

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

**Name of Permitted Facility: Pella Corporation – Carroll  
Operations**

**Facility Location: 1750 E US Highway 30, Carroll, Iowa 51401**

**Air Quality Operating Permit Number: 98-TV-025R2**

**Expiration Date: January 31, 2017**

**Permit Renewal Application Deadline: July 31, 2016**

**EIQ Number: 92-4046**

**Facility File Number: 14-01-010**

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**Responsible Official**

**Name: Jim Meyer**

**Title: Vice President of Operations**

**Mailing Address: 102 Main Street, Pella, Iowa 50219**

**Phone #: (641) 621-1000**

**Permit Contact Person for the Facility**

**Name: Terry Noteboom**

**Title: Environmental Engineer**

**Mailing Address: 102 Main Street, Pella, Iowa 50219**

**Phone #: (641) 621-6266**

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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**

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

### Pollutants

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

# I. Facility Description and Equipment List

Facility Name: Pella Corporation – Carroll Operations

Permit Number: 98-TV-025R2

Facility Description: Millwork (SIC 2431)

## Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP 1A	EU 1A	Wood Paint Machine	91-A-331-S5
EP 1B	EU 1B	Wood Paint Machine	01-A-862
EP 2	EU 2	Wood Dust System #1	82-A-054
EP 4	EU 4	Wood Dust System #3	87-A-070
EP 5	EU 5	Wood Dust System #2	87-A-093
EP 6	EU 6	Maintenance Paint Spray Booth	91-A-035-S2
EP 11	EU 11	Wood Dust System #4	91-A-136-S2
EP 12	EU 12	Emergency Generator	94-A-094-S1
EP 13	EU 13	Boiler #1	NA
EP 14	EU 14	Boiler #2	NA
EP 26	EU 26	Wood Dust System #5	00-A-874-S2
EP 32	EU 32	Wood Dust System #6	07-A-1017
Group 1			
EP 17	EU 17	Spray Booth #1	00-A-861-S6
EP 18	EU 18	Spray Booth #2	00-A-862-S6
EP 22	EU 22	Spray Booth #3	00-A-868-S6
EP 23	EU 23	Spray Booth #4	00-A-869-S6
EP 33	EU 33	Primer Oven #1	06-A-1034-S2
EP 34	EU 34	Topcoat Oven #2	06-A-1035-S2
EP 35	EU 35	Primer Oven #3	06-A-1036-S2
EP 36	EU 36	Topcoat Oven #4	06-A-1037-S2
EP 44	EU 44	1/2 Auto Prefinish Booth	10-A-257
EP 45	EU 45	1/2 Auto Prefinish Booth	10-A-258
EP 46	EU 46	1/2 Auto Prefinish Booth	10-A-259
EP 47	EU 47	1/2 Auto Prefinish Booth	10-A-260
EP 48	EU 48	Manual Prefinish Oven	10-A-261
EP 49	EU 49	Prefinish Oven	10-A-262
EP 50	EU 50	Prefinish Oven	10-A-263
EP 51	EU 51	Prefinish Oven	10-A-264
EP 52	EU 52	Manual Spray Booth	10-A-265
EP 53	EU 53	Surface Preparation Area	10-A-266
EP 54	EU 54	Surface Preparation Area	10-A-267

### Equipment List (cont)

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
EP CO	EU 29	Wood Dip/Dry – Frame In-Line	91-A-327-S7
	EU 30	Wood Dip/Dry – Sash In-Line	
	EU 41	Wood Dip/Dry – Rail In-Line	
	EU 42	Wood Dip/Dry – Stile/Still In-Line	
	EU 43	Wood Dip/Dry – Head/Jamb In-Line	
Surface App.	Surface App.	Miscellaneous Chemicals. Surface Application	NA

### Insignificant Activities Equipment List

<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
Insig. 1	Indoor Wood Dust Collection Systems (35 Systems)
Insig. 2	Combustion Units; Plant Heating (3 @ 6.0 MMBtu/hr., 1 @ 0.8 MMBtu/hr., 3@ 2.25 MMBtu/hr.)
Insig. 3	Aboveground Storage Tank (Unleaded Gasoline) 300 gallons
Insig. 4	Aboveground Storage Tank (Diesel Fuels) 300 gallons
Insig. 5	Aboveground Storage Tank (Diesel Fuel-Fire Pump) 300 gallons
Insig. 6	Aboveground Storage Tank (Fuel Oil) 2,500 gallons
Insig. 7	Aboveground Storage Tank (Fuel Oil) 10,000 gallons
Insig. 8	Aboveground Storage Tank (Milltreat/Mineral Spirits) 10,000 gallons

# I. Plant-Wide Conditions

Facility Name: Pella Corporation – Carroll Operations  
Permit Number: 98-TV-025R2

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

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## Permit Duration

The term of this permit is: Five (5) years from permit issuance  
Commencing on: February 1, 2012  
Ending on: January 31, 2017

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.

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## 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<sub>2</sub>): 500 parts per million by volume  
Authority for Requirement: 567 IAC 23.3(3)"e"

### Particulate Matter:

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

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

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

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit 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 public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. 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 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 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, fertilizers 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.

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

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### **Compliance Plan**

*The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.*

Unless otherwise noted in Section III of this permit, Pella Corporation – Carroll Operations is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Pella Corporation – Carroll Operations shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

### III. Emission Point-Specific Conditions

Facility Name: Pella Corporation - Carroll Division  
Permit Number: 98-TV-025R2

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#### **Emission Point ID Number: EP 1A**

##### Associated Equipment

Associated Emission Unit ID Number: EU 1A  
Emissions Control Equipment ID Number: CE 1A  
Emissions Control Equipment Description: Paint Arrestor Pads

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Emission Unit vented through this Emission Point: 1A  
Emission Unit Description: Wood Paint Machine  
Raw Material/Fuel: Paint  
Rated Capacity: 9.6 gal./hr each (4 spray guns)

#### **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%<sup>(1)</sup>

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

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S5  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S5  
567 IAC 23.4(13)

Pollutant: Total HAP's

Emission Limit(s): 0.48 lb HAP/gallon solids

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S5  
567 IAC 23.1(4)"cq"  
40 CFR 63 Subpart QQQQ

## **Operational Limits & Requirements**

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

Process throughput:

1. The paint usage for permits 91-A-331-S5 and 01-A-862 will not exceed 4,980 gallons per 12 month period rolled monthly.
2. The VOC content of the spray material will not exceed 1.0 lb./gal.
3. The solids content of the spray material will not exceed 9.0 lb./gal.
4. The spray booth is limited to the use of no more than four spray nozzles at one time.
5. Each spray nozzle will have a capacity of no more than 9.6 gal./hr.

Control equipment parameters:

1. The paint arrestor pads (control equipment) shall be maintained and replaced according to manufacturer's instructions.

Reporting & Record keeping:

*All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records must be maintained on site for five years and made available to the DNR upon request. The owner or operator of the equipment shall maintain the following records:*

1. The total quantity of paint used for permits 91-A-331-S5 and 01-A-862 in gallons per twelve-month rolling total.
2. The VOC content of the spray materials used.
3. The solids content of the spray materials used.
4. The specifications of the spray nozzles used.
5. A record of all maintenance and replacement of the paint arrestor pads (filters).

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S5

## **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 31

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 1,265

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S5

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

**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)

**Paint Booth Agency Operation & Maintenance Plan**

**Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

**Record Keeping and Reporting**

- Maintenance and inspection records will be kept for five years and available upon request.

**Quality Control**

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP 1B**

### Associated Equipment

Associated Emission Unit ID Number: EU 1B  
Emissions Control Equipment ID Number: CE 1B  
Emissions Control Equipment Description: Paint Arrestor Pads

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Emission Unit vented through this Emission Point: 1B  
Emission Unit Description: Wood Paint Machine  
Raw Material/Fuel: Paint  
Rated Capacity: 9.6 gal./hr each (4 spray guns)

### **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%<sup>(1)</sup>

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

Authority for Requirement: Iowa DNR Construction Permit 01-A-862  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-862  
567 IAC 23.4(13)

Pollutant: Total HAP's

Emission Limit(s): 0.48 lb HAP/gallon solids

Authority for Requirement: 567 IAC 23.1(4)"cq"  
40 CFR 63 Subpart QQQQ

#### **Operational Limits & Requirements**

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

Process throughput:

1. Total paint usage for permits 91-A-331-S5 and 01-A-862 shall not exceed 4,980 gallons per twelve-month rolling total.
2. The VOC content of the spray material shall not exceed 1.0 lb/gallon.
3. The solids content of the spray material shall not exceed 9.0 lb/gallon.
4. The paint machine shall not operate more than four spray nozzles at one time.
5. The capacity for each spray nozzle shall not exceed 9.6 gallons per hour.

Control equipment parameters:

1. The paint arrestor pads (control equipment) shall be maintained and replaced according to manufacturer's instructions.

Reporting & Record keeping:

*All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records must be maintained on site for five years and made available to the DNR upon request. The owner or operator of the equipment shall maintain the following records:*

1. The total quantity of paint used for permits 91-A-331-S5 and 01-A-862 in gallons per twelve-month rolling total.
2. The VOC content of the spray materials used.
3. The solids content of the spray materials used.
4. The specifications of the spray nozzles used.
5. A record of all maintenance and replacement of the paint arrestor pads (filters).

Authority for Requirement: Iowa DNR Construction Permit 01-A-862

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 29

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 01-A-862

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

### **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

## **Paint Booth Agency Operation & Maintenance Plan**

### **Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

### **Record Keeping and Reporting**

- Maintenance and inspection records will be kept for five years and available upon request.

### **Quality Control**

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: EP 2, EP 4, EP 5

### Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Authority for Requirement
EP 2	EU 2	Wood Dust System #1	CE2A: Cyclone CE2B: Baghouse	Wood	2,640 mcf/hr.	82-A-054
EP 4	EU 4	Wood Dust System #3	CE4A: Cyclone CE4B: Baghouse	Wood	2,700 mcf/hr.	87-A-070
EP 5	EU 5	Wood Dust System #2	CE5A: Cyclone CE5B: Baghouse	Wood	2,700 mcf/hr.	87-A-093

### Applicable Requirements

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

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

Emission Point	Opacity	Particulate Matter	Authority for Requirement
EP 2	40%	6.78 lb/hr.	82-A-054, 567 IAC 23.3(2)"d", 23.3(2)"a"
EP 4	40%	6.31 lb/hr.	87-A-070, 567 IAC 23.3(2)"d", 23.3(2)"a"
EP 5	40%	9.60 lb/hr.	87-A-093, 567 IAC 23.3(2)"d", 23.3(2)"a"

#### 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

*(Required for CE 2B, CE 4B, and CE 5B)*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP 6**

### Associated Equipment

Associated Emission Unit ID Number: EU 6  
Emissions Control Equipment ID Number: CE 6  
Emissions Control Equipment Description: Dry Filter

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Emission Unit vented through this Emission Point: 6  
Emission Unit Description: Maintenance Paint Booth  
Raw Material/Fuel: Paint  
Rated Capacity: 2.0 gal./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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2  
567 IAC 23.3(2)"d"

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

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.54 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2  
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 2.0 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2

#### **Operational Limits & Requirements**

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

Process throughput:

1. This emissions unit shall be used for facility maintenance operations.

**Reporting & Record keeping:**

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The permittee shall record daily the quantities and the VOC content of each coating and solvent used in the emissions unit.
2. The permittee shall maintain the following monthly records:
  - a. The VOC emission rate from the emissions unit in pounds or tons; and
  - b. The rolling 12-month total amount of VOC emissions from the emissions unit in tons.

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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

Stack Opening, (inches, dia.): 34

Exhaust Flow Rate (scfm): 18,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 91-A-035-S2

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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**

## **Paint Booth Agency Operation & Maintenance Plan**

### **Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

### **Record Keeping and Reporting**

- Maintenance and inspection records will be kept for five years and available upon request.

### **Quality Control**

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP 11**

### Associated Equipment

Associated Emission Unit ID Number: EU 11  
Emissions Control Equipment ID Number: CE 11  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU 11  
Emission Unit Description: Wood Dust System #4  
Raw Material/Fuel: Wood  
Rated Capacity: 3,240 mcf/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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S2  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: PM<sub>10</sub>

Emission Limit(s): 1.07 lb./hr, 0.0023 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.50 lb/hr., 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S2  
567 IAC 23.3(2)"a"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 22

Stack Opening, (inches, dia.): 48

Exhaust Flow Rate (scfm): 57,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S2

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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 12**

### Associated Equipment

Associated Emission Unit ID Number: EU 12

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Emission Unit vented through this Emission Point: EU 12

Emission Unit Description: Emergency Diesel Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 2,304 hp

### **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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1  
567 IAC 23.3(2)"d"

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

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.81 lb./hr, 0.081 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 3.30 lb./hr, 0.330 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

Pollutant: Nitrogen Oxide (NO<sub>x</sub>)

Emission Limit(s): 50.6 lb./hr, 5.06 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 1.47 lb./hr, 0.147 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 13.2 lb./hr, 1.32 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

### **Operational Limits & Requirements**

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

Hours of operation:

1. Operation of this engine shall be limited to 200 hours in any rolling 12-month period.

Process Throughput:

1. The sulfur content of the oil burned in this engine shall not exceed 0.5 percent by weight.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.
2. The permittee shall keep the following monthly records:
  - i. the number of hours that the engine operated; and
  - ii. the rolling, 12-month total of the number of hours that the engine operated.

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height, (ft, from the ground): 18

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 2,800

Exhaust Temperature (°F): 960

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-094-S1

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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 13 & EP 14

### Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Authority for Requirement
EP 13	EU13	Boiler #1	Natural Gas/ Fuel Oil	4.185 MMBtu/hr.	NA
EP 14	EU 14	Boiler #2	Natural Gas/ Fuel Oil	14.65 MMBtu/hr.	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): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.8 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(1)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (When combusting natural gas.)

Authority for Requirement: 567 IAC 23.3(3)"e"

#### Operational Limits & Requirements

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

Process throughput:

1. The boiler is limited to using #2 fuel oil and natural gas.
2. The sulfur content of the #2 fuel oil shall not exceed 0.5% (weight basis percentage).

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The sulfur content of the #2 fuel oil.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

**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 26**

### Associated Equipment

Associated Emission Unit ID Number: EU 26  
Emissions Control Equipment ID Number: CE-26  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: 26  
Emission Unit Description: Wood Dust System #5 (Sander System)  
Raw Material/Fuel: Wood  
Rated Capacity: 1,506 mcf/hr. (900 parts per 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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S2  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: PM<sub>10</sub>

Emission Limit(s): 1.5 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.5 lb/hr., 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-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.*

Control equipment parameters:

1. Maintain Fabric Filter Dust Collector (CE 26) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Fabric Filter Dust Collector (CE 26).

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S2

### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

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

Stack Opening, (inches): 34 x 34

Exhaust Flow Rate (scfm): 25,100

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S2

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

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

#### **Stack Testing:**

Pollutant - Particulate Matter

Stack Test to be Completed by – January 31, 2014

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**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 32**

### Associated Equipment

Associated Emission Unit ID Number: EU 32  
Emissions Control Equipment ID Number: CE 32  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU 32  
Emission Unit Description: Wood Dust System #6  
Raw Material/Fuel: Wood  
Rated Capacity: 3,900 mcf/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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 07-A-1017  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: PM<sub>10</sub>

Emission Limit(s): 1.44 lb/hr.

Authority for Requirement: Iowa DNR Construction Permit 07-A-1017

Pollutant: Particulate Matter

Emission Limit(s): 1.44 lb/hr., 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 07-A-1017  
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.*

Control equipment parameters:

1. The permittee shall operate and maintain the fabric filter baghouse in accordance with the recommendations of the manufacturer.

**Reporting & Record keeping:**

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The permittee shall maintain records on the maintenance performed on the fabric filter baghouse.
2. The permittee shall maintain records on the emissions testing performed on this emissions unit.
3. The permittee shall properly install, operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

Authority for Requirement: Iowa DNR Construction Permit 07-A-1017

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 28

Stack Opening, (inches, dia.): 54

Exhaust Flow Rate (scfm): 65,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 07-A-1017

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: Group 1

### Associated Equipment

<b>Emission Point</b>	<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Authority for Requirement</b>
EP 17	EU 17	Spray Booth #1	CE 17: Dry Filters	Paints/ Solvents	3 gal/hr.	00-A-861-S6
EP 18	EU 18	Spray Booth #2	CE 18: Dry Filters	Paints/ Solvents	3 gal/hr.	00-A-862-S6
EP 22	EU 22	Spray Booth #3	CE 22: Dry Filters	Paints/ Solvents	3 gal/hr.	00-A-868-S6
EP 23	EU 23	Spray Booth #4	CE 23: Dry Filters	Paints/ Solvents	3 gal/hr.	00-A-869-S6
EP 33	EU 33	Primer Oven #1	NA	Electric	NA	06-A-1034-S1
EP 34	EU 34	Topcoat Oven #2	NA	Electric	NA	06-A-1035-S1
EP 35	EU 35	Primer Oven #3	NA	Electric	NA	06-A-1036-S1
EP 36	EU 36	Topcoat Oven #4	NA	Electric	NA	06-A-1037-S1
EP 44	EU 44	1/2 Auto Prefinish Booth	CE 44: Dry Filters	Paints/ Solvents	22.4 gal/hr.	10-A-257
EP 45	EU 45	1/2 Auto Prefinish Booth	CE 45: Dry Filters	Paints/ Solvents	22.4 gal/hr.	10-A-258
EP 46	EU 46	1/2 Auto Prefinish Booth	CE 46: Dry Filters	Paints/ Solvents	22.4 gal/hr.	10-A-259
EP 47	EU 47	1/2 Auto Prefinish Booth	CE 47: Dry Filters	Paints/ Solvents	22.4 gal/hr.	10-A-260
EP 48	EU 48	Manual Prefinish Oven	NA	Electric	NA	10-A-261
EP 49	EU 49	Prefinish Oven	NA	Electric	NA	10-A-262
EP 50	EU 50	Prefinish Oven	NA	Electric	NA	10-A-263
EP 51	EU 51	Prefinish Oven	NA	Electric	NA	10-A-264
EP 52	EU 52	Manual Spray Booth	CE 52: Dry Filters	Paints/ Solvents	5.6 gal/hr.	10-A-265

## Applicable Requirements

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

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

<b>Emission Point</b>	<b>Opacity</b>	<b>PM<sub>10</sub></b>	<b>Particulate Matter</b>	<b>VOC's</b>	<b>Total HAP</b>	<b>Authority for Requirement</b>
EP 17	40% <sup>(1)</sup>	0.17 lb/hr.	0.17 lb/hr. 0.01 gr/dscf	35.1 tons/yr.	0.48 lb HAP/gallon solids	00-A-861-S6, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 18	40% <sup>(1)</sup>	0.17 lb/hr.	0.17 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	00-A-862-S6, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 22	40% <sup>(1)</sup>	0.17 lb/hr.	0.17 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	00-A-868-S6, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 23	40% <sup>(1)</sup>	0.17 lb/hr.	0.17 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	00-A-869-S6, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 33	NA	NA	NA		0.48 lb HAP/gallon solids	06-A-1034-S2, 567 IAC 23.1(4)"cq"
EP 34	NA	NA	NA		0.48 lb HAP/gallon solids	06-A-1035-S2, 567 IAC 23.1(4)"cq"
EP 35	NA	NA	NA		0.48 lb HAP/gallon solids	06-A-1036-S2, 567 IAC 23.1(4)"cq"
EP 36	NA	NA	NA		0.48 lb HAP/gallon solids	06-A-1037-S2, 567 IAC 23.1(4)"cq"
EP 44	40% <sup>(1)</sup>	0.12 lb/hr.	0.12 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	10-A-257, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 45	40% <sup>(1)</sup>	0.12 lb/hr.	0.12 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	10-A-258, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 46	40% <sup>(1)</sup>	0.12 lb/hr.	0.12 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	10-A-259, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 47	40% <sup>(1)</sup>	0.12 lb/hr.	0.12 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	10-A-260, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"
EP 48	NA	NA	NA		0.48 lb HAP/gallon solids	10-A-261, 567 IAC 23.1(4)"cq"
EP 49	NA	NA	NA		0.48 lb HAP/gallon solids	10-A-262, 567 IAC 23.1(4)"cq"
EP 50	NA	NA	NA		0.48 lb HAP/gallon solids	10-A-263, 567 IAC 23.1(4)"cq"
EP 51	NA	NA	NA		0.48 lb HAP/gallon solids	10-A-264, 567 IAC 23.1(4)"cq"
EP 52	40% <sup>(1)</sup>	0.60 lb/hr.	0.60 lb/hr. 0.01 gr/dscf		0.48 lb HAP/gallon solids	10-A-265, 567 IAC 23.3(2)"d", 23.4(13), 23.1(4)"cq"

<sup>(1)</sup> If visible emissions are observed the owner/operator is required to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

## **Operational Limits & Requirements**

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

Sources EU 17, EU 18, EU 22, and EU 23 will comply with requirements of 40 CFR Part 63 Subpart B 40 by demonstrating compliance with the conditions and requirements specified in 63 Subpart QQQQ-*National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products.*

Authority for Requirement: Iowa DNR Construction Permits 00-A-861-S6, 00-A-862-S6, 00-A-868-S6, 00-A-869-S6

### **Required for EU 17, EU 18, EU 22, and EU 23**

Process throughput:

1. The application rate of coating material in each booth is limited to 3 gallons per hour based on average daily usage.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The permittee shall maintain the following daily records:
  - a. The amount of coating material used in this emissions unit (gallons);
  - b. The number of hours that the emissions unit was in operation; and
  - c. The average hourly coating usage rate for the day (gallons/ hour).

Authority for Requirement: Iowa DNR Construction Permits 00-A-861-S6, 00-A-862-S6, 00-A-868-S6, 00-A-869-S6

### **Required for EU 44, EU 45, EU 46, and EU 47**

Process throughput:

1. The owner or operator is limited to using no more than four spray guns with a maximum capacity of 22.4 gallons per hour in each spray booth.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The owner or operator shall maintain a specification sheet for any spray gun used in the paint booth to verify the capacity of the spray guns.

Authority for Requirement: Iowa DNR Construction Permits 10-A-257, 10-A-258, 10-A-259, 10-A-260

**Required for EU 52**

Process throughput:

1. The owner or operator is limited to using no more than one spray gun with a maximum capacity of 5.6 gallons per hour in this spray booth.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The owner or operator shall maintain a specification sheet for any spray gun used in the paint booth to verify the capacity of the spray guns.

Authority for Requirement: Iowa DNR Construction Permit 10-A-265

**Required for EU 17, EU 18, EU 22, EU 23, EU 44, EU 45, EU 46, EU 47, and EU 52**

Control equipment parameters:

1. The owner or operator shall maintain dry filters for these spray booths according manufacturers specifications and maintenance schedule.

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of dry filters.

Authority for Requirement: Iowa DNR Construction Permits 00-A-861-S6, 00-A-862-S6, 00-A-868-S6, 00-A-869-S6, 10-A-257, 10-A-258, 10-A-259, 10-A-260, 10-A-265

Process throughput:

1. The total amount of materials (coating, primer, adhesive, solvent, etc.) containing Volatile Organic Compound (VOC) used in the emission units in Group 1 shall not exceed 60,000 gallons per twelve-month rolling period.
2. The VOC content of the materials (coating, primer, adhesive, solvent, etc.) used in any of the emission units in Group 1 shall not exceed 1.17 pounds per gallon.
3. The owner or operator shall operate and maintain this spray booth according to the provision in 40 CFR §63.6(e)(1)(i) as per the compliance requirements of 40 CFR §63.4700(b).

Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The owner or operator shall calculate and record the monthly total and the 12-month rolling total amount of VOC-containing materials (coating, primer, adhesive, solvent, etc.) used in the emission units in Group 1.
2. The owner or operator shall keep records on the identification and the VOC content of all VOC-containing materials (coating, primer, adhesive, solvent, etc.) used in any of the emission units in Group 1, in pounds per gallon.
3. The owner or operator shall maintain manufacturer/vendor provided information (i.e., Material Safety Data Sheets (MSDS), technical data sheets, etc.) of all materials used in the emission units in Group 1, which clearly indicates the VOC content of that material.
4. The owner or operator shall meet all the applicable requirements of 40 CFR Part 63, Subpart QQQQ, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products, including those not specifically mentioned in this permit. In differences in language between this permit and Subpart QQQQ-National Emission Standards for Hazardous Air Pollutants Surface Coating of Wood Building Product, the language specified in Subpart QQQQ shall be considered correct. The facility is also subject to 40 CFR Part 63, Subpart A – General Provisions as specified in 40 CFR §63.4701.
5. As specified in 40 CFR Part 63 §63.4691, Pella Corporation must include all coating, thinners, and cleaning materials used in an affected source when determining whether organic HAP emission rate is equal to or less than applicable emission limit of 0.48 lb HAP/gallon Solids. To make this determination, Pella Corporation must use at least one of the three compliance options listed in paragraphs (a) through (c) of §63.4691, i.e. Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls.
  - a. If Pella Corporation would like to implement Emission Rate with Add-on Controls option as specified in §63.4691(c), Pella Corporation must submit a request to the Department to modify this permit.
  - b. Pella Corporation may apply any of the compliance options to an individual coating or to multiple coating operations as a group or the entire affected source in accordance with the requirements specified in §63.4691.
  - c. Pella Corporation may use different compliance options for different coating operations or at different times on the same coating operation in accordance with the requirements specified in §63.4691.
  - d. Pella Corporation may not use different compliance options at the same time on the same coating operation in accordance with the requirements specified in §63.4691.

**Compliant Material Option:** If Pella Corporation chooses the *Compliant Material Option*, Pella Corporation must comply with the following requirements specified in 1 through 3 below and requirements specified in 40 CFR Part 63 §63.4740, §63.4741, and §63.4742.

1. As specified in 40 CFR Part 63, §63.4740 and §63.4742(a), to demonstrate compliance for each compliance period, Pella Corporation must use no coating in an affected source for which the organic HAP content determined using Equation 2 of §63.4741 exceeds 0.48 lb HAP/gallon Solids and use no thinner or cleaning material that contains organic HAP, determined according to §63.4741(a). A compliance period consists of 12 months. The initial compliance period for affected sources is the end of the first month in which this permit is issued. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months.
2. As specified in 40 CFR Part 63 §63.4741, in demonstrating initial compliance of an affected source with the emission limit of 0.48 lb HAP/gallon Solids, Pella Corporation must comply with the following conditions:
  - a. Determine the mass fraction of organic HAP for each coating, thinner, and cleaning agent used during the compliance period according to the requirements specified in §63.4741(a).
  - b. Determine the volume fraction of coating solids for each coating used during the compliance period according to the requirements specified in §63.4741(b).
  - c. Determine the density of each coating used during the compliance period from test results using ASTM Method D1475-90 or information from the supplier or manufacturer of the material according to the requirements specified in §63.4741(c).
  - d. Calculate the organic HAP content, lbs organic HAP per gallon coating solids, of each coating used during the compliance period according to requirements in §63.4741(d).
3. As specified in 40 CFR Part 63 §63.4742(b), the use of any coating, thinner, or cleaning material that does not meet criteria specified in Condition 1 above is a deviation from the emission limitations that must be reported as specified in 40 CFR Part 63 §63.4710(c)(6) and §63.4720(a)(6).

**Emission Rate Without Add-on Controls Option:** If Pella Corporation chooses the *Emission Rate Without Add-on Controls Option*, Pella Corporation must comply with the following requirements and requirements specified in 40 CFR Part 63 §63.4750, §63.4751, and §63.4752.

1. As specified in 40 CFR Part 63 §63.4752(a), to demonstrate compliance, the organic HAP emission rate for each compliance period, calculated using Equation 3 of §63.4751, must be less than or equal to 0.48 lb HAP/gallon Solids from affected sources. A compliance period consists of 12 months. The initial compliance period for affected sources is the end of the first month in which this permit is issued. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4751(a) through (g) on monthly basis using the data from the previous 12 months of operation.
2. As specified in 40 CFR Part 63 §63.4751, in demonstrating initial compliance of affected sources with applicable emission limit of 0.48 lb HAP/gallon Solids, Pella Corporation must comply with the following conditions:
  - a. Determine the mass fraction of organic HAP for each coating, thinner, and cleaning agent used during each month according to the requirements specified in §63.4751(a).
  - b. Determine the volume fraction of coating solids for each coating used during each month according to the requirements specified in §63.4751(b).

- c. Determine the density of each coating, thinner, and cleaning material used during each month from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data of pure materials according to the requirements specified in §63.4751(c).
  - d. Determine the volume (gallons) of each coating, thinner, and cleaning material used during each month by measurement or usage records according to the requirements specified in §63.4751(d).
  - e. Calculate the mass of organic HAP emissions according to the requirements specified in §63.4751(e). The mass of organic HAP emissions is the combined mass of organic HAP contained in all coating, thinners, and cleaning materials used during each month minus the organic HAP in certain waste materials.
  - f. If owner/operator chooses to account for the mass of organic HAP contained in the waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of §63.4751(e), then the owner/operator must determine it according to paragraphs (e)(4)(i) through (iv) of §63.4751(e)(4).
  - g. Determine the total volume of coating solids used which is the combined volume of coating solids for all coating used during each month according to the requirements specified in §63.4751(f).
  - h. Calculate the organic HAP emission rate for the 12-month compliance period, lbs organic HAP per gallon coating solids used according to the requirements specified in §63.4751(g).
3. As specified in 40 CFR Part 63 §63.4752(b), if the organic HAP emission rate for any 12-month compliance period exceeded the emission limit of 0.48 lb HAP/gallon solids, this is a deviation from the emission limitations for that compliance period and must be reported as specified in 40 CFR Part 63 §63.4710(c)(6) and §63.4720(a)(6).
  4. The owner or operator must maintain all applicable records required by 40 CFR Part 63, Subpart QQQQ, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products, as specified in 40 CFR Part 63 §63.4730 and §63.4731. This includes the following records and documentation:
    - a. A current copy of information provided by materials suppliers or manufactures, such as manufacture's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If testing was conducted to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the owner or operator must keep a copy of the complete test report. If information is provided by the manufacturer or supplier of the material that was based on testing the summary sheet of results must be kept. The owner or operator is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
    - b. For each compliance period:
      - i. A record of the coating operations at which you used each compliance option and the time periods (beginning and ending dates and times) you used each option.
      - ii. For the Compliant Material Option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.4741.
      - iii. For the Emission Rate Without Add-on Controls Option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used each month, using Equations 1, 1A

through 1C, and 2 of §63.4751; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4751(e)(4); the calculation of the total volume of coating solids used each month, using Equation 2 of §63.4751; and the calculation of each 12-month organic HAP emission rate, using Equation 3 of §63.4751.

- iv. A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.
- c. A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
- d. A record of the volume fraction of coating solids for each coating used during each compliance period.
- e. A record of the density for each coating used during each compliance period; and, if either the Emission Rate Without Add-on Controls Option or the Emission Rate With Add-on Controls Option is used, the density for each thinner and cleaning material used during each compliance period.

Authority for Requirement: Iowa DNR Construction Permits 00-A-861-S6, 00-A-862-S6, 00-A-868-S6, 00-A-869-S6, 06-A-1034-S2, 06-A-1035-S2, 06-A-1036-S2, 06-A-1037-S2, 10-A-257, 10-A-258, 10-A-259, 10-A-260, 10-A-261, 10-A-262, 10-A-263, 10-A-264, 10-A-265 567 IAC 23.1(4)"cq"

### **Emission Point Characteristics**

*These emission points shall conform to the conditions listed below.*

<b>Emission Point</b>	<b>Stack Height, (ft, from the ground)</b>	<b>Stack Opening, (inches, dia.)</b>	<b>Exhaust Flow Rate (scfm)</b>	<b>Exhaust Temperature (°F)</b>	<b>Discharge Style</b>	<b>Authority for Requirement</b>
EP 17	32	18	2,025-4,500	70	Vertical Unobstructed	00-A-861-S6
EP 18	32	18	2,025-4,500	70	Vertical Unobstructed	00-A-862-S6
EP 22	32	18	2,025-4,500	70	Vertical Unobstructed	00-A-868-S6
EP 23	32	18	2,025-4,500	70	Vertical Unobstructed	00-A-869-S6
EP 33	32	16	1,500	150	Vertical Unobstructed	06-A-1034-S1
EP 34	32	16	1,500	150	Vertical Unobstructed	06-A-1035-S1
EP 35	31	16	1,500	150	Vertical Unobstructed	06-A-1036-S1
EP 36	31	16	1,500	150	Vertical Unobstructed	06-A-1037-S1
EP 44	33	14	1,700-3,000	Ambient	Vertical Unobstructed	10-A-257
EP 45	33	14	1,700-3,000	Ambient	Vertical Unobstructed	10-A-258
EP 46	33	14	1,700-3,000	Ambient	Vertical Unobstructed	10-A-259
EP 47	33	14	1,700-3,000	Ambient	Vertical Unobstructed	10-A-260
EP 48	33	8	900	130	Vertical Unobstructed	10-A-261
EP 49	33	10	1,500	130	Vertical Unobstructed	10-A-262
EP 50	33	10	1,500	130	Vertical Unobstructed	10-A-263
EP 51	33	10	1,500	130	Vertical Unobstructed	10-A-264
EP 52	33	36	10,000-14,000	Ambient	Vertical Unobstructed	10-A-265

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Agency Approved Operation & Maintenance Plan Required? Yes  No**

*(Required for CE 17, CE 18, CE 22, CE 23, CE 44, CE45, CE 46, CE 47, CE 52)*

**Facility Maintained Operation & Maintenance Plan Required? Yes  No**

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

Authority for Requirement: 567 IAC 22.108(3)

**Paint Booth Agency Operation & Maintenance Plan**

**Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

**Record Keeping and Reporting**

- Maintenance and inspection records will be kept for five years and available upon request.

**Quality Control**

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: EP 53 & EP 54

### Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Authority for Requirement
EP 53	EU 53	Surface Preparation Area	CE 53: Cyclone & Cartridge Filter	Wood	NA	10-A-266
EP 54	EU 54	Surface Preparation Area	CE 54: Cyclone & Cartridge Filter	Wood	NA	10-A-267

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### 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): 40%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permits 10-A-266 & 10-A-267  
567 IAC 23.3(2)"d"

<sup>(1)</sup> If visible emissions are observed the owner/operator is required 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: PM<sub>10</sub>

Emission Limit(s): 0.11 lb/hr.

Authority for Requirement: Iowa DNR Construction Permits 10-A-266 & 10-A-267

Pollutant: Particulate Matter

Emission Limit(s): 0.11 lb/hr., 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 10-A-266 & 10-A-267  
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.*

Control equipment parameters:

1. The owner or operator shall maintain dry filters for this unit according manufacturers specifications and maintenance schedule.

**Reporting & Record keeping:**

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. Maintain a copy of the dust collector manufacturer’s recommendation on the maintenance and operation of the dust collector.
2. Log all maintenance activities performed on the dust collector associated with emission point. This log shall include, but not be limited to, the date and time any inspections of the dust collector occurs, any issues with the dust collector identified, and any corrective action taken to resolve noted issues with the dust collector.

Authority for Requirement: Iowa DNR Construction Permits 10-A-266 & 10-A-267

**Emission Point Characteristics**

*Each emission point shall conform to the specifications listed below.*

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

Stack Opening, (inches, dia.): 16

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permits 10-A-266 & 10-A-267

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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   
*(Required for CE 53 and CE 54)*

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

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP CO

### Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Authority for Requirement
EU 29	Wood Dip/Dry – Frame In-Line	CE CO: Catalytic Oxidizer	Wood Treatment	125,000 gal./yr.	91-A-327-S7
EU 30	Wood Dip/Dry – Sash In-Line				
EU 41	Wood Dip/Dry – Rail In-Line				
EU 42	Wood Dip/Dry – Stile/Still In-Line				
EU 43	Wood Dip/Dry – Head/Jamb In-Line				

### 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%<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7  
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 102 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7

Pollutant: Total HAP's

Emission Limit(s): 0.48 lb HAP/gallon solids

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7  
567 IAC 23.1(4)"cq"  
40 CFR 63 Subpart QQQQ

## **Operational Limits & Requirements**

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

### Process throughput:

1. The VOC content of any preservative or solvent added to the dip tanks serving the 91-A-327-S7, and EU-43 shall not exceed 6.5 pounds per gallon.
2. The amount of preservative and solvent used in wood dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43 shall not exceed 125,000 gallons in any rolling 12-month period.
3. The VOC emissions from EU-29, EU-30, EU-41, EU-42, and EU-43 and EP-CO shall not exceed 102 tons in any rolling 12-month period.
4. Wood Dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43 shall be equipped with a permanent total enclosure that shall meet the requirements of Method 204 (Appendix M to 40 CFR Part 51). This requirement only applies to the area where the wood preservative chemicals are applied.

### Control equipment parameters:

1. The destruction efficiency of the catalytic oxidizer shall be a minimum of 95% by weight.
2. The permittee shall maintain the inlet temperature of the main combustion chamber of the catalytic oxidizer between 630°F and 750°F.
3. The permittee shall inspect and maintain the catalytic oxidizer in accordance with the recommendations of the manufacturer.

### Reporting & Record keeping:

*All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:*

1. The permittee shall record the identification, the VOC content, and the HAP content of any preservative or solvent used in the wood treatment tanks (EU-29, EU-30, EU-41, EU-42, and EU-43).
2. The permittee shall maintain the following monthly records:
  - a. The amount of preservative and solvent added to emissions units EU-29, EU-30, EU-41, EU-42, and EU-43 in gallons;
  - b. The rolling 12-month total amount of preservative and solvent added to wood dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43 in gallons;
  - c. the total VOC emissions for EU-29, EU-30, EU-41, EU-42, EU-43 and EP-CO in tons. This shall be calculated using the following equation:

$$VOC_{TOT} = (VOC_{USED} \times .75 \times (1 - DE)) + (VOC_{USED} \times .25)$$

Where:

$VOC_{TOT}$  = VOC emission rate from wood dip tanks EU-29, EU-30, EU-41, EU-42, EU-43, and EP-CO in tons per month

$VOC_{USED}$  = the amount of VOC used in the wood dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43 in tons per month based on the monthly records on the amount of preservative and solvent used and their VOC content. The permittee can take credit for 10% of the VOC to be retained in the final wood product provided that records are maintained to support this claim. In that case,  $VOC_{USED}$  will be equal to the amount of VOC used in the tanks multiplied by 90%.

0.75 = assumed overall capture efficiency for the wood dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43

DE = destruction efficiency of the catalytic incinerator, based on the most recent stack test accepted by the Iowa DNR - Air Quality Bureau

0.25 = assumed percent of VOC emissions for the wood dip tanks EU-29, EU-30, EU-41, EU-42, and EU-43 that are not captured

- d. the total VOC emission rate in tons for EU-29, EU-30, EU-41, EU-42, EU-43 and EP-CO on a rolling 12-month basis.
3. The permittee shall submit notifications as required by § 63.4710; the permittee shall submit required reports in accordance with § 63.4720.
4. The permittee shall maintain the necessary records in accordance with §63.4730 and §63.4731.
5. If using the Compliant Material Option to comply with the HAP limit, the permittee shall follow the requirements of §63.4740, §63.4741, and §63.4742.
6. If using the Emission Rate Without Add-on Control Option to comply with the HAP limit, the permittee shall follow the requirements of §63.4750, §63.4751, and §63.4752.
7. The permittee shall record the inlet temperature to the main combustion chamber to the catalytic oxidizer hourly.
8. The permittee shall maintain a record of the inspection and maintenance performed on the catalytic oxidizer.

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7

### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

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

Stack Opening, (inches, dia.): 35

Exhaust Flow Rate (acfm): 7,500 – 20,000

Exhaust Temperature (°F): 350 -500

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S7

The temperature and flow rate 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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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 for Catalytic Oxidizer for VOC Control

## CATALYTIC OXIDIZER FOR VOC CONTROL

### 1. APPLICABILITY

- 1.1 Control Technology: Catalytic Oxidizer
- 1.2 Pollutants: Volatile organic compounds (VOC's)
- 1.3 Process Emissions Unit: Dip/Dry Units Wood Treatment Tanks
- 1.4 Applicable Regulation and Emission Limit
  - Iowa DNR Construction Permit: 91-A-327-S7
  - Emission Limit: Volatile Organic Compounds limited to 102 Tons/yr

### 2. MONITORING APPROACH DESCRIPTION

- 2.1 Parameters to be Monitored: Catalyst inlet gas stream temperatures between 553 EF and 1000 EF.
- 2.2 Rationale for Monitoring Approach
  - Catalyst inlet gas temperature: Allows determination of temperature of gas flowing into catalyst bed to ensure bed is maintained within the design temperature range to ensure 95% destruction efficiency.
  - Wood Dip Tanks EU 29, EU 30, EU 41, EU 42, and EU 43 shall be equipped with a permanent total enclosure that shall meet the requirements of Method 204 (Appendix M to 40 CFR Part 51).
  - Wood Dip Tanks EU 29, EU 30, EU 41, EU 42, and EU 43 are directly tied to the control unit EP-CO and cannot by-pass to the atmosphere.
- 2.3 Monitoring Location:
  - Inlet gas temperature: Inlet probe is secured prior to the air stream entering the catalytic bed.
- 2.4 Analytical Devices Required
  - Inlet temperatures: Thermocouples as appropriate for specific gas stream.
- 2.5 Data Acquisition and Measurement System Operation
  - Frequency of measurement: Recorded continuously on strip chart or data acquisition system. Monitored daily for temperatures outside operational parameters.
  - Reporting units: Degrees Fahrenheit (EF)
  - Recording process: Operators take readings and manually log data, or recorded automatically on strip chart or digital data acquisition system.
- 2.6 Data Requirements
  - Historical plant/chart records on catalyst inlet gas temperatures.
- 2.7 Specific QA/QC Procedures:
  - Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.
  - A stack test shall be conducted on the inlet and outlet to verify the 95% destruction efficiency. Such tests will be required every 3 years to verify performance rating on the oxidizers control efficiency technology.
  - The oxidizer shall be operated and maintained according to the manufacturers recommendations.
  - Verify Chart recorder calibration on an annual basis to verify accuracy.

### **3. Data Collection**

3.1 Data Collection Frequency: Inlet temperature shall be measured continuously during the hours of operation of the oxidizer (EP-CO).

3.2 Collected temperature readings will be maintained on site for and available for inspection for a period of five years.

**Emission Point ID Number: Surface App. (Uncaptured)**

Associated Equipment

Associated Emission Unit ID Number: Surface Application

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**Applicable Requirements**

Emission Unit vented through this Emission Point: Surface App.

Emission Unit Description: Miscellaneous Chemicals, Surface Application

Raw Material/Fuel: Solvents, Sealants, Adhesives

Rated Capacity: NA

**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.*

No applicable requirements at this time.

**Monitoring Requirements**

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

**Agency Approved Operation & Maintenance Plan Required? Yes  No**

**Facility Maintained Operation & Maintenance Plan Required? Yes  No**

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

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"*

### G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *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 present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, 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 EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. 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 following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
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) 281-8694 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. 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. Oral 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 oral 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 oral report may be made 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 oral 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 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 must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *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.
  - e. The changes comply with all applicable requirements.
  - f. For such a 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 is required to do 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 Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

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 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.

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 a 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, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant 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, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 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 22.105(1)"a"(4)

#### **G19. Duty to Obtain Construction Permits**

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 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, training fires and controlled burning of a demolished building. 567 IAC 23.1(3)"a", and 567 IAC 23.2

## **G21. Open Burning**

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

## **G22. Acid Rain (Title IV) Emissions Allowances**

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

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

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

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

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight

sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance 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)*

## **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 to determine transferability of the permit. *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. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. 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  
7900 Hickman Road, Suite #1  
Windsor Heights, IA 50324  
(515) 242-6001

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:

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(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  
7900 Hickman Road, Suite #1  
Windsor Heights, IA 50324  
(515) 242-5100

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

**Field Office 1**

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

**Field Office 3**

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

**Field Office 5**

401 SW 7<sup>th</sup> Street, Suite I  
Des Moines, IA 50309  
(515) 725-0268

**Polk County Public Works Dept.**

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

**Field Office 2**

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

**Field Office 4**

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Air Pollution Control Division  
501 13th St., NW  
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## V. Compliance Assurance Monitoring Plan

### EP 2, EP4, EP 5, EP 11, EP 26 & EP 32 Wood Dust Collection Systems

	<b>Indicator #1</b>	<b>Indicator #2</b>
I. Indicator	Differential pressure across the baghouse	Visible Emissions
II. Measurement Approach	Differential pressure measured across the baghouse by a pressure gauge.	Visible emissions from the baghouse exhaust while operating and exhausting to the outdoors. NOTE: This indicator is not applicable when the exhaust is vented internally during the winter months.
III. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside of the acceptable range. The acceptable range is 0.5 to 5.0 inches water.  Excursions trigger inspection, corrective action to return operation to the indicator range and recordkeeping of the excursion and the corrective action taken to resolve the excursion.	An excursion is defined a observation of visible emissions from the exhaust.  Excursions trigger inspection, corrective action to return operation to the indicator range and recordkeeping of the excursion and the corrective action taken to resolve the excursion.
IV. Performance Criteria		
A. Data Representativeness	The differential pressure is measured across the baghouse.	Visible emissions are made at the emission point and on the external baghouse unit, system ductwork, and associated components.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	NA
C. QA/QC Practices and Criteria	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	Observer(s) will be trained to detect visible emissions.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	No visible emissions observations are made at the emission point on a weekly basis
E. Data Collection Procedures	Results of the differential pressure readings will be recorded on record forms that will be kept for a minimum of 5 years.	Results of visible emission observations are recorded on record forms and kept for a minimum of 5 years.