas	2.5 MMBtu/hr	97-A-676-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits in Table: Line 014 Dryers
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits in Table: Line 014 Dryers
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 776.0 tpy ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits in Table: Line 014 Dryers

⁽²⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permits.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The dryers (Dryer 1 and Dryer 2) are limited to firing on natural gas only.
2. VOC emissions shall be calculated and recorded as required in the reporting and recordkeeping section below.
3. Compliance shall be demonstrated for NESHAP Subpart JJJJ as per 40 CFR §63.3370.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014 & 016 and their respective VOC content (in applicable units).
3. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
4. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
 - b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.

Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

5. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 022; and
 - b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

6. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the

VOC content is received from the recovery company.

7. The facility shall record the compliance option and emission limit of NESHAP Subpart JJJJ the emission units are demonstrating compliance with. The facility shall follow the requirements of the applicable subpart.
8. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).

Authority for Requirement: Iowa DNR Construction Permits in Table: Line 014 Dryers

NESHAP

These emission units are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for the web link to the rule.

Authority for Requirement: Iowa DNR Construction Permits in Table: Line 014 Dryers
 40 CFR 63 Subpart JJJJ
 567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
014-3C	53	42	9060	185	Vertical obstructed	97-A-675-S2
014-5C	53	42	11,400	160	Vertical obstructed	97-A-676-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 014-6

Associated Equipment

Associated Emission Unit ID Numbers: 014-6

Emission Unit vented through this Emission Point: 014-6
Emission Unit Description: Mixing Area for Silicon Coatings
Raw Material/Fuel: Silicone coatings
Rated Capacity: 6.54 lb/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 776.0 tpy⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 15-A-322

⁽¹⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permits.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. VOC emissions shall be calculated and recorded as required below.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
3. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
4. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:

- a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
- b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.

Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

5. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 022; and
 - b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

6. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
7. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).

Authority for Requirement: Iowa DNR Construction Permit 15-A-322

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 70

Exhaust Flow Rate (scfm): 20,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 15-A-322

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 014/016

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Coating Line 014/016

Table: Coating Line 014/016

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
014/016	014-2	014 Coating Booth Floor Sweep	CE 014/016: Thermal Oxidizer	Silicone Coatings	1,000 lb/hr	82-A-003-S6
	014-3a	014 Silicone Coating Dryer 1, Zone 1		Natural Gas	2.5 MMBtu/hr	
	014-3b	014 Silicone Coating Dryer 1, Zone 2		Natural Gas	2.5 MMBtu/hr	
	014-5a	014 Silicone Coating Dryer 2, Zone 1		Natural Gas	2.5 MMBtu/hr	
	014-5b	014 Silicone Coating Dryer 2, Zone 2		Natural Gas	2.5 MMBtu/hr	
	016-2	016 Coater Floor Sweep		Silicone Coatings	1,000 lb/hr	
	016-3a	016 Silicone Coating Dryer, Zone 1		Natural Gas	1.2 MMBtu/hr	
	016-3b	016 Silicone Coating Dryer, Zone 2		Natural Gas	1.2 MMBtu/hr	
	016-3c	016 Silicone Coating Dryer, Zone 3		Natural Gas	1.2 MMBtu/hr	
	022-2	Rod Coating Head		Silicone Coatings	600 lb/hr	
	022-3	Arch Type Dryer Oven		Natural Gas	1.2 MMBtu/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 82-A-003-S6
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 82-A-003-S6
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 776.0 tpy ⁽²⁾⁽³⁾
Authority for Requirement: Iowa DNR Construction Permit 82-A-003-S6

⁽²⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permits.

⁽³⁾ For those units (i.e., Line 22) subject to NSPS Subpart RR, VOC emissions shall be limited per 40 CFR §60.442. Compliance shall be demonstrated per NSPS Subpart RR.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. These emission units are limited to firing on natural gas only.
2. VOC emissions shall be calculated and recorded as required in the reporting and recordkeeping section below.
3. The bypass of the thermal oxidizer may only occur in emergency situations (when the VOC concentration within the thermal oxidizer is approaching explosive conditions) or non-solvent coatings are being utilized by the subject line(s).
4. The thermal oxidizer shall be operated such that a minimum of 95% organic HAP destruction efficiency is achieved.
5. The minimum combustion temperature for the oxidizer, as determined on a rolling 3-hour average, shall not fall below the average combustion temperature established during the most recent performance test conducted per 40 CFR §63.3360(e)(3)(ii) that demonstrated compliance with the emission limits of the Emission Limits Section above.
6. The minimum oxidizing chamber temperature shall be 1200°F.
7. The facility shall meet the compliance standards for VOCs as per NSPS Subpart RR as per 40 CFR §60.442.
8. The facility shall meet the emission standards for HAPs as per NESHAP Subpart JJJJ as per 40 CFR §63.3320.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).

3. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 012, 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
4. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
 - b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.

Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

5. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 022; and
 - b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

6. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
7. The owner or operator shall install, calibrate, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months or the chart recorder, data logger, or temperature indicator must be replaced. You must replace the equipment whether you choose not to perform the calibration or the equipment cannot be calibrated properly.
8. The owner or operator shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the thermal oxidizer. The monitoring device shall have an accuracy of +/- 0.75 percent of the temperature being measured expressed in degree Celsius. [Most stringent requirement of 40 CFR Part 60 Subpart RR & 40 CFR Part 63 Subpart JJJJ]
9. The owner or operator shall submit quarterly reports of exceedances of the VOC emission limits. If no such exceedances occur during a particular quarter, a report stating this shall be submitted semiannually.
10. The owner or operator shall maintain a record of each calendar month showing all coatings used in Line 22 and the results of the reference test method specified in §60.446(a) or the manufacturer's formulation data used for determining the VOC content of those coatings.

11. The facility shall record the reasons for bypass and the hours of uncontrolled emissions on a rolling twelve-month basis for each month of operation.
12. The owner or operator must monitor bypasses of the thermal oxidizer and the mass of each coating material applied at the work station during any such bypass. The bypass monitoring must be conducted using one of the following means (as described in § 63.3350(c)1-4:
 - a. Flow control position indicator.
 - b. Car-seal or lock and key valve closures.
 - c. Valve closure continuous monitoring.
 - d. Automatic shutdown system
13. The facility shall record the compliance option and emission limit of NESHAP Subpart JJJJ the emission units are demonstrating compliance with. The facility shall follow the compliance demonstration requirements of the applicable subpart.
14. The owner or operator shall develop a site-specific monitoring plan containing the following information:
 - a. The identity of the operating parameter to be monitored to ensure the capture efficiency determined during the initial compliance test (as required by permit no. 82-A-003-S5) is maintained.
 - b. An explanation regarding why the chosen parameter is appropriate for demonstrating ongoing compliance.
 - c. Identify the specific monitoring procedures.
 - d. The monitoring plan must specify the operating parameter value or range of values that demonstrate compliance with the emission standards stipulated in §63.3320. The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and maintained.
 - e. The owner or operator must conduct all capture system monitoring in accordance with the plan.
 - f. Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit.
15. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).

Authority for Requirement: Iowa DNR Construction Permits 82-A-003-S6

NSPS (EU 022-2 and EU 022-3 only)

These emission units shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR. See Appendix A for a web link to the rule.

Authority for Requirement: Iowa DNR Construction Permits 82-A-003-S6

40 CFR Part 60 Subpart RR

567 IAC 23.1(2)"qq"

NESHAP

These emission units are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: Iowa DNR Construction Permits 82-A-003-S6
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
014/016	60	72	53,000	700	Vertical Unobstructed	82-A-003-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required?* Yes No

* Compliance with 40 CFR 63 Subpart JJJJ requirements constitutes compliance demonstration. Therefore no CAM plan is needed for these units at this time.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 022-3 (bypass)

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Coating and Dryer Bypass Line 022

Table: Coating and Dryer Bypass Line 022

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
022-3	022-2	Rod Coating Head	None: Bypass stack	Silicone Coatings	600 lb/hr	11-A-482-S2
	022-3	Arch Type Dryer Oven		Natural Gas	1.2 MMBtu/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-482-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf; 1.3 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 11-A-482-S2
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 39.0 tpy⁽²⁾⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-482-S2

⁽²⁾ Limit applies to the total emissions from Line 22 (controlled and uncontrolled). This emission limit includes VOCs from any solvents or other chemicals used on Line 22.

⁽³⁾ Line 22 is subject to NSPS Subpart RR, VOC emissions shall be limited per 40 CFR §60.442. Compliance shall be demonstrated per NSPS Subpart RR.

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. These emission units are limited to firing on natural gas only.
2. The owner or operator shall calculate and update monthly the 12-month rolling VOC emission totals from Lines 012, 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
 - a. The owner or operator shall maintain a daily log of all materials, as applied, used in Line 022 and their respective VOC content (in applicable units).
 - b. The owner or operator shall maintain a monthly log of all materials, as applied, used in Line 022 and their respective VOC content (in applicable units).
3. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 022; and
 - b. The rolling 365-day total amount of VOC emissions from Line 022.
4. Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.
 - a. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
5. The bypass of the thermal oxidizer may only occur in emergency situation (when the VOC concentration within the thermal oxidizer is approaching explosive conditions) or non-solvent coatings are being utilized by the subject line(s).
 - a. The owner or operator must monitor bypasses of the thermal oxidizer and the mass of each coating material applied at the work station during any such bypass. The bypass monitoring must be conducted using one of the following means (as described in § 63.3350(c)1-4):
 - i. Flow control position indicator.
 - ii. Car-seal or lock and key valve closures.
 - iii. Valve closure continuous monitoring.
 - iv. Automatic shutdown system.
6. The facility shall meet the emission standards for HAPs as per NESHAP Subpart JJJJ as per 40 CFR §63.3320.

- a. The facility shall record the compliance option and emission limit of NESHAP Subpart JJJJ these emission units are using to demonstrate compliance with this subpart.
 - b. The facility shall follow the compliance demonstration requirements of the applicable subpart.
7. The facility shall meet the compliance standards for VOCs as per NSPS Subpart RR as per 40 CFR §60.442.
- a. The facility shall record the compliance option and emission limit of NSPS Subpart RR these emission units (Line 22) are using to demonstrate compliance with this subpart.
 - b. The facility shall follow the compliance demonstration requirements of the applicable subpart.
8. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).

Authority for Requirement: Iowa DNR Construction Permit 11-A-482-S2

NSPS

These emission units shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

These emission units are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: Iowa DNR Construction Permit 11-A-482-S2
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
022-3	41.3	18 x 27	15,500	70	Vertical Unobstructed	11-A-482-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values

stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 022-1

Associated Equipment

Associated Emission Unit ID Numbers: 022-1

Emission Unit vented through this Emission Point: 022-1

Emission Unit Description: Mixing Room

Raw Material/Fuel: Silicone Coatings

Rated Capacity: 700.00 lb/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 11-A-480
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 11-A-480
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 34

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 8,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-480

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 022-4

Associated Equipment

Associated Emission Unit ID Numbers: 022-4

Emission Unit vented through this Emission Point: 022-4

Emission Unit Description: Line 22 Corona Treater

Raw Material/Fuel: Electricity

Rated Capacity: 4.5 kW

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Ozone

Emission Limit(s): 0.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 11-A-481-S1
567 IAC 23.3(2)"d"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

This emission unit shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

This emission unit is subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35.3

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 1,050

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-481-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 015-1

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Dryer Line 015

Table: Dryer Line 015

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
015-1A	Dryer	Natural Gas	2 MMBtu/hr	14-A-664
015-1B	Ink Application	Ink	137 lb/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

BACT Emission Limits

Pollutant	Tons/Yr	Additional Limits
Particulate Matter (PM)	NA	Natural gas fired only
Sulfur Dioxide (SO ₂)	NA	Natural gas fired only
Nitrogen Oxides (NO _x)	NA	Natural gas fired only
Volatile Organic Compounds	NA	Natural gas fired only ⁽¹⁾
Carbon Monoxide (CO)	NA	Natural gas fired only

⁽¹⁾ The facility is limited to using inks with a maximum VOC content of 17%, by weight, on Line 15.

Authority for Requirement: Iowa DNR Construction Permit: 14-A-664

Pollutant: Opacity

Emission Limit(s): 40 %⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 14-A-664
567 IAC 23.3(2)"d"

⁽²⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 1.07 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 14-A-664

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 14-A-664
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 14-A-664
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The facility is limited to applying a maximum of 35,000 pounds of VOC-containing ink per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 14-A-664

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The facility shall maintain records on the identification, the VOC content and the total HAP content of each ink applied in this emissions unit, EU 15-1b.
2. The facility shall monthly record the amount of VOC-containing ink applied in this emission unit, EU 15-1b, (in pounds) and calculate the rolling 12-month total amount of VOC-containing ink applied in this emission unit, EU 15-1b, (in pounds).
3. The permittee shall maintain an MSDS of all materials used in this emission unit, EU-15-1b, showing the VOC and HAP content.
4. Recordkeeping for NESHAP Subpart KK shall be done per 40 CFR §63.829 and reporting for NESHAP Subpart KK shall be done per 40 CFR §63.830.

Authority for Requirement: Iowa DNR Construction Permit 14-A-664
567 IAC 22.108(4)

NESHAP

These emission units are subject to 40 CFR Subpart KK – National Emission Standards for the Printing and Publishing Industry. As per 40 CFR §63.821(b), should the facility comply with the criteria of paragraphs of 40 CFR §63.821(b)(1) or (b)(2) the facility would be subject only to the requirements of §§63.829(e) and 63.830(b)(1) of Subpart KK. See Appendix A for the web link to the rule.

Authority for Requirement: Iowa DNR Construction Permit 14-A-664
40 CFR 63 Subpart KK
567 IAC 23.1(4)"ak"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 26

Exhaust Flow Rate (scfm): 12,500

Exhaust Temperature (°F): 250

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 14-A-664

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 015-2

Associated Equipment

Associated Emission Unit ID Numbers: 015-2

Emission Unit vented through this Emission Point: 015-2

Emission Unit Description: 015 Mix Booth

Raw Material/Fuel: Ink

Rated Capacity: 137 lb/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 016-1

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Corona and Flame Treaters Line 016

Table: Corona and Flame Treaters Line 016

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
016-1A	Corona Treater	NA	Electric Current	5 kW/hr	14-A-665-S2
016-1B	Flame Treater		Natural Gas	0.5 MMBtu/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 14-A-665-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 14-A-665-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 14-A-665-S2
567 IAC 23.3(3)"e"

Pollutant: Ozone

Emission Limit(s): 0.6 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 14-A-665-S2
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NESHAP

This emission unit is subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. Please see Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ

567 IAC 23.1(4)"cj"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33

Stack Opening, (inches, dia.): 16

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 14-A-665-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 016-4

Associated Equipment

Associated Emission Unit ID Numbers: 016-4

Emission Unit vented through this Emission Point: 016-4

Emission Unit Description: Line 16, Mixing Booth

Raw Material/Fuel: Coatings

Rated Capacity: 0.81 lb/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 776.0 tpy ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 15-A-323

⁽¹⁾ 737 Tons per year presents the combined VOC limit for Lines 012, 014, and 016. 39 tons per year represents the VOC limit for Line 22 (Limit applies to the total emissions from Line 22 - controlled and uncontrolled). The emission limits are based upon the operating limits established in Section 14 of the construction permit.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. VOC emissions shall be calculated and recorded as required below.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A daily log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
2. A monthly log of all materials, as applied, used in Lines 012, 014, 016, and 022 and their respective VOC content (in applicable units).
3. Calculate and update monthly the 12-month rolling VOC emission totals from Lines 014, 016, and 022 operations (the emission associated with the operations of Line 22 shall be calculated separately from those of Line 012, 014 and 016). The VOC emissions shall be determined from the amount of material introduced to the emission units, taking into account emissions generated during the use of the bypass stack and the oxidizer destruction efficiency as demonstrated by stack test.
4. If the rolling, 12-month total VOC emissions from Line 012, 014 and 016 exceeds 589.6 tons per 12-month rolling period, the facility shall maintain the following daily records:

- a. The total emissions of VOC (tons) from Line 012, 014 and 016; and
- b. The rolling 365-day total amount of VOC emissions from Line 012, 014 and 016.

Daily recordkeeping/calculations for VOC emissions from Line 012, 014 and 016 shall continue until the rolling 12-month total amount of VOC emissions drops below 589.6 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

5. If the rolling, 12-month total VOC emissions from Line 022 exceeds 31.2 tons per 12-month rolling period, the facility shall maintain the following daily records:
 - a. The total emissions of VOC (tons) from Line 022; and
 - b. The rolling 365-day total amount of VOC emissions from Line 022.

Daily recordkeeping/calculations for VOC emissions from Line 022 shall continue until the rolling 12-month total amount of VOC emissions drops below 31.2 tons on the last day of a month. Monthly calculation of VOC emissions will then begin in the following month.

6. The owner or operator may take credit for any waste VOC used in Lines 012, 014, 016, and 022 shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and maintain a record from the recovery company that documents the VOC content of the waste. The credit may be subtracted from the VOC rolling totals as of the date the VOC content is received from the recovery company.
7. A copy of the Material Safety Data Sheet (MSDS) or equivalent, which clearly shows the VOC content for each material used in the emission units (i.e., Line 012, 014, 016 and 022).

Authority for Requirement: Iowa DNR Construction Permit 15-A-323

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 42

Exhaust Flow Rate (scfm): 20,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 15-A-323

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Equipment Associated with Line 17

Equipment Associated

Associated Emission Unit ID Numbers: See Table: Equipment Associated with Line 17

Table: Equipment Associated with Line 17

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
017-1	017-1	Corona Treater	NA	Electricity	15.0 kW/hr	09-A-358-P2
017-2 017-BP	017-2	Coater Floor Sweep	CE 017: Thermal Oxidizer (EP 017-2 Only)	Silicone Coatings	720 lb/hr	09-A-359-P2 09-A-360-P2
	017-3a	Silicone Coating Dryer, Zone 1		Silicone Coatings ⁽¹⁾	720 lb/hr	
	017-3b	Silicone Coating Dryer, Zone 2		Silicone Coatings ⁽¹⁾	720 lb/hr	
017-3	017-3c	Silicone Coating Dryer, Zone 3	NA	Silicone Coatings ⁽¹⁾	720 lb/hr	09-A-361-P2
017-4	017-3d	Silicone Coating Dryer, Zone 4	NA	Silicone Coatings ⁽¹⁾	720 lb/hr	09-A-362-P3
017-5	017-4	Mix Booth	NA	Silicone Coatings	720 lb/hr	09-A-363-P3

⁽¹⁾ Dryers use recirculated heat from CE 017 or radiant heat from heated oil from EU 017-5

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

BACT Emission Limits

Pollutant	Tons/Yr	Additional Limits
Particulate Matter (PM)	NA	Natural gas fired only
Sulfur Dioxide (SO ₂)	NA	Natural gas fired only
Nitrogen Oxides (NO _x)	NA	Natural gas fired only
Carbon Monoxide (CO)	NA	Natural gas fired only

Authority for Requirement: Iowa DNR Construction Permit: 09-A-359-P2

Pollutant: Volatile Organic Compounds (VOC)

BACT Emission Limit(s): 98.2 tpy ⁽²⁾⁽³⁾

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 17
40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

⁽²⁾ Limit is a total for all emission points on Line 17. The emission points are EPs 017-1, 017-2, 017-bypass, 017-3, 017-4 and 017-5.

- (3) The owner/operator shall comply with the following BACT emission standards:
- (a) 0.20 kg VOC/kg of coating solids applied, or less, as calculated on a weighted average basis for each calendar month; or,
 - (b) a 90% overall VOC emission reduction, or greater as calculated over each calendar month (or a lesser overall reduction as allowed by 40 CFR §60.442(a)(2)(ii).
 - (c) the percent overall VOC emission reduction specified in §60.443(b) as calculated over a calendar month.

Pollutant: HAP emissions

Emission Limit(s): Organic HAP emissions shall be limited per NESHAP Subpart JJJJ (National Emission Standards for the Printing and Publishing Industry (40 CFR §63.820 – 40 CFR §63.839).

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 17
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

EP 017-2 Only

1. The owner/operator shall maintain records that have sufficient information to verify compliance (or noncompliance) with the BACT emission standards for the combustion units (thermal oxidizer and auxiliary heater).
2. The thermal oxidizer shall fire only natural gas.
3. Compliance shall be demonstrated for NESHAP Subpart JJJJ per 40 CFR §63.3370.

Authority for Requirement: Iowa DNR Construction Permit 09-A-359-P2

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. All necessary records to demonstrate compliance with NSPS Subpart RR.
2. Monitoring and recordkeeping for NSPS Subpart RR shall be done per 40 CFR §60.445.
3. Monitoring for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3350.
4. Recordkeeping for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3400 and 40 CFR §63.3410.

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 17

NSPS

These emission units shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

All of the emission units in this line except EP 017-5 are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
017-1	33	8 x 8	2,200	70	Vertical unobstructed	09-A-358-P2
017-2	40	42.25	17,400	790	Vertical unobstructed	09-A-359-P2
017-BP	35	24	16,400	180	Downward	09-A-360-P2
017-3	35	24 x 27	7,800	320	Vertical unobstructed	09-A-361-P2
017-4	35	19	13,800	150	Vertical unobstructed	09-A-362-P3
017-5	35	36	16,000	70	Vertical unobstructed	09-A-363-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required?* Yes No

* Compliance with 40 CFR 63 Subpart JJJJ requirements constitutes compliance demonstration. Therefore no CAM plan is needed for these units at this time.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Boilers Line 17 and 18

Equipment Associated

Associated Emission Unit ID Numbers: See Table: Boilers Line 17 and 18

Table: Boilers Line 17 and 18

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
017-6	017-5	Auxiliary Heater	NA	Natural Gas	10.57 MMBtu/hr	14-A-666
018-6	018-5	Auxiliary Heater	NA	Natural Gas	10.7 MMBtu/hr	14-A-667

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

BACT Emission Limits

Pollutant	Tons/Yr	Additional Limits
Particulate Matter (PM)	NA	Natural gas fired only
Sulfur Dioxide (SO ₂)	NA	Natural gas fired only
Nitrogen Oxides (NO _x)	NA	Natural gas fired only
Carbon Monoxide (CO)	NA	Natural gas fired only

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 98.2 tons/yr⁽¹⁾ and 49.2 tons/yr⁽²⁾

Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18

⁽¹⁾ This limit applies to the combustion sources associated with Line 17 (i.e., auxiliary heater (EP 17-6) & thermal incinerator).

⁽²⁾ This limit applies to the combustion sources associated with Line 18 (i.e., auxiliary heater (EP 18-6) & thermal incinerator).

Pollutant: Opacity

Emission Limit(s): 40%⁽³⁾

Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18
567 IAC 23.3(2)"d"

⁽³⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18
567 IAC 23.3(2)"b"

Pollutant: Particulate Matter (each unit)
Emission Limit(s): 0.2 lb/hr
Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18
567 IAC 23.3(2)"b"

Pollutant: Particulate Matter <10µm (each unit)
Emission Limit(s): 0.2 lb/hr
Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput:

1. The auxiliary heaters shall fire only natural gas.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

None at this time

Authority for Requirement: See Construction Permit Listed in Table: Boilers Line 17 and 18

NESHAP

Emission units EU-017-5 and EU-018-5, are subject to 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
017-6	40	20	6,800	505	Vertical unobstructed	14-A-666
018-6	22	20	6,800	510	Vertical obstructed	14-A-667

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Equipment Associated with Line 18

Equipment Associated

Associated Emission Unit ID Numbers: See Table: Equipment Associated with Line 18

Table: Equipment Associated with Line 18

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
018-1	018-1	Corona Treater	NA	Electricity	15.0 kW/hr	09-A-364-P2
018-2 018-BP	018-2	018 Coater Floor Sweep	CE 018: Thermal Oxidizer (EP 018-2 Only)	Silicone Coatings	720 lb/hr	09-A-365-P2
	018-3a	018 Silicone Coating Dryer, Zone 1		Silicone Coatings ⁽¹⁾	720 lb/hr	
	018-3b	018 Silicone Coating Dryer, Zone 2		Silicone Coatings ⁽¹⁾	720 lb/hr	
018-3	018-3c	018 Silicone Coating Dryer, Zone 3	NA	Silicone Coatings ⁽¹⁾	720 lb/hr	09-A-367-P2
018-4	018-4c	018 Silicone Coating Dryer, Zone 4	NA	Silicone Coatings ⁽¹⁾	720 lb/hr	09-A-368-P2
018-5	018-4	018 Mix Booth	NA	Silicone Coatings	720 lb/hr	09-A-369-P2

⁽¹⁾ Dryers use recirculated heat from CE 017 or radiant heat from heated oil from EU 017-5

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

BACT Emission Limits

Pollutant	Tons/Yr	Additional Limits
Particulate Matter (PM)	NA	Natural gas fired only
Sulfur Dioxide (SO ₂)	NA	Natural gas fired only
Nitrogen Oxides (NO _x)	NA	Natural gas fired only
Carbon Monoxide (CO)	NA	Natural gas fired only

Authority for Requirement: Iowa DNR Construction Permit: 09-A-365-P2

Pollutant: Volatile Organic Compounds (VOC)

BACT Emission Limit(s): 49.2 tpy⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 18
40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

(1) The owner/operator may select BACT CONTROL OPTION 1, CONTROL OPTION 2, or CONTROL OPTION 3:

- CONTROL OPTION 1
0.20 g VOC/kg of coating solids applied, as calculated on a calendar month, weighted average, basis.
- CONTROL OPTION 2
 - The installation of a total enclosure (see note below) on the application/flashoff area; and
 - The ventilation of all VOC emissions from the total enclosure and the drying oven(s) to a thermal incinerator that has a VOC destruction efficiency of at least 98% (3-hr average).
- CONTROL OPTION 3
The owner or operator shall meet a minimum of a 98% reduction (3-hr average) based on the total VOC inlet rate to the emission units on Line 18 and the outlet VOC emissions measured at each stack associated with Line 18.

(2) The control of VOC emissions from the coating mix preparation equipment shall be achieved through the use of a cover on each piece of affected coating mix preparation equipment at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspections when such activities cannot be carried out with the cover(s) in place. Such activities shall be carried out through ports of the minimum practical size. Each cover shall meet the following requirements, unless otherwise subsequently revised or eliminated by the PSD implementing agency:

- The cover shall extend at least two (2) centimeters (cm) beyond the outer rim of the opening or shall be attached to the rim;
- The cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter of the opening; and,
- Any breach in the cover (i.e. a slit for insertion of a mixer shaft or a port for the addition of ingredients) shall be covered when not actively in use.

NOTES:

- Total enclosure means a permanent rigid or semi-rigid structure that completely surrounds and isolates the points of emission of airborne VOC from a coating operation and that meets the other requirements.
- Coating mix preparation equipment means mixing vessels used in the preparation of the coating formulation to be used at the subject coating line.

(3) Limit is a total for all emission points on Line 18. The emission points are EPs 018-1, 018-2, 018-bypass, 018-3, 018-4 and 018-5.

(4) Per 40 CFR §60.442, the owner or operator shall:

- (a) Cause the discharge into the atmosphere from an affected facility not more than 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for each calendar month; or,
- (b) A 90% overall VOC emission reduction as calculated over a calendar month or
- (c) The percent overall VOC emission reduction specified in §60.443(b) as calculated over a calendar month.

Pollutant: HAP emissions

Emission Limit(s): Organic HAP emissions shall be limited per NESHAP Subpart JJJJ National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating; 40 CFR §63.3280 – 40 CFR §63.3420).

Authority for Requirement: Iowa DNR Construction Permit: 09-A-366-P2
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

1. CONTROL OPTION 1 from BACT Conditions listed above shall only be used if the owner or operator is using a compliant coating as the method of control of VOC emissions from the coating line.
2. If the owner or operator decides to demonstrate compliance with CONTROL OPTION 1, all applicable requirements (i.e. test procedures, monitoring, recordkeeping, reporting, etc.) of 40 CFR Part 60, Subpart RR, must be met by the owner or operator of the coating line unless more stringent requirements are herein established; in which case, the more stringent requirement(s) shall apply for the purposes of the DNR PSD permits.
3. If the owner or operator decides to demonstrate compliance with CONTROL OPTION 2, the total enclosure shall meet the following specifications:
 - a. During the operation of the coating line, the only openings in the total enclosure shall be those needed to allow entry and exit of the substrate (i.e. the material to which the coating is applied), exhaust ducts, and forced make-up air inlets. All access doors and all windows shall be closed during the operation of the coating operation.
 - b. The owner or operator may demonstrate compliance with the total enclosure requirement of this permit by satisfying the provisions of either (a) or (b):
 - i. By demonstrating the enclosure meets all of the following specifications:
 - The width of each web slot does not exceed 1.15 times the width of the widest substrate processed at the facility.
 - The height of each web slot does not exceed the thickness of the thickest coated substrate processed at the facility by more than 12 centimeters (cm).
 - All sources of emissions within the enclosure are a minimum of one equivalent diameter (i.e. four times the area of a rectangular duct or opening divided by its perimeter) away from all web slots.
 - All web slots are a minimum of four duct diameters (equivalent diameters for rectangular ducts) away from the nearest forced make-up air duct or exhaust duct.
 - The average inward face velocity across all web slots (as determined using procedures set forth by the EPA regional office) is a minimum of 3,600 meters per hour (1.0 meter per second).
 - ii. By demonstrating to the satisfaction of the EPA regional office by other means that all VOC emissions from the affected coating operation are contained and vented to the thermal incinerator.

4. If the owner or operator decides to demonstrate compliance with CONTROL OPTION 2, the facility shall be required to vent all VOC emissions from the process line (i.e., including VOC emissions from the drying ovens) to the thermal incinerator; requiring the owner or operator to obtain a Construction Permit Modification.
5. All requirements of NSPS Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §63.19) and Subpart RR (Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations; 40 CFR §60.440 – 40 CFR §60.447) remain applicable to the production line. Nothing within permit 09-A-365-P1 shall affect the owner or operator's obligation to comply with all requirements of NSPS Subparts A or RR.
6. Compliance shall be demonstrated for NESHAP Subpart JJJJ per 40 CFR §63.3370.
7. The facility shall record the CONTROL OPTION, found in the BACT Conditions listed above, that it is using to meet the emission limits of this permit.

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 18

EP-018-2 Only

8. The owner/operator shall maintain records which have sufficient information to verify compliance (or noncompliance) with the BACT emission standards for the combustion units.
9. The thermal oxidizer and dryers shall fire only natural gas.⁽⁵⁾

⁽⁵⁾ Includes the dryers/ovens associated with the silicone release coating operation. Also, the associated heaters and the make-up air units.

Authority for Requirement: Iowa DNR Construction Permit: 09-A-365-P2

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. All necessary records to demonstrate compliance with NSPS Subpart RR.
2. Monitoring and recordkeeping for NSPS Subpart RR shall be done per 40 CFR §60.445.
3. Monitoring for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3350.
4. Recordkeeping for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3400 and 40 CFR §63.3410.
5. If the owner or operator plans to switch from one CONTROL OPTION to another CONTROL OPTION found in the BACT Conditions listed above, the owner/operator must provide the Department with written notice 30-days before the switch to the other CONTROL OPTION.

Authority for Requirement: See Construction Permit Listed in Table: Equipment Associated with Line 18

EP-018-2 Only

6. The owner or operator shall maintain records and submit quarterly reports documenting all 3-hour periods (during actual coating operations) during which the average combustion temperature of the control device is more than 28 Celsius degrees below the average combustion temperature of the control device during the most recent performance test that demonstrated compliance.

7. The owner or operator shall maintain records and submit quarterly reports documenting all periods during actual mixing or coating operations when the control device was malfunctioning or not operating.

Authority for Requirement: Iowa DNR Construction Permit: 09-A-365-P2

Continuous Emission Monitoring

If the owner or operator elects to demonstrate initial compliance with CONTROL OPTION 2 or CONTROL OPTION 3 in the BACT Conditions listed above; the owner or operator shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the solvent destruction device's exhaust gases.

The monitoring device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$. The monitoring device shall be maintained and calibrated according to the manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit: 09-A-365-P2

NSPS

These emission units shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

All of the emission units in this line except EP 018-5 are subject to 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
018-1	15	8	900	70	Horizontal	09-A-364-P2
018-2	40	45	13,800	150	Vertical unobstructed	09-A-365-P2
018-3	35	19.5 x 28.5	6,300	265	Vertical unobstructed	09-A-367-P2
018-4	35	19.5 x 28.5	7,000	320	Vertical unobstructed	09-A-368-P2
018-5	35	36	16,700	70	Horizontal	09-A-369-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required?* Yes No

* Compliance with 40 CFR 63 Subpart JJJJ requirements constitutes compliance demonstration. Therefore no CAM plan is needed for these units at this time.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-018-BP

Equipment Associated

Associated Emission Unit ID Numbers: See Table: Equipment Associated with Line 18 Bypass

Table: Equipment Associated with Line 18 Bypass

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
018-BP	018-2	018 Coater Floor Sweep	CE 018: Thermal Oxidizer	Silicone Coatings	720 lb/hr	09-A-366-P2
	018-3a	018 Silicone Coating Dryer, Zone 1		Silicone Coatings ⁽¹⁾	720 lb/hr	
	018-3b	018 Silicone Coating Dryer, Zone 2		Silicone Coatings ⁽¹⁾	720 lb/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

BACT Emission Limit(s): 49.2 tpy ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit: 09-A-366-P2
 40 CFR Part 60 Subpart RR
 567 IAC 23.1(2)"qq"

⁽¹⁾ The owner/operator may select CONTROL OPTION 1, CONTROL OPTION 2, or CONTROL OPTION 3:

- CONTROL OPTION 1
 0.20 g VOC/kg of coating solids applied, as calculated on a calendar month, weighted average, basis.
- CONTROL OPTION 2
 - The installation of a total enclosure (see note below) on the application/flashoff area; and
 - The ventilation of all VOC emissions from the total enclosure and the drying oven(s) to a thermal incinerator that has a VOC destruction efficiency of at least 98% (3-hr average).
- CONTROL OPTION 3
 The owner or operator shall meet a minimum of a 98% reduction (3-hr average) based on the total VOC inlet rate to the emission units on Line 18 and the outlet VOC emissions measured at each stack associated with Line 18.

⁽²⁾ The control of VOC emissions from the coating mix preparation equipment shall be achieved through the use of a cover on each piece of affected coating mix preparation equipment at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspections when such activities cannot be carried out with the cover(s) in place. Such activities shall be carried out through ports of the minimum practical size. Each cover shall meet the following requirements, unless otherwise subsequently revised or eliminated by the PSD

implementing agency:

- The cover shall extend at least two (2) centimeters (cm) beyond the outer rim of the opening or shall be attached to the rim;
- The cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter of the opening; and,
- Any breach in the cover (i.e. a slit for insertion of a mixer shaft or a port for the addition of ingredients) shall be covered when not actively in use.

NOTES:

- Total enclosure means a permanent rigid or semi-rigid structure that completely surrounds and isolates the points of emission of airborne VOC from a coating operation and that meets the other requirements.
 - Coating mix preparation equipment means mixing vessels used in the preparation of the coating formulation to be used at the subject coating line.
- (3) Limit is a total for all emission points on Line 18. The emission points are EPs 018-1, 018-2, 018-bypass, 018-3, 018-4 and 018-5.
- (4) Per 40 CFR §60.442, the owner or operator shall:
- (a) Cause the discharge into the atmosphere from an affected facility not more than 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for each calendar month; or,
 - (b) A 90% overall VOC emission reduction as calculated over a calendar month or
 - (c) The percent overall VOC emission reduction specified in §60.443(b) as calculated over a calendar month.

Pollutant: HAP emissions

Emission Limit(s): Organic HAP emissions shall be limited per NESHAP Subpart JJJJ National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating; 40 CFR §63.3280 – 40 CFR §63.3420).

Authority for Requirement: Iowa DNR Construction Permit: 09-A-366-P2
40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. All necessary records to demonstrate compliance with NSPS Subpart RR.
2. Monitoring and recordkeeping for NSPS Subpart RR shall be done per 40 CFR §60.445.
3. Monitoring for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3350.
4. Recordkeeping for NESHAP Subpart JJJJ shall be done per 40 CFR §63.3400 and 40 CFR §63.3410.

Authority for Requirement: Iowa DNR Construction Permit: 09-A-366-P2

NSPS

These emission units shall comply with all operational limits and requirements of 40 CFR Part 60 Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR Part 60 Subpart RR
567 IAC 23.1(2)"qq"

NESHAP

These emission units are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.16) and 40 CFR Part 63 Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating. For these units subject to the NESHAP Subpart JJJJ, organic HAP emissions shall be limited per 40 CFR 63.3320. The Facility is allowed to use VOC as a surrogate for organic HAP emissions per 40 CFR 63.3360. Compliance shall be demonstrated per 40 CFR 63.3370. See Appendix A for a web link to the rule.

Authority for Requirement: 40 CFR 63 Subpart JJJJ
567 IAC 23.1(4)"cj"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches)	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
018-BP	35	19	16,400	180	Vertical unobstructed	09-A-366-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 1T, 2T, 3T, 4T

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Storage Tanks

Table: Storage Tanks

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
1T	1T	Heptane Storage Tank	NA	Heptane	10,000 gallons	01-A-089
2T	2T	Isopropyl Alcohol Storage Tank	NA	Isopropyl Alcohol	10,000 gallons	01-A-090
3T	3T	Tolusol 40 Storage Tank	NA	Tolusol 40	15,000 gallons	01-A-091
4T	4T	Tolusol 40 Storage Tank	NA	Tolusol 40	15,000 gallons	01-A-092

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

None at this time.

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 12

Stack Opening, (inches, dia.): 2

Exhaust Flow Rate (scfm): Working Losses

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: See Construction Permit Listed in Table: Storage Tanks

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: C1 and C2

Associated Equipment

Associated Emission Unit ID Numbers: Paper Trimmers

Table: Paper Trimmers

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
C1	Paper Trimmer #1	CE-C1: Cyclone	Paper	154 lb/hr	82-A-005-S1
C2	Paper Trimmer #2	CE C2: Cyclone	Paper	2.18 lb/hr	85-A-058-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: See Construction Permit Listed in Table: Paper Trimmers
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

None at this time

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source,

currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be

confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

- ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
- b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
 - vi. The steps that were taken to limit the excess emission.
 - vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories)

or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:

- i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

- i. Do not violate any applicable requirement;
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- ii. The permittee's suggested draft permit;
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a"*); training fires and controlled burning of a demolished building (*567 IAC 23.2*).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
- a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

- c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*
5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
- a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building

502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health
Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A: NSPS and NESHAP

NSPS

- A. 40 CFR 60 Subpart RR – Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations
<http://www.ecfr.gov/cgi-bin/text-idx?SID=0d845a8bace451bed6ffabcd9a9bc104&mc=true&node=sp40.7.60.rr&rgn=div6>

NESHAP

- A. 40 CFR 63 Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating
<http://www.ecfr.gov/cgi-bin/text-idx?SID=0d845a8bace451bed6ffabcd9a9bc104&mc=true&node=sp40.13.63.jjjj&rgn=div6>
- B. 40 CFR 63 Subpart KK – National Emission Standards for the Printing and Publishing Industry
<http://www.ecfr.gov/cgi-bin/text-idx?SID=0d845a8bace451bed6ffabcd9a9bc104&mc=true&node=sp40.11.63.kk&rgn=div6>
- C. 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
<http://www.ecfr.gov/cgi-bin/text-idx?SID=0d845a8bace451bed6ffabcd9a9bc104&mc=true&node=sp40.14.63.ddddd&rgn=div6>