Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: American Packaging Corporation – Story City
Facility Location: 103 West Broad Street, Story City, Iowa 50248
Air Quality Operating Permit Number: 00-TV-058R4
Expiration Date: February 14, 2027
Permit Renewal Application Deadline: August 14, 2026

EIQ Number: 92-0209
Facility File Number: 85-03-003

Responsible Official
Name: Kevin Neis
Title: Operations Manager
Mailing Address: 103 West Broad Street, Story City, IA 50248
Phone #: (515) 733-1417

Permit Contact Person for the Facility
Name: Dave Fisher
Title: Plant Engineer
Mailing Address: 103 West Broad Street, Story City, IA 50248
Phone #: (515) 733-3215

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

02/15/2022

Marnie Stein, Supervisor of Air Operating Permits Section — Date

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Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
^{o}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
NESHAP .....National Emission Standards for Hazardous Air Pollutants
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: American Packaging Corporation
Permit Number: 00-TV-058R4
Facility Description: Flexographic Printing & Lamination, and Manufacturing of Preformed Products (primarily flexible consumer product packaging,) - SIC 2759

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-D EP-DA EP-DB	EU FLX51.286	Flexographic Press No. 5	04-A-589-P3 08-A-037-P2 04-A-588-P2
	EU FLX51.286-D1	Flexographic Press No. 5 Deck Dryer	
	EU FLX51.286-D2	Flexographic Press No.5 Tunnel Dryer	
	EU LAM03-A	Adhesive Laminator No.3	
	EU LAM03-D	Adhesive Laminator No.3 Dryer	
	EU RG03-A	Rotogravure No.3	
	EU RG03-D	Rotogravure No.3 Dryer	
	EU CT01*	Corona Treater #1	
	EU CT02	Corona Treater #2	
	EU CT03	Corona Treater #3	
	EU CT04	Corona Treater #4	
	EU CT05	Corona Treater #5	
	EU CT06	Corona Treater #6	
	EU CT07	Corona Treater #7	
	EU CT08	Corona Treater #8	
	EU CT09	Corona Treater #9	
	EU FLX7660-A*	Flexographic Press No.2	
	EU FLX7660-D*	Flexographic Press No.2 Dryer	
	EU LAM01-A	Adhesive Laminator No.1	
	EU LAM01-D	Adhesive Laminator No.1 Dryer	
	EU FLX7719-A	Vision Flexographic Press	
	EU FLX7719-D	Vision Flexographic Press Dryer	
	EU FLX41.569-A	W&H Flexographic Press	
	EU FLX41.569-D	W&H Flexographic Press Dryer	
	EU RG01-A	Rotogravure Unit No.1	
	EU RG01-D	Rotogravure Unit No.1 Dryer	
	EU RG02-A	Rotogravure Unit No.2	
	EU RG02-D	Rotogravure Unit No.2 Dryer	
	EU RENZ *	Renzmannn Parts Washer	
	DPP-001	HP Digital Printing Press	17-A-497
EP-DC	EU FLX54.785-D	Flexographic Press No.6 Dryer	10-A-081-P4
	EU FLX54.785	Flexographic Press No.6	
	EU CT10	Corona Treater No.10	
	EU FLX57.987-D	Flexographic Press 57.987 Dryers	
	EU FLX57.987-A	Flexographic Press 57.987	
	EU CT13	Corona Treater #13	10-A-081-P4

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-DC (cont)	EU LAM04-D1	Adhesive Laminator No.4 Dryer A	
	LAM04-D2	Adhesive Laminator No.4 Dryer D	
	EU LAM04	Adhesive Laminator No.4	
	EU CT11; EU CT12	Corona Treaters No.11 & No.12	
	EU FLX59.406-D	Dryers	
	EU FLX59.406-A	Flexographic Press	
	EU CT14	Corona Treater #14	
	EU FLX59.407-D	Dryer	
	EU FLX59.407-A	Flexographic Press	
	EU CT15	Corona Treater #15	
	EU LAM05-D1; EU LAM05-D2	Dryer A & Dryer D	
	EU LAM05	Adhesive Laminator No. 5	
	EU CT16 & CT17	Corona Treaters #16 & #17	
	EU LAM06-D1; EU LAM06-D2	Dryer A & Dryer D	
	EU LAM06	Adhesive Laminator No. 6	
	EU CT18; EU CT19	Corona Treaters #18 & #19	
EP-DD			16-A-013-P1
	EU FLX54.785-D	Dryer	
	EU FLX54.785-A	Flexographic Press	
	EU CT10	Corona Treater #10	
	EU FLX57.987-D	Dryer	
	EU FLX57.987-A	Flexographic Press	
	EU CT13	Corona Treater #13	
	EU LAM04-D1; EU LAM04-D2	Dryer A & Dryer D	
	EU LAM04	Adhesive Laminator No. 4	
	EU CT11 & CT12	Corona Treaters #11 & #12	
	EU FLX59.406-D	Dryers	
	EU FLX59.406-A	Flexographic Press	
	EU CT14	Corona Treater #14	
	EU FLX59.407-D	Dryer	
	EU FLX59.407-A	Flexographic Press	
	EU CT15	Corona Treater #15	
	EU LAM05-D1; EU LAM05-D2	Dryer A & Dryer D	
	EU LAM05	Adhesive Laminator No. 5	
	EU CT16 & EU CT17	Corona Treaters #16 & #17	
	EU LAM06-D1; EU LAM06-D2	Dryer A & Dryer D	
	EU LAM06	Adhesive Laminator No. 6	
	EU CT18	Corona Treater #18	
	EU CT19	Corona Treater #19	16-A-013-P1

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-DD (cont)			
EP-D2	EU LAM01-A	Adhesive Laminator No. 1	96-A-559-S4
	EU LAM01-D	Adhesive Laminator No. 1 Dryer	
EP-D3	EU FLX7719-A	Vision Flexographic Press	97-A-429-S3
	EU FLX7719-D	Vision Flexographic Press Dryer	
EP-D4	EU RG01-A	Rotogravure Unit No.1	99-A-346-S2
	EU RG01-D	Rotogravure Unit No.1 Dryer	
EP-D5	EU RG02-A	Rotogravure Unit No.2	99-A-347-S2
	EU RG02-D	Rotogravure Unit No.2 Dryer	
EP-D6	EU FLX41.569-A	W&H Flexographic Press	97-A-430-S4
	EU FLX41.569-D	W&H Flexographic Press Dryer	
EP-D7	EU LAM04-A	Adhesive Laminator No.4	10-A-082-P1
	EU LAM04-D1	Adhesive Laminator No.4 Dryer A&D	
	EU LAM04-D2		
EP-D8	EU FLX54.785	Flexographic Press 54.785	10-A-083-P2
	EU FLX54.785-D	Flexographic Press Dryer	
	EU CT-10	Corona Treater #10	
EP-D9	EU FLX57.987-A	Flexographic Press 57.987	16-A-008-P
	EU FLX57.987-D	Flexographic Press Dryer	
	EU CT-13	Corona Treater #13	
EP-D10	EU FLX59.406-A	Flexographic Press 59.406	16-A-009-P
	EU FLX59.406-D	Flexographic Press Dryer	
	EU CT-14	Corona Treater #14	
EP-D11	EU FLX59.407-A	Flexographic Press 59.407	16-A-010-P
	EU FLX59.407-D	Flexographic Press Dryer	
	EU CT-15	Corona Treater #15	
EP-D12	EU LAM05-D1; EU LAM05-D2	Dryer A & Dryer D	16-A-011-P
	EU LAM05	Adhesive Laminator No. 5	
EP-D13	EU LAM06-D1; EU LAM06-D2	Dryer A & Dryer D	16-A-012-P
	EU LAM06	Adhesive Laminator No. 6	
EP-FPL	EU FP&L	Ink Blending & Storage	98-A-870-S3
EP-L	EU LAM02	Laminator No.2 - Mist Eliminator	01-A-189-S2
EG-1	EG-1	Emergency Generator 1	NA

*: this emission unit has been removed from service.

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
IA-01	Renzmann Still
IA-05	Trim Collection
IA-06	Material Dispensing Units
IA-09	Boiler and Unit Heaters
IA-11	Outdoor Aboveground Storage Tanks (3 - 6,000-gallon tanks; 1 – 8,000-gallon tank; 1 – 300-gallon tank)
IA-13	Flexo Wash Anilox Washing Machines
IA-14	Fugitive Emissions from Unpaved Roads
IA-15	Pouch Machines
IA-16	Laser Perforation
IA-18	Thermal Developer
IA-19	Plate Processor
IA-20	Distillation Unit (Plate Processor)
IA-21	Flexowash Parts Washer
IA-22	Flexowash Sleeve Washer
IA-23	Flexowash Plate Washer
IA-24	Flexowash Sleeve Washer
IA-25	Flexowash Anilox Washing Machine
IA-26	Laser Perforation
IA-27	Laser Perforation
IA-28	Distillation Unit

II. Plant-Wide Conditions

Facility Name: American Packaging Corporation
Permit Number: 00-TV-058R4

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

Permit Duration

The term of this permit is: Five years from permit issuance
Commencing on: February 15, 2022
Ending on: February 14, 2027

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 (SO_2): 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 on or 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"

Plant-Wide Limits for Non-Combustion HAPs from Coating Operations

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

Pollutant: Single HAP
Emission Limit(s): 9.0 ton/yr [(1)]
Authority for Requirement: DNR Construction Permits 10-A-081-P4, 10-A-082-P1, 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P, 16-A-011-P, 16-A-012-P, 16-A-013-P1

Pollutant: Total HAP
Emission Limit(s): 24.0 ton/yr [1]
Authority for Requirement: DNR Construction Permits 10-A-081-P4, 10-A-082-P1, 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P, 16-A-011-P, 16-A-012-P, 16-A-013-P1

[1] Facility-wide limits for all non-combustion sources to ensure the facility is an area source for HAPs.

Operating Limits

A. The total emissions of all cumulative HAP from all non-combustion sources at this facility shall not exceed 24.0 tons per 12-month rolling period. All HAP-containing materials used at the facility shall be included in the emissions calculations.
B. The total emissions of each individual HAP for all non-combustion sources at this facility shall not exceed 9.0 tons per 12-month rolling period. All HAP-containing materials used at the facility shall be included in the emissions calculations.

Operating Condition Monitoring

A. The owner or operator shall maintain MSDS sheets showing the VOC and HAP content for all materials used in the press and lamination lines.
B. The owner or operator shall calculate the HAP emissions using the material throughput, HAP content and control efficiency on monthly basis, and calculate and record 12-month rolling totals.
C. If the facility-wide 12-month rolling total of any individual HAP emitted exceeds 7.2 tons, the owner or operator shall immediately begin keeping the following daily records:
   - The amount of emissions of each individual HAP emissions, in tons.
   - The 365-day rolling total of the amount of emissions of each individual HAP, in tons.
   - Daily calculations of individual HAP emissions shall continue until the 365-day rolling total of the amount of emissions of each individual HAP from all non-combustion sources drops below 7.2 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of emissions of each individual HAP will cease. If the emissions once again exceed 7.2 tons, daily recordkeeping will be required as stated Condition C above.
D. If the facility-wide 12-month rolling total of all cumulative HAP emissions exceeds 19.2 tons, the owner or operator shall immediately begin keeping the following daily records:
   - The amount of all cumulative HAP emissions, in tons.
   - The 365-day rolling total of the amount of cumulative HAP emissions, in tons.
   - Daily calculations of all cumulative HAP emissions shall continue until the 365-day rolling total of the amount of all cumulative HAP emissions from all non-combustion sources drops below 19.2 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of cumulative HAP emissions will cease. If the emissions once again exceed 19.2 tons, daily recordkeeping will be required per Condition D above.

Authority for Requirement: DNR Construction Permits 10-A-081-P4, 10-A-082-P1, 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P, 16-A-011-P, 16-A-012-P, 16-A-013-P1

III. Emission Point-Specific Conditions

Facility Name: American Packaging Corporation
Permit Number: 00-TV-058R4

Emission Point ID Number: EP-D, EP-DA, EP-DB

Associated Equipment

Associated Emission Unit ID Numbers: See Table 1 – Emission Units
Emissions Control Equipment ID Number: CE-01, CE-01D, CE-02, CE-02D, CE-05
Emissions Control Equipment Description: Thermal Oxidizers & Burners (CE-01, 5.1 MMBtu/hr; CE-02, 10.5 MMBtu/hr) Oil Recycling System (CE-05)

Table 1 – Emission Units

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
EP-D EP-DA EP-DB	EU FLX51.286-A	Flexographic Press No. 5 - PSD	Solvent Based Ink	1722.9 lb/hr
	EU FLX51.286-D1	Flexographic Press No. 5 Deck Dryer - PSD	Natural Gas	0.48 MMBtu/hr
	EU FLX51.286-D2	Flexographic Press No.5 Tunnel Dryer - PSD	Natural Gas	0.53MMBtu/hr
	EU LAM03-A	Adhesive Laminator No.3 - PSD	Solvent Based Coating	887.2 lb/hr
	EU LAM03-D	Adhesive Laminator No.3 Dryer - PSD	Natural Gas	2.80 MMBtu/hr
	EU RG03-A	Rotogravure No.3 - PSD	Solvent Based Coating	887.2 lb/hr
	EU RG03-D	Rotogravure No.3 Dryer - PSD	Natural Gas	2.8 MMBtu/hr
	EU CT01*	Corona Treater #1 - PSD	Electricity	3.00 kw
	EU CT02	Corona Treater #2 - PSD	Electricity	3.00 kw
	EU CT03	Corona Treater #3 - PSD	Electricity	3.00 kw
	EU CT04	Corona Treater #4 - PSD	Electricity	5.00 kw
	EU CT05	Corona Treater #5 - PSD	Electricity	5.00 kw
	EU CT06	Corona Treater #6 - PSD	Electricity	10.0 kw
	EU CT07	Corona Treater #7 - PSD	Electricity	7.50 kw
	EU CT08	Corona Treater #8 - PSD	Electricity	10.00 kw
	EU CT09	Corona Treater #9 - PSD	Electricity	30.00 kw
	EU LAM01-A	Adhesive Laminator No.1 – non-PSD	Solvent Based Materials Water Based Materials	392.9 lb/hr solvent based 297.9 lb/hr water based
	EU LAM01-D	Adhesive Laminator No.1 Dryer – non-PSD	Natural Gas	1.5 MMBtu/hr

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
	EU FLX7719-A	Vision Flexographic Press – non-PSD	Solvent Based Materials Water Based Materials	149.3 lb/hr solvent based 100.1 lb/hr water based
	EU FLX7719-D	Vision Flexographic Press Dryer – non-PSD	Natural Gas	0.8 MMBtu/hr
	EU FLX41.569-A	W&H Flexographic Press – non-PSD	Solvent Based Materials Water Based Materials	1033.3 lb/hr solvent based 690.2 lb/hr water based
	EU FLX41.569-D	W&H Flexographic Press Dryer – non-PSD	Natural Gas	1.6 MMBtu/hr
	EU RG01-A	Rotogravure Unit No.1 – non-PSD	Solvent Based Materials Water Based Materials	165.7 lb/hr solvent based 165.7 lb/hr water based
	EU RG01-D	Rotogravure Unit No.1 Dryer – non-PSD	Natural Gas	0.8 MMBtu/hr
	EU RG02-A	Rotogravure Unit No.2 – non-PSD	Solvent Based Materials Water Based Materials	165.7 lb/hr solvent based 165.7 lb/hr water based
	EU RG02-D	Rotogravure Unit No.2 Dryer – non-PSD	Natural Gas	0.80 MMBtu/hr
	DPP-001	HP Digital Printing Press	Solvent Based Materials	8820 linear ft/hr

*: this emission unit has been removed from service.

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.

Emission Limits with PSD Emission Units Operating

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of No Visible Emissions will require the owner or 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 Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 3.29 lb/hr
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2

Pollutant: Particulate Matter
Emission Limit(s): 3.29 lb/hr, 0.1 g/dscf
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(3) "e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 251.5 lb/hr
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2

Table 2 – BACT limits

Pollutant	Reduction	Tons/yr	Lb VOC Emissions per lb Material (Monthly Weighted Average)
VOC	95%[(2)]	373.04[(3)]	0.041 [(4)] for Printing Lines #1 & 2

[(2)] The destruction efficiency of the thermal oxidizers (CE-01 and CE-02) shall be a minimum of 95%.

[(3)] Standard is a 12-month rolling total for all PSD units listed in Table 1.

[(4)] The following limits apply to the PSD emission units:

- Printing line #1 (EUs FLX51.286-A, FLX51.286-D1, FLX51.286-D2, LAM03-A, LAM03-D, RG03A, RG03-D, CT-08 and CT-09) is limited to 0.041 lbs of VOC emissions/lb of all materials used on Printing Line #1
- Printing line #2 (EUs FLX51.286-A, FLX51.286-D1, FLX51.286-D2, LAM04-A, LAM04-D, RG04-A, RG04-D, CT-10, and CT-11) is limited to 0.041 lbs of VOC emissions/lb of all materials used on Printing Line #2. Printing line #2 is vented through EP-DC/ EP-DD.
- These limits are monthly weighted averages.

Authority for Requirement: DNR Construction Permits 04-A-589-P3, 04-A-588-P2, 08-A-037-P2, 17-A-497

Emission Limits without PSD Emission Units Operating

Pollutant: Opacity
Emission Limit(s): 40%[(5)]
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(2)"d"

[(5)] An exceedance of the indicator opacity of 25% will require the owner or 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 Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.1 g/dscf
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2
567 IAC 23.3(3) "e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 175.8 lb/hr [6]
Authority for Requirement: DNR Construction Permits 04-A-588-P2, 04-A-589-P3, 08-A-037-P2

[6] Limit is for the use of solvent-based ink for the non-PSD emission units listed in Table 1

Operational Limits & Reporting/Record keeping Requirements

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

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

Operating limits for Digital Printing Press:

A. The digital printing press shall be housed within an enclosure.
    i. The owner or operator shall make sure that the enclosure meets the requirements of 40 CFR 52.741 Appendix B, Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure.
B. The electro ink/imaging oil usage for the digital printing press shall not exceed 5714 gallons per rolling 12-month period.
    i. The owner or operator shall maintain records of electro ink/imaging oil usage for the digital press in gallon per month. Calculate and record the rolling 12-month totals.
C. The maximum VOC content of the electro ink/imaging oil shall not exceed 7.0 pounds per gallon.
    i. The owner or operator shall keep records of the VOC content of the electro ink/imaging oil used in digital printing press, in pounds per gallon.
D. The electro ink/imaging oil shall be free of all HAPs.
E. The owner or operator shall maintain Material Safety Data Sheets (MSDS) for each material used in the digital printing press.
F. The priming unwinder shall exhaust into EP-D/EP-DA/EP-DB during operation.

Authority for Requirement: DNR Construction Permit 17-A-497

Operating limits for emission units listed in Table 1:

A. The fuel used by the thermal oxidizers (CE01 and CE02) and all dryers listed in Table 1 shall be limited to natural gas.
B. Daily hours of operation of the thermal oxidizers (CE01 and CE02).
C. The thermal oxidizers (CE01 and CE02) shall initially be maintained at a minimum temperature of 1450 F or at the minimum temperature measured during testing, when the oxidizers demonstrated a VOC destruction efficiency of 95%.
    i. Temperature of the oxidizers (CE01 and CE02) shall be monitored on a continuous basis and an alarm shall be set to sound if the temperature falls below that required in Condition C above. If the oxidizer temperature falls below that required in Condition C., the facility shall record the temperature, time, and date of the event every ten minutes until the required temperature is achieved, along with a description of the corrective actions taken.

D. The owner or operator shall maintain Safety Data Sheets (SDS) for each material used in any of the units.
E. Calculate the HAP emissions from this unit using the material throughput, HAP content and control efficiency. Calculate and record monthly and 12-month rolling totals.
F. The facility shall construct either a temporary or permanent total enclosure to capture all emissions from the PSD emission units listed in Table 1. The total enclosure shall meet the requirements of 40 CFR 52.741 Appendix B, Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure. All captured emissions shall be vented to the thermal oxidizers (CE01 and CE02).

Operating limits specific to PSD emission units:

G. The PSD Flexographic presses (EUs FLX51.286-A and FLX51.286a-A) shall not use water-based materials.
H. The PSD Flexographic presses (EUs FLX51.286-A and FLX51.286a-A) are each limited to 7,573,301 lbs of materials per rolling twelve (12) month period.
I. Laminator No. 3 and Laminator No. 4 (EUs LAM03-A and LAM04-A) are each limited to 4,780,769 lbs of material per rolling twelve (12) month period.
J. The PSD Rotogravure units (EUs RG03-A and RG04-A) are each limited to 7,158,347 lbs of materials per rolling twelve (12) month period.
K. Laminator No. 5 (EU LAM05-A) is limited to 1,424,172 lbs of materials per rolling twelve (12) month period.
L. The monthly weighted averages of Printing Lines #1 & #2 and Laminator #5 in lbs of VOC emissions per lbs of material used. The monthly weighted average shall be calculated by:
   - Sum all materials used each month and the total VOC of those materials for that month,
   - Multiplying the total VOC by 0.05 to get an adjusted VOC emission rate, and
   - Dividing the adjusted VOC emission rate (in lbs) by the total materials (in lbs) used for the month.
M. Calculate and record the total material usage for the PSD Flexographic Presses (EUs FLX51.286-A and FLX51.286a-A) on a rolling-12-month basis for each month of operation.
N. Calculate and record the total material usage for Laminator No. 3 and Laminator No. 4 (EUs LAM03-A and LAM04-A) on a rolling-12-month basis for each month of operation.
O. Calculate and record the total material usage for the Rotogravure units (EUs RG03-A and RG04-A) on a rolling-12-month basis for each month of operation.
P. Calculate and record the total material usage for Laminator No. 5 (EU LAM05-A) on a rolling-12-month basis for each month of operation.
Q. Calculate the total emissions (in tons/month) for the PSD emission units listed in Condition 3 for each month of operation and determine the cumulative emissions (in tons/yr) for the PSD emission units listed in Table 1 on a rolling-12-month basis for each month of operation.
R. Documentation shall be maintained at the plant (Plant Number 85-03-003) that demonstrates a total enclosure has been installed for Printing Lines #1 and #2 and Laminator #5. This installation is a BACT requirement.

Operating Limits Specific to Non-PSD Emission Units:

Table 3

Emission Unit	Material	VOC Emission Limit[1]
Flexographic Press No. 2 (EU FLX7660)	Solvent-based[2]	154.79 tons/yr[3, 5]
Adhesive Laminator Unit #1(EU LAM01)	Solvent-based[2]	
Vision Flexographic Press (EU FLX7719)	Solvent-based[2]	
W & H Flexographic Press (EU FLXX41.569)	Solvent-based[2]	
Renzmann Parts Washer (EU RENZ)	Solvent-based[2]	

Table 4

Emission Unit	Material	VOC Emission Limit
Rotogravure Unit #1 (EU RG01)	Solvent-based[2]	21 tons/yr[4, 5]
Rotogravure Unit #2 (EU RG02)	Solvent-based[2]	

[1] VOC usage shall be monitored and recorded as required in the Reporting and Recordkeeping Section below.

[2] Solvent-based materials shall be defined as any material with a VOC content greater than or equal to 25% (by weight).

[3] The VOC emission limit for the four emission units listed in Table 7 shall not exceed 154.79 tons/yr. This is a controlled emission limit.

[4] The VOC emission limit for the two emission units listed in Table 8 shall not exceed 21 tons/yr. This is a controlled emission limit.

[5] The VOC usage restrictions are twelve-month rolling totals.

S. When solvent-based materials are used in the any of the emission units listed in Tables 3 or 4, the emissions shall be vented to either thermal oxidizer (CE01 and CE02) before being exhausted to the atmosphere.

T. The capture efficiency of the laminator and presses listed in Tables 3 and 4 above during solvent-based material application shall be at least 85%.

U. The capture efficiency of the rotogravure units listed in Table 4 during solvent-based material application shall be 100%.

V. The owner or operator shall record the amount and VOC content of each material (solvent-based) used in the emission units listed in Tables 3 and 4. The VOC usage shall be determined by multiplying the monthly usage of each material by its VOC content considering capture and control efficiencies. Both fugitive and captured emissions must be calculated for the units listed in Table 3. After each month these units are used, the twelve-month rolling total shall be calculated and updated. This record may be maintained electronically.

Authority for Requirement: DNR Construction Permits 04-A-589-P3, 04-A-588-P2, 08-A-037-P2, 17-A-497

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table 5 – Stacks			Stack Characteristics				
EP	**EU**	**Construction Permit #**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
EP-D	See List in Table 1	04-A-589-P3	40	Vertical Unobstructed	44	210	20,000
EP-DA		08-A-037-P2	29.4	Vertical Unobstructed	30	210	20,000
EP-DB		04-A-588-P2	40	Vertical Unobstructed	60	210	20,000

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)

Compliance Assurance Monitoring (CAM) Plan
Catalytic Oxidizers (CE-01 and CE-02) for VOC Control

I. Background

A. Emission Units

Description: Flexographic and Rotogravure Press Lines (See Table 1 for Details)
Identification: Various Units (See Table 1 for Details)
Stack designation: EP-D, EP-DA and EP-DB

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permits 04-A-589-P2, 08-A-037-P2 and 04-A-588-P2
Regulated pollutant: VOC
Emission limit: 95% VOC destruction efficiency and various VOC emission limits (See Tables 4, 5 and 6 for details)
Monitoring requirements in permits: Oxidizer temperature monitored continuously

C. Control Technology: Regenerative Thermal oxidizers (w/o cold-side bypass)

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

(The table was adapted from the EPA's "Technical Support Document for Title V Permitting of Printing Facilities" dated January 2005, Protocol 1 for thermal oxidizers, pages D-48 through D-49.)

Table A. Monitoring Approach for Thermal Oxidizers

	Indicator #1	Indicator #2	Indicator #3
1. Indicator	Oxidizer operating temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously record the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer, including assessment of valves for leakage, to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction efficiency of 95% at minimum. (* See note below)
2. Indicator Range	An excursion is identified as a temperature measurement of less than 1450 °F or the temperature that demonstrates a VOC destruction efficiency of 95% to the Department's satisfaction during the most recent compliance demonstration.	An excursion is identified as any finding that the structural integrity of the oxidizer has been jeopardized and it no longer operates as designed, or leakage of values is identified.	An excursion is identified as any finding that the oxidizer does not meet the permitted destruction efficiency.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement, including those in Condition B of the Reporting & Recordkeeping Section (pg 16)	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
3. Performance Criteria A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone temperature shall be accurate to within 0.5% of temperature measured or ±5 °F, whichever is greater.	Inspections of the oxidizer system will identify problems.	A test protocol shall be prepared and approved by the IDNR prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media, and installation of temperature alarm system as required in Condition B of the Reporting & Recordkeeping Section (pg. 16)	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria ±20 °F.	Not applicable.	EPA test methods approved in protocol.

Table A. Monitoring Approach for Thermal Oxidizers (Continued)

	Indicator #1	Indicator #2	Indicator #3
D. Monitoring Frequency	Measured continuously.	Follow manufacture's maintenance and inspection schedule.	CE-01D was tested on May 13, 1999 and CE-02D was tested on June 14, 2005. No additional testing is required.
Data Collection Procedure	Recorded at least every 10-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.
Averaging Period	Not applicable.	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of chart recorder paper or electronic media and corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and corrective actions taken in response to excursions.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain records of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Submit written notice to IDNR not less than 30 days before the testing. Results of the test shall be submitted in writing to the IDNR within 6 weeks of the completion of the testing.
Frequency	Semiannually.	Semiannually.	For each performance test conducted.

Compliance Assurance Monitoring (CAM) Plan
Capture Systems for VOC Control: Permanent Total Enclosures

I. Background

A. Emission Units

Description & Identification: The units in the following table and their associated driers are required to have permanent total enclosures (assumed 100% capture.)

EP	EU	EU Description
EP-D/DB	FLX51.286	Flexographic Press No. 5
	LAM03	Adhesive Laminator No. 3
	RG03	Rotogravure No. 3
	RG04*	Rotogravure No. 4
	LAM05*	Adhesive Laminator No. 5
	RG01	Rotogravure Unit No. 1
	RG02	Rotogravure Unit No. 2

***: These emission units are no longer vented through EP-D/EP-DA/EP-DB.**

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permits 04-A-589-P3, 08-A-037-P2 and 04-A-588-P2
Regulated pollutant: VOC
Emission limit: 100% capture efficiency
Monitoring requirements in permits: 40 CFR 52.741, Appendix B, Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure

C. Capture System: Permanent Total Enclosure

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table B.

(The table was adapted from the EPA's "Technical Support Document for Title V Permitting of Printing Facilities" dated January 2005, Protocol C for capture system for VOC control – permanent total enclosures, pages D-33 through D-34.)

Table B. Monitoring Approach for Permanent Total Enclosures Utilizing Pressure Differential

	Indicator #1	Indicator #2
1. Indicator	Pressure differential	Work Practice
Measurement Approach	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.	Inspect the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.
2. Indicator Range	An excursion is defined as a pressure differential of less than -0.007 in. w.c. for 15 consecutive minutes; this pressure differential was demonstrated as adequate to qualify the permanent total enclosure with Method 204 during the most recent performance test.	An excursion is identified as any finding that the integrity of the exhaust system ductwork, or the enclosure have been compromised.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
3. Performance Criteria		
A. Data Representativeness	A measure of the pressure differential at the interface between the wall of the enclosure and surrounding atmosphere assures that the permanent total enclosure is maintained under negative pressure.	Properly positioned dampers, leak-free ductwork and a leak-free enclosure will assure that all of the exhaust will reach the control device. Inspections will identify problems.
B. Verification of Operational Status	Not applicable.	Inspection records.
C. QA/QC Practices and Criteria	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.	Not applicable.
D. Monitoring Frequency	Monitor continuously.	Semiannually.
Data Collection Procedure	N/A. The system shall be designed so that the process will be shut down by the monitoring control if an excursion continues for 15 consecutive minutes.	Record results of inspections and observations.
Averaging Period	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of data and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.

Compliance Assurance Monitoring (CAM) Plan
Capture Systems for VOC Control: Permanent Non-Total Enclosures

I. Background

A. Emission Units

Description & Identification: The units in the following table and their associated driers are required to have permanent non-total enclosures (85% capture.)

EP	EU	EU Description
EP-D/DB	LAM01	Adhesive Laminator No. 1
	FLX7719	Vision Flexographic Press
	FLX41.569	W & H Flexographic Press

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permits 04-A-589-P3, 08-A-037-P2 and 04-A-588-P2
Regulated pollutant: VOC
Emission limit: 85% capture efficiency
Monitoring requirements in permits: None

C. Capture System: Non-Total Enclosure

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table C.

(The table was adapted from the EPA's "Technical Support Document for Title V Permitting of Printing Facilities" dated January 2005, Protocol D for capture system for VOC control – enclosures, pages D-37 through D-38. The non-total enclosures in the facility do not have doors therefore sensors and interlocks in the Protocol D are not applicable to the facility.)

Table C. Monitoring Approach for Enclosures Utilizing an Indicator of Flow, and Routine Inspections

	Indicator #1	Indicator #2
1. Indicator	Enclosure Exhaust Flow	Work Practice
Measurement Approach	A flow sensor (static pressure measurement) is used as an indicator to monitor the total exhaust flow rate from the enclosure.	Inspect the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.
2. Indicator Range	An excursion is identified as anytime the static pressure becomes more positive than -0.1 in. w.c.	An excursion is identified as any finding that the integrity of the ductwork, or the enclosure have been compromised.
Corrective Action	Each excursion triggers corrective action and a reporting requirement.	Each excursion triggers an inspection, corrective action and a reporting requirement.
3. Performance Criteria		
A. Data Representativeness	Continuously monitoring an indicator of flow assures the minimum required flow rate from the enclosure is maintained and the enclosure is maintained under negative pressure.	Properly positioned dampers, leak free ductwork and enclosure will assure that all of the exhaust will reach the control device. Inspections will identify problems.
B. Verification of Operational Status	The instrument is installed and calibrated according to the manufacturer's instructions.	Inspection records.
C. QA/QC Practices and Criteria	Annually verify that the instrument used is reading accurately.	Not applicable.
D. Monitoring Frequency	Measured continuously.	Quarterly.
Data Collection Procedure	N/A. The system shall be designed so that the process will be shut down by the monitoring control if an excursion continues for 15 consecutive minutes.	Record results of inspections and observations.
Averaging Period	Not applicable.	Not applicable.
E. Recordkeeping	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.

Emission Point ID Numbers: EP-DC & EP-DD

Associated Equipment

Associated Emission Unit ID Numbers: See Table 1 – Emission Units
Emissions Control Equipment ID Number: CE-03 & CE-03D (EP-DC), CE-04 & CE04-D (EP-DD)
Emissions Control Equipment Description: Regenerative Thermal Oxidation System & Burner (8 MMBtu/hr)

Table 1 – Emission Units

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Bypass EP ID
EP-DC EP-DD	EU FLX54.785-D	Flexographic Press No.6 Dryer	Natural Gas	1.2 MMBtu/hr	D8
	EU FLX54.785	Flexographic Press No.6	Solvent Based Ink	1625 lb/hr	D8
	EU CT10	Corona Treater No.10	Electricity	15 kW	D8
	EU FLX57.987-D	Flexographic Press 57.987 Dryers	Natural Gas	1.663 MMBtu/hr	D9
	EU FLX57.987-A	Flexographic Press 57.987	Solvent Based Ink	1,625 lb/hr	D9
	EU CT13	Corona Treater #13	Electricity	15 kW	D9
	EU LAM04-D1; LAM04-D2	Adhesive Laminator No.4 Dryer A&D	Natural Gas	2.2 MMBtu/hr	D7
	EU LAM04	Adhesive Laminator No.4	Solvent Based Coating	1264.0 lb/hr solvent-based adhesive; 887.2 lb/hr solvent-based lacquers	D7
	EU CT11; EU CT12	Corona Treaters No.11 & No.12	Electricity	15 kW (each)	NA
	EU FLX59.406-D	Dryers	Natural Gas	1.663 MMBtu/hr	D10
	EU FLX59.406-A	Flexographic Press	Solvent Based Coating	1,625 lb/hr	D10
	EU CT14	Corona Treater #14	Electricity	15 kW	D10
	EU FLX59.407-D	Dryer	Natural Gas	1.663 MMBtu/hr	D11
	EU FLX59.407-A	Flexographic Press	Solvent Based Ink	1,625 lb/hr	D11
	EU CT15	Corona Treater #15	Electricity	15 kW	D11
	EU LAM05-D1; EU LAM05-D2	Dryer A & Dryer D	Natural Gas	2.2 MMBtu/hr	D12
	EU LAM05	Adhesive Laminator No. 5	Solvent Based Coating	1,264 lb/hr solvent-based adhesive; 887.2 lb/hr solvent-based lacquers; 723.8 lb/hr cold seal	D12
	EU CT16 & CT17	Corona Treaters #16 & #17	Electricity	15 kW each	NA

	EU LAM06-D1; EU LAM06-D2	Dryer A & Dryer D	Natural Gas	2.2 MMBtu/hr	D13
	EU LAM06	Adhesive Laminator No. 6	Solvent Based Coating	1,264 lb/hr solvent-based adhesive; 887.2 lb/hr solvent-based lacquers; 723.8 lb/hr cold seal	D13
	EU CT18; EU CT19	Corona Treaters #18 & #19	Electricity	15 kW each	NA

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 0% (1)
Authority for Requirement: DNR Construction Permit 10-A-081-P4

(1) An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or 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 Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.91 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-081-P4

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.91 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-081-P4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 10-A-081-P4
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 238.0 tons/yr (2), 98% Reduction
Authority for Requirement: DNR Construction Permit 10-A-081-P4

(2) This is a combined limit for EP Dc and EP DD

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 10-A-081-P4
567 IAC 23.3(3) "e"

Pollutant: Ozone
Emission Limit(s): 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-081-P4

Pollutant: Single HAP
Emission Limit(s): 9.0 ton/yr [3]
Authority for Requirement: DNR Construction Permit 10-A-081-P4

Pollutant: Total HAP
Emission Limit(s): 24.0 ton/yr [3]
Authority for Requirement: DNR Construction Permit 10-A-081-P4

[3] Facility-wide limits for all non-combustion sources to ensure the facility is an area source for HAPs

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The facility shall use 98% destruction efficiency for the thermal oxidizer for all emissions calculations.
B. The owner/operator shall keep the following records:
   i. Maximum VOC content of all materials used in units associated with EP-DC and EP-DD in percent by weight.
   ii. Maximum SHAP content of all materials used in units associated with EP-DC and EP-DD in percent by weight.
   iii. Maximum Total HAP content of all materials used in units associated with EP-DC and EP-DD in percent by weight.
   iv. Quantity of all VOC/HAP containing materials used in units associated with EP-DC and EP-DD in pounds.
C. Total VOC emissions from all units associated with EP-DC and EP-DD at this facility shall not exceed 238.0 tons per 12-month rolling period. All VOC-containing materials used at units associated with EP-DC and EP-DD at the facility shall be included in the emissions calculations.
   i. The owner/operator shall calculate the VOC emissions from all units associated with EP-DC and EP-DD, in tons using material throughput, VOC content and control efficiency on a monthly basis, and calculate and record the 12-month rolling totals.
   ii. If the 12-month rolling total of VOC emissions from all units associated with EP-DC and EP-DD exceeds 190.40 tons, the owner or operator shall immediately begin keeping the following daily records:
      a. The amount of VOC emissions, in tons.
      b. The 365-day rolling total of the amount of VOC emissions, in tons.
      c. Daily calculations of VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all units associated with EP-DC and EP-DD drops below 190.40 tons for the remainder of the current calendar

month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per Condition C.ii. If the emissions once again exceed 190.40 tons, daily recordkeeping will be required per Condition C.ii.

D. The owner or operator shall calculate the HAP emissions from the Thermal Oxidizer stacks (EP-DC and EP-DD) using the material throughput, HAP content and control efficiency on monthly basis, and calculate and record 12-month rolling totals.

E. Water-based materials are defined as materials with a VOC content of less than or equal to 5% by weight.

F. The Regenerative Thermal Oxidizers CE-03 and CE-04, Flexographic Press Dryers 54.785 (EU FLX54.785-D), Flexographic Press Dryers 57.987 (EU FLX57.987-D), Flexographic Press Dryers 59.406 (EU FLX59.406-D); Flexographic Press Dryers 59.407 (EU FLX59.407-D); Adhesive Laminator Dryers A and D (EU LAM04-D1 and D2); Adhesive Laminator Dryers A and D (EU LAM05-D1 and D2); Adhesive Laminator Dryers A and D (EU LAM06-D1 and D2) shall be fired by natural gas only.

G. The owner or operator shall maintain records of type of fuel used in the Regenerative Thermal Oxidizer, Flexographic Press Dryers and Laminator Dryers.

H. Flexographic Press 54.785 (EU FLX54.785-A), Flexographic Press 57.987 (EU FLX57.987-A), Flexographic Press 59.406 (EU FLX59.406-A), and Flexographic Press 59.407 (EU FLX59.407-A), shall be vented to Thermal Oxidizer CE-03 or CE-04 at all times except during an emergency shutdown.

I. Corona Treaters CT-10; CT13; CT14 and CT15 (EU CT10, EU CT13, EU CT14, EU CT15) shall be vented to Thermal Oxidizer CE-03 or CE-04 at all times except during an emergency shutdown.

J. Adhesive Laminator #4 (EU LAM04-A); Adhesive Laminator #5 (EU LAM05-A); Adhesive Laminator #6 (EU LAM06-A) shall be vented to Thermal Oxidizer CE-03 or CE-04, at all times when using solvent based materials, except during an emergency shutdown.

K. Laminator Dryers A and D (EU LAM04-D1 and D2); Laminator Dryers A and D (EU LAM05-D1 and D2) and Laminator Dryers A and D (EU LAM06-D1 and D2) shall be vented to Thermal Oxidizer CE-03 or CE-04, at all times when using solvent based materials, except during an emergency shutdown.

L. Flexographic Press Dryers 54.785 (EU FLX54.785-D), Flexographic Press Dryers 57.987 (EU FLX57.987-D); Flexographic Press Dryers 59.406 (EU FLX59.406-D); and Flexographic Press Dryers 59.407 (EU FLX59.407-D) shall be vented to Thermal Oxidizer CE-03 or CE-04 at all times, except during an emergency shutdown.

M. Corona Treaters CT11, CT12, CT16, CT17, CT18 and CT19 (EU CT11, EU CT12, EU CT16, EU CT17, EU CT18, EU CT19) shall be vented to Thermal Oxidizer CE-03 or CE-04 at all times.

N. Adhesive Laminator #4 (EU LAM04-A); Adhesive Laminator #5 (EU LAM05-A); Adhesive Laminator #6 (EU LAM06-A); shall be vented to bypass stacks EP-D7, EP D-12 and EP D-13 respectively, when using water-based dry bond adhesive and water-based lacquer.

O. Laminator Dryers A and D (EU LAM04-D1 and D2); Laminator Dryers A and D (EU LAM05-D1 and D2) and Laminator Dryers A and D (EU LAM06-D1 and D2) shall be vented to bypass stacks EP-D7, EP D-12 and EP D-13 respectively, when using water-

based dry bond adhesive and water-based lacquer.

P. The minimum operating temperature for Thermal Oxidizer CE-04 shall be 1,400 °F.
Q. Temperature of the oxidizer (CE-04) shall be monitored on a continuous basis and an alarm shall be set to sound if the temperature falls below 1,400°F. If the oxidizer temperature falls below 1,400°F, the facility shall record the temperature, time, and date of the event every ten minutes until the required temperature is achieved, along with a description of the corrective actions taken.
R. All equipment associated with Flexographic Press 54.785 (EU FLX54.785-A), Flexographic Press 57.987 (EU FLX57.987-A), Flexographic Press 59.406 (EU FLX59.406-A), and Flexographic Press 59.407 (EU FLX59.407-A) shall have a permanent total enclosure for the capture of VOC emissions.
S. All equipment associated with Adhesive Laminator #4 (EU LAM04-A); Adhesive Laminator #5 (EU LAM05-A); Adhesive Laminator #6 (EU LAM06-A) shall have a permanent total enclosure for the capture of VOC emissions, when using solvent based materials.
T. The owner or operator shall record the number of hours when Flexographic Press 54.785 (EU FLX54.785-A), Dryer (EU FLX54.785-D) and Corona Treater #10 (EU CT10) are vented through bypass stack (EP D8).
U. The owner or operator shall record the number of hours when Flexographic Press 57.987 (EU FLX57.987-A), Dryer (EU FLX57.987-D) and Corona Treater #13 (EU CT13) are vented through bypass stack (EP D9).
V. The owner or operator shall record the number of hours when Flexographic Press 59.406 (EU FLX59.406-A), Dryer (EU FLX59.406-D) and Corona Treater #14 (EU CT14) are vented through bypass stack (EP D10).
W. The owner or operator shall record the number of hours when Flexographic Press 59.407 (EU FLX59.407-A), Dryer (EU FLX59.407-D) and Corona Treater #15 (EU CT15) are vented through bypass stack (EP D11).
X. The owner or operator shall maintain MSDS sheets showing the VOC and HAP content for all materials used in the press and lamination lines.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45
Stack Opening, (inches, dia.): 54
Exhaust Flow Rate (scfm): 50,000
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 10-A-081-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.

Opacity Monitoring

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point when the unit is operating. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

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)

Compliance Assurance Monitoring (CAM) Plan
Capture Systems for VOC Control: Permanent Total Enclosures

I. Background

A. Emission Units

Description & Identification: The units in the following table and their associated driers are required to have permanent total enclosures (assumed 100% capture.)

EP	EU	EU Description
EP-DC	FLX54.785	Flexographic Press No.6
	LAM04	Laminator No.4
	FLX57.987-A	Flexographic Press FLX57.987-A
	FLX59.406-A	Flexographic Press
	FLX59.407-A	Flexographic Press
	LAM05	Adhesive Laminator No. 5
	LAM06	Adhesive Laminator No. 6

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permit 10-A-081-P4
Regulated pollutant: VOC
Emission limit: 100% capture efficiency
Monitoring requirements in permits: 40 CFR 52.741, Appendix B, Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure

C. Capture System: Permanent Total Enclosure

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

(The table was adapted from the EPA's "Technical Support Document for Title V Permitting of Printing Facilities" dated January 2005, Protocol C for capture system for VOC control – permanent total enclosures, pages D-33 through D-34.)

Table A. Monitoring Approach for Permanent Total Enclosures Utilizing Pressure Differential

	Indicator #1	Indicator #2
1. Indicator	Pressure differential	Work Practice
Measurement Approach	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.	Inspect the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.
2. Indicator Range	An excursion is defined as a pressure differential of less than -0.007 in. w.c. for 15 consecutive minutes; this pressure differential was demonstrated as adequate to qualify the permanent total enclosure with Method 204 during the most recent performance test.	An excursion is identified as any finding that the integrity of the exhaust system ductwork, or the enclosure have been compromised.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
3. Performance Criteria		
A. Data Representativeness	A measure of the pressure differential at the interface between the wall of the enclosure and surrounding atmosphere assures that the permanent total enclosure is maintained under negative pressure.	Properly positioned dampers, leak-free ductwork and a leak-free enclosure will assure that all of the exhaust will reach the control device. Inspections will identify problems.
B. Verification of Operational Status	Not applicable.	Inspection records.
C. QA/QC Practices and Criteria	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.	Not applicable.
D. Monitoring Frequency	Monitor continuously.	Semiannually.
Data Collection Procedure	N/A. The system shall be designed so that the process will be shut down by the monitoring control if an excursion continues for 15 consecutive minutes.	Record results of inspections and observations.
Averaging Period	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of data and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.

Compliance Assurance Monitoring (CAM) Plan
Capture Systems for VOC Control: Permanent Total Enclosures

I. Background

A. Emission Units

Description & Identification: The units in the following table and their associated driers are required to have permanent total enclosures (assumed 100% capture.)

EP	EU	EU Description
EP-DD	FLX54.785-A	Flexographic Press No. 6
	FLX57.987-A	Flexographic Press FLX57.987-A
	LAM04	Adhesive Laminator No. 4
	FLX59.406-A	Flexographic Press
	FLX59.407-A	Flexographic Press
	LAM05	Adhesive Laminator No. 5
	LAM06	Adhesive Laminator No. 6

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: DNR Construction Permit 16-A-013-P1
Regulated pollutant: VOC
Emission limit: 100% capture efficiency
Monitoring requirements in permits: 40 CFR 52.741, Appendix B, Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure

C. Capture System: Permanent Total Enclosure

II. Monitoring Approach
The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

(The table was adapted from the EPA's "Technical Support Document for Title V Permitting of Printing Facilities" dated January 2005, Protocol C for capture system for VOC control – permanent total enclosures, pages D-33 through D-34.)

Table A. Monitoring Approach for Permanent Total Enclosures Utilizing Pressure Differential

	Indicator #1	Indicator #2
1. Indicator	Pressure differential	Work Practice
Measurement Approach	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.	Inspect the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.
2. Indicator Range	An excursion is defined as a pressure differential of less than -0.007 in. w.c. for 15 consecutive minutes; this pressure differential was demonstrated as adequate to qualify the permanent total enclosure with Method 204 during the most recent performance test.	An excursion is identified as any finding that the integrity of the exhaust system ductwork, or the enclosure have been compromised.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
3. Performance Criteria		
A. Data Representativeness	A measure of the pressure differential at the interface between the wall of the enclosure and surrounding atmosphere assures that the permanent total enclosure is maintained under negative pressure.	Properly positioned dampers, leak-free ductwork and a leak-free enclosure will assure that all of the exhaust will reach the control device. Inspections will identify problems.
B. Verification of Operational Status	Not applicable.	Inspection records.
C. QA/QC Practices and Criteria	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.	Not applicable.
D. Monitoring Frequency	Monitor continuously.	Semiannually.
Data Collection Procedure	N/A. The system shall be designed so that the process will be shut down by the monitoring control if an excursion continues for 15 consecutive minutes.	Record results of inspections and observations.
Averaging Period	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of data and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.

Emission Point ID Number: EP-D2, EP-D3, EP-D4, EP-D5 and EP-D6

Associated Equipment

Table 1 – Units and Descriptions

Emission Point Number	Emission Unit Number	EU Description	Raw Material/ Fuel	Rated Capacity
EP-D2	LAM01-A	Adhesive Laminator No. 1	Water-based Coatings	297.9 lb/hr
	LAM01-D	Adhesive Laminator No. 1 Dryer	Natural Gas	1.5 MMBtu/hr
EP-D3	FLX7719-A	Vision Flexographic Press	Water-based Inks	100.1 lb/hr
	FLX7719-D	Vision Flexographic Press Dryer	Natural Gas	0.8 MMBtu/hr
EP-D4	RG01-A	Rotogravure Unit No. 1	Water-based Coatings	165.7 lb/hr
	RG01-D	Rotogravure Unit No. 1 Dryer	Natural Gas	1.6 MMBtu/hr
EP-D5	RG02-A	Rotogravure Unit No. 2	Water-based Coatings	165.7 lb/hr
	RG02-D	Rotogravure Unit No. 2 Dryer	Natural Gas	1.6 MMBtu/hr
EP-D6	FLX41.569-A	W&H Flexographic Press	Water-based Inks	690.2 lb/hr
	FLX41.569-D	W&H Flexographic Press Dryer	Natural Gas	1.6 MMBtu/hr

Note: There is no control equipment for water-based application. Thermal Oxidizers for EP-D and EP-DB are for solvent-based application.

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.

Table 2 – Emission Limits

EP	EU	Opacity	PM	SO_2	VOC	Iowa DNR Construction Permit #
EP-D2	LAM01-A LAM01-D	40% (1)	0.1 gr/dscf	500 ppmv	65.0 tpy(2)	96-A-559-S4
EP-D3	FLX7719-A FLX7719-D	40% (1)	0.1 gr/dscf	500 ppmv		97-A-429-S3
EP-D4	RG01-A RG01-D	40% (1)	0.1 gr/dscf	500 ppmv		99-A-346-S2
EP-D5	RG02-A RG02-D	40% (1)	0.1 gr/dscf	500 ppmv		99-A-347-S2
EP-D6	FLX41.569-A FLX41.569-D	40% (1)	0.1 gr/dscf	500 ppmv		97-A-430-S4

(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).

(2)Total VOCs (water-based only) for EP-D2, EP-D3, EP-D4, EP-D5 & EP-D6 shall not exceed 65.0 tons per year.

Table 3 – Authority for General Emission Limits in Table 2

Pollutant	Emission Limits	Authority for Requirement
Opacity	40%	567 IAC 23.3(2)"d" and DNR Construction Permits Referenced in Table 2
PM	0.1 gr/dscf	567 IAC 23.3(2)"a" and DNR Construction Permits Referenced in Table 2
SO_2	500 ppmv	567 IAC 23.3(3)"e" and DNR Construction Permits Referenced in Table 2
VOC	65.0 tpy	DNR Construction Permits Referenced in Table 2

Operational Limits & Requirements

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

Operating Limits

Operating limits for these emission units shall be:

Emission Unit	Material	Total Max. VOC Usage	VOC Content
Adhesive Laminator Unit #1 (EP-D2)	Water-based	65 tons/yr(2) (3)	<25%
Vision Flexographic Press (EP-D3)	Water-based		<25%
Rotogravure Unit #1 (EP-D4)	Water-based		<25%
Rotogravure Unit #2 (EP-D5)	Water-based		<25%
W & H Flexographic Press (EP-D6)	Water-based		<25%

Notes:

(1). VOC usage shall be monitored and recorded as required in this section by multiplying the amount of each material used and the VOC content of the material.

(2). Total VOC usage for emission points EP-D2, EP-D3, EP-D4, EP-D5 & EP-D6 shall not exceed 65 tons/yr.

(3). VOC usage restrictions in tons/yr refer to a twelve-month rolling total.

(4). Water-based materials shall be defined as any material with a VOC content less than 25% (by weight).

A. When solvent-based materials are used the emissions shall be vented to the thermal oxidizer (EP-D) before being exhausted to the atmosphere. Solvent-based materials shall be defined as any material with a VOC content greater than or equal to 25% (by weight). When water-based materials are used emissions may be vented directly to the atmosphere (via EP-D2, EP-D3, EP-D4, EP-D5 &/or EP-D6).

B. The maximum capacity of: the Laminator Unit #1 Dryer, Vision Flexographic Dryer, Rotogravure Unit #1 Dryer, Rotogravure Unit #2 Dryer and Flexographic Dryer shall not exceed 1.6 MMBTU/hr (each).

C. The capture system for VOC emissions from EP-D2, EP-D3 & EP-D6 shall be designed for a minimum capture efficiency of 85% of VOCs from solvent based coating.

D. The capture system for VOC emissions from EP-D4 & EP-D5 shall be designed for a capture efficiency of 100% of VOCs from solvent based coating.

E. Fuel usage shall be limited to natural gas only.

Reporting and Recordkeeping

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 DNR. Records shall be legible and maintained in an orderly manner.

A. The VOC usage shall be determined by multiplying the monthly usage of each material by its VOC content. After each month these units are used, the twelve-month rolling total shall be calculated and updated.
B. Material Safety Data Sheets (MSDS) for each material used in any of the units.

Authority for Requirement: DNR Construction Permits 96-A-559-S4, 97-A-429-S3
99-A-346-S2, 99-A-347-S2, and 97-A-430-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table 4 – Stacks			**Stack Characteristics**				
EP	**EU**	**Construction Permit #**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (ºF)**	**Exhaust Flowrate (scfm)**
EP-D2	LAM01-A LAM01-D	96-A-559-S4	48.5	Vertical Unobstructed	24	150 - 200	5,300
EP-D3	FLX7719-A FLX7719-D	97-A-429-S3	47.3	Vertical Unobstructed	20	150 - 200	2,100
EP-D4	RG01-A RG01-D	99-A-346-S2	47.3	Vertical Unobstructed	20	150 - 200	2,500
EP-D5	RG02-A RG02-D	99-A-347-S2	46.9	Vertical Unobstructed	20	150 - 200	2,500
EP-D6	FLX41.569-A FLX41.569-D	97-A-430-S4	50.2	Vertical Unobstructed	20	150 - 200	5,000

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: EP-D7

Associated Equipment

Table 1: Emission Units and Descriptions

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
EP-D7	EU LAM04	Adhesive Laminator No.4	Water Based Inks	672.1 lb adhesive/hr 747.2 lb lacquer /hr
	EU LAM04-D1; EU LAM04-D2	Adhesive Laminator No.4 Dryer A&D	Natural Gas	2.2 MMBtu/hr

Note: There is no control equipment for water-based application. Thermal Oxidizers for EP-DC and EP-DD are for solvent-based application.

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.

General Limits:

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 10-A-082-P1
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 ($PM_{2.5}$)
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-082-P1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-082-P1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.10 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 10-A-082-P1
567 IAC 23.3(2) "a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 10-A-082-P1
567 IAC 23.3(3) "e"

Pollutant: Single HAP
Emission Limit(s): 9.0 ton/yr [2]
Authority for Requirement: DNR Construction Permit 10-A-082-P1

Pollutant: Total HAP
Emission Limit(s): 24.0 ton/yr [2]
Authority for Requirement: DNR Construction Permit 10-A-082-P1

[2] Facility-wide limits for all non-combustion sources to ensure the facility is an area source for HAPs.

BACT Limit:
Pollutant: VOC
Emission Limit(s): 119.0 ton/yr
Authority for Requirement: DNR Construction Permit 10-A-082-P1

Operational Limits & Requirements

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

Operating Limits

A. Total VOC emissions from all units associated with EP-D7 at this facility shall not exceed 119.0 tons per 12-month rolling period. All VOC-containing materials used at units associated with EP-D7 at the facility shall be included in the emissions calculations.
B. The total emissions of all cumulative HAP from all non-combustion sources at this facility shall not exceed 24.0 tons per 12-month rolling period. All HAP-containing materials used at the facility shall be included in the emissions calculations.
C. The total emissions of each individual HAP for all non-combustion sources at this facility shall not exceed 9.0 tons per 12-month rolling period. All HAP-containing materials used at the facility shall be included in the emissions calculations.
D. Water-based materials are defined as materials with a VOC content of less than or equal to 5% by weight.
E. The Adhesive Laminator Dryers A and D (EU LAM04-D1 and D2) shall be fired by natural gas only.
F. Adhesive Laminator #4 (EU LAM04-A) and Laminator Dryers A and D (EU LAM04-D1 and D2) shall be vented to Thermal Oxidizer CE-03 or CE-04, at all times when using solvent based materials, except during an emergency shutdown.
G. Adhesive Laminator #4 (EU LAM04-A) and Laminator Dryers A and D (EU LAM04-D1 and D2) shall be vented to bypass stack EP-D7 when using water-based dry bond adhesive and water-based lacquer.
H. All equipment associated with Adhesive Laminator #4 (EU LAM04-A) shall have a permanent total enclosure for the capture of VOC emissions, when using solvent based materials.

Reporting and Recordkeeping

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 DNR. Records shall be legible and maintained in an orderly manner.

A. The owner/operator shall keep the following records:
   i. Maximum VOC content of all materials used in units associated with EP-D7 in percent by weight.
   ii. Maximum SHAP content of all materials used in units associated with EP-D7 in percent by weight.
   iii. Maximum Total HAP content of all materials used in units associated with EP-D7 in percent by weight.
   iv. Quantity of all VOC/HAP containing materials used in units associated with EP-D7 in pounds.

B. The owner/operator shall calculate the VOC emissions from all units associated with EP-D7, in tons using material throughput and VOC content on a monthly basis, and calculate and record the 12-month rolling totals.

C. If the 12-month rolling total of VOC emissions from all units associated with EP-D7 exceeds 95.20 tons, the owner or operator shall immediately begin keeping the following daily records:
   - The amount of VOC emissions, in tons.
   - The 365-day rolling total of the amount of VOC emissions, in tons.

   Daily calculations of VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all units associated with EP-D7 drops below 95.20 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease. If the emissions once again exceed 95.20 tons, daily recordkeeping will be required per Condition C above.

D. The owner/operator shall keep records of the number of hours Adhesive Laminator #4 (EU LAM04-A) and Laminator Dryers A and D (EU LAM04-D1 and D2) are vented to bypass stack EP-D7 during an emergency shutdown, when using solvent based materials. Record and calculate the 12-month rolling totals.

E. The owner or operator shall maintain MSDS sheets showing the VOC and HAP content for all materials used in the press and lamination lines.

F. The owner or operator shall maintain records of type of fuel used in the Laminator Dryers.

Authority for Requirement: DNR Construction Permit 10-A-082-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 38.4
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 15,000
Exhaust Temperature (°F): 200
Discharge Style: Vertical, Unobstructed Permit 10-A-082-P1

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: EP-D8, EP-D9, EP-D10, EP-D11 (Bypass Stacks)

Associated Equipment

Table 1: Emission Units and Descriptions

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit Number
EP-D8	EU FLX54.785-A	Flexographic Press 54.785	Solvent-based and Water-based Inks	1625 lb/hr	10-A-083-P2
	EU FLX54.785-D	Flexographic Press Dryer	Natural Gas	1.2 MMBtu/hr	
	EU CT-10	Corona Treater #10	Electricity	15 kW	
EP-D9	EU FLX57.987-A	Flexographic Press 57.987	Solvent-based and Water-based Inks	1625 lb/hr	16-A-008-P
	EU FLX57.987-D	Flexographic Press Dryer	Natural Gas	1.663 MMBtu/hr	
	EU CT-13	Corona Treater #13	Electricity	15 kW	
EP-D10	EU FLX59.406-A	Flexographic Press 59.406	Solvent-based and Water-based Inks	1625 lb/hr	16-A-009-P
	EU FLX59.406-D	Flexographic Press Dryer	Natural Gas	1.663 MMBtu/hr	
	EU CT-14	Corona Treater #14	Electricity	15 kW	
EP-D11	EU FLX59.407-A	Flexographic Press 59.407	Solvent-based and Water-based Inks	1625 lb/hr	16-A-010-P
	EU FLX59.407-D	Flexographic Press Dryer	Natural Gas	1.663 MMBtu/hr	
	EU CT-15	Corona Treater #15	Electricity	15 kW	

Applicable Requirements

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

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

General Limits

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.02 lb/hr
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.02 lb/hr
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.02 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P
567 IAC 23.3(3)"e"

Pollutant: Single HAP
Emission Limit(s): 9.0 ton/yr [(1)]
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Pollutant: Total HAP
Emission Limit(s): 24.0 ton/yr [(1)]
Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

[(1)] Facility-wide limits for all non-combustion sources to ensure the facility is an area source for HAPs.

BACT Limits:

Pollutant	tons/yr	Additional Limits
Opacity	NA	0% [(2)]
Volatile Organic Compounds	1.0	NA
Ozone	NA	3 bypass events

[(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).

Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Operational Limits & Requirements

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

Operating Limits

A. The bypass stacks shall be used to vent VOC, ozone and HAP emissions only during an emergency shutdown.
B. The bypass stacks at the facility: EP-D8, EP-D9, EP-D10 and EP-D11 shall be allowed three (3) emergency bypass events per calendar year.
C. Any combination of bypass stacks: EP-D8, EP-D9, EP-D10 and EP-D11 can be operated during the bypass event.

Reporting and Recordkeeping

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 DNR. Records shall be legible and maintained in an orderly manner.

A. The permittee shall keep the following records:
   i. The duration when a bypass stack is in operation. Keep monthly records and rolling 12-month totals.
   ii. Record the number of events a rolling 12-month basis.
   iii. Calculate and record the VOC, Ozone and HAP emissions from the stack. Calculate monthly and rolling 12-month totals.

B. The owner or operator shall Maintain MSDS sheets showing the VOC and HAP content for all materials used in the press and lamination lines.

Authority for Requirement: DNR Construction Permits 10-A-083-P2, 16-A-008-P, 16-A-009-P, 16-A-010-P

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Table 2 – Stacks			**Stack Characteristics**				
EP	**EU**	**Construction Permit #**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (ºF)**	**Exhaust Flowrate (scfm)**
EP-D8	See List in Table 1	10-A-083-P2	32.1	Horizontal	32	200	15,000
EP-D9		16-A-008-P	32.1	Horizontal	32	200	12,400
EP-D10		16-A-009-P	35.5	Horizontal	32	200	12,420
EP-D11		16-A-0010-P	35.5	Horizontal	32	200	12,420

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.

Opacity Monitoring

Visible emissions shall be observed during each bypass event to ensure there are none when the emission units on these emission points when operating. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

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: EP-D12 and EP-D13

Associated Equipment

Table 1: Emission Units and Descriptions

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit Number
EP-D12	LAM05-D1; LAM05-D2	Dryer A & Dryer D	Natural Gas	2.2 MMBtu/hr	16-A-011-P
	LAM05	Adhesive Laminator No. 5	Adhesives and Lacquers	672.1 lb/hr water-based adhesive; 747.2 lb/hr water-based lacquers	
EP-D13	LAM06-D1; LAM06-D2	Dryer A & Dryer D	Natural Gas	2.2 MMBtu/hr	16-A-012-P
	LAM06	Adhesive Laminator No. 6	Adhesives and Lacquers	672.1 lb/hr water-based adhesive; 747.2 lb/hr water-based lacquers	

Note: There is no control equipment for water-based application. Thermal Oxidizers for EP-DC and EP-DD are for solvent-based application

Applicable Requirements

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

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

General Limits

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P
567 IAC 23.3(2) "d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or 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 Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.10 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P
567 IAC 23.3(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P
567 IAC 23.3(3)"e"

Pollutant: Single HAP
Emission Limit(s): 9.0 ton/yr [(2)]
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

Pollutant: Total HAP
Emission Limit(s): 24.0 ton/yr [(2)]
Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

[(2)] Facility-wide limits for all non-combustion sources to ensure the facility is an area source for HAPs.

BACT Limits:

Pollutant	tons/yr	Additional Limits
Volatile Organic Compounds (VOC)	37.25	NA

Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

Operational Limits & Requirements

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

Operating Limits

A. Total VOC emissions from all units associated with EP-D12 or EP-D13, as listed in Table 1, at this facility shall not exceed 37.25 tons per 12-month rolling period (each). All VOC-containing materials used at units associated with EP-D12 and EP-D13 at the facility shall be included in the emissions calculations.
B. Water-based materials are defined as materials with a VOC content of less than or equal to 5% by weight.
C. The Adhesive Laminator Dryers A and D (EU LAM05-D1 and D2 and EU LAM06-D1 and D2) shall be fired by natural gas only.
D. Adhesive Laminator #5 (EU LAM05-A and EU LAM06-A) and Laminator Dryers A and D (EU LAM05-D1 and D2; and LAM06-D1 and D2) shall be vented to Thermal Oxidizer CE-03 or CE-04, at all times when using solvent based materials, except during an emergency shutdown.
E. Adhesive Laminator #5 (EU LAM05-A and EU LAM06-A) and Laminator Dryers A and D (EU LAM05-D1 and D2; and LAM06-D1 and D2) shall be vented to bypass stack EP D-12 and EP D13, respectively, when using water-based dry bond adhesive and water-

based lacquer.

F. All equipment associated with Adhesive Laminator #5 (EU LAM05-A) and Adhesive Laminator #6 (EU LAM06-A) shall have a permanent total enclosure for the capture of VOC emissions, when using solvent based materials.

Reporting and Recordkeeping

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 DNR. Records shall be legible and maintained in an orderly manner.

A. The owner/operator shall keep the following records:
   i. Maximum VOC content of all materials used in units associated with EP-D12 and EP-D13 in percent by weight.
   ii. Maximum SHAP content of all materials used in units associated with EP-D12 and EP-D13 in percent by weight.
   iii. Maximum Total HAP content of all materials used in units associated with EP-D12 and EP-D13 in percent by weight.
   iv. Quantity of all VOC/HAP containing materials used in units associated with EP-D12 and EP-D13 in pounds.

B. The owner/operator shall calculate the VOC emissions from all units associated with EP-D12 and EP-D13, in tons using material throughput and VOC content on a monthly basis, and calculate and record the 12-month rolling totals.

C. If the 12-month rolling total of VOC emissions from all units associated with EP-D12 or EP-D13 exceeds 29.80 tons, the owner or operator shall immediately begin keeping the following daily records:
   - The amount of VOC emissions, in tons.
   - The 365-day rolling total of the amount of VOC emissions, in tons.

   Daily calculations of VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from all units associated with EP-D12 or EP-D13 drops below 29.80 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease. If the emissions once again exceed 29.80 tons, daily recordkeeping will be required per Condition C above.

D. The owner/operator shall keep records of the number of hours Adhesive Laminator #5 (EU LAM05-A) and Laminator Dryers A and D (EU LAM05-D1 and D2 are vented to bypass stack EP-D12, and Adhesive Laminator #6 (EU LAM06-A) and Laminator Dryers A and D (EU LAM06-D1 and D2 are vented to bypass stack EP-D13 during an emergency shutdown, when using solvent based materials. Record and calculate the 12-month rolling totals.

E. The owner or operator shall maintain MSDS sheets showing the VOC and HAP content for all materials used in the press and lamination lines.

F. The owner or operator shall maintain records of type of fuel used in the Laminator Dryers.

Authority for Requirement: DNR Construction Permits 16-A-011-P, 16-A-012-P

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Table 2 – Stacks			Stack Characteristics				
EP	**EU**	**Construction Permit #**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
EP-D12	LAM05-D1; LAM05-D2; LAM05	16-A-011-P	55	Vertical Unobstructed	32	200	15,960
EP-D13	LAM06-D1; LAM06-D2LAM06	16-A-012-P	53	Vertical Unobstructed	32	200	15,960

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: EP-FPL

Associated Equipment

Associated Emission Unit ID Numbers: EU INK

Emission Unit vented through this Emission Point: EU INK
Emission Unit Description: Ink Blending & Storage
Raw Material/Fuel: Ink and Adhesive
Rated Capacity: 3,715 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): 22.30 ton/yr
Authority for Requirement: DNR Construction Permit 98-A-870-S3

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

Operating Limits

A. The maximum amount of VOCs used in the FP&L Solvent Use (Note: this is a fugitive emission) shall not exceed 22.3 tons per year.

Reporting and Recordkeeping
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 DNR. Records shall be legible and maintained in an orderly manner.

A. The permit holder, owner or operator of the facility shall record the VOC content of any material used in the FP&L Solvent Use.
B. The permit holder, owner or operator of the facility shall calculate and record the monthly total and the 12-month rolling total amount of VOCs (in tons/yr) used by the FP&L Solvent Use.
C. The permit holder, owner or operator of the facility shall maintain manufacturer/vendor provided information (i.e., Material Safety Data Sheets (MSDS), technical data sheets, etc.) of all materials used in the FP&L Solvent Use.

Authority for Requirement: DNR Construction Permit 98-A-870-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40.6
Stack Opening, (inches, dia.): 18
Exhaust Flow Rate (scfm): 5,000
Exhaust Temperature (ºF): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 98-A-870-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: EP-L

Associated Equipment

Associated Emission Unit ID Numbers: EU LAM02

Emission Unit vented through this Emission Point: EU LAM02
Emission Unit Description: Laminator No.2 - Mist Eliminator
Raw Material/Fuel: Adhesives
Rated Capacity: 195.12 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: DNR Construction Permit 01-A-189-S2
567 IAC 23.3(2) "d"

[(1)] An exceedance of the indicator opacity of "25%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 01-A-189-S2
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.

Operating Limits

A. The laminator shall use VOC-free adhesive materials.

Reporting and Recordkeeping
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 DNR. Records shall be legible and maintained in an orderly manner.

A. Maintain MSDS sheets of all adhesive materials used.

Authority for Requirement: DNR Construction Permit 01-A-189-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 47.3
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 1,200
Exhaust Temperature (8F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 01-A-189-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: EG-1

Associated Equipment

Associated Emission Unit ID Numbers: EG-1

Emission Unit vented through this Emission Point:
Emission Unit Description:
Raw Material/Fuel: Natural Gas
Rated Capacity: 133 bhp

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 (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)

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

NESHAP:
The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Certification Requirements:
According to 60.4231(b) and 60.4233(b) (for gasoline engines) or 60.4231(c) and 60.4233(c) (for rich burn LPG engines), the engine manufacturers must certify these engines to the following emission standards in grams/kW-hr (grams/HP-hr) and other requirements for new nonroad SI engines in 40 CFR Part 90 or 1048 as follows:
Limits in grams/kW-hr (grams/HP-hr) - see rule for alternative standards

Maximum Engine Power	HC + NOx	CO	Rule Reference
100 ≤ kW (130 ≤ HP)	2.7 (2.0)	4.4 (3.3)	40 CFR 1048
	2.7 (2.0) [(1)]	130 (97.0) [(1)]	40 CFR 1048

[(1)] Severe-duty engines are used in, for example, concrete saws, concrete pumps and similar severe applications where air-cooled engines must be used.

Requirements for Certified SI Engines:
1. Owners and operators must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(a)(1).

Operating and Recordkeeping Requirements (40 CFR 4243(d))
1. There is no time limit on the use of the emergency engine in emergency situations.
2. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
3. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
4. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.

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)

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 <u>except</u> 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) 725-9545

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
1101 Commercial Court, Suite 10
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
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