

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

**Name of Permitted Facility: HNI Corporation – Central Campus**

**Facility Locations: 301 Oak Street  
Muscatine, IA 52761**

**Air Quality Operating Permit Number: 02-TV-028R2**

**Expiration Date: 9/12/2028**

**Permit Renewal Application Deadline: 3/12/2028**

**EIQ Number: 92-2531\***

**Facility File Number: 70-01-006\***

\* HON Oak Steel (70-01-006; 92-2531), HON Oak Laminate (70-01-068), HON Headquarters, Solution Center, and Central Regional Distribution were consolidated into one source subject to Title V and now use one facility number (70-01-006) and one EIQ number (92-2531).

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**Responsible Official**

**Name: David Gardner**

**Title: Vice President**

**Mailing Address: 600 East 2<sup>nd</sup> Street, Muscatine, IA 52761**

**Phone #: (563) 272-7930**

**Permit Contact Person for the Facility**

**Name: Gabriel Capan**

**Title: Corporate Environmental Manager**

**Mailing Address: 600 East 2<sup>nd</sup> Street Suite 100, Muscatine, IA 52761**

**Phone #: (563) 214-2054**

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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**



9/13/2023

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Marnie Stein, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
DNR .....	Department of Natural Resources
°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
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
SUE.....	Small Unit Exemption
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
PM <sub>2.5</sub> .....	particulate matter 2.5 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: HNI Corporation – Central Campus

Permit Number: 02-TV-028R2

Facility Description: Wood and Metal Office Furniture Manufacturing (SICs 2521, 2522)

## Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	Construction Permit Number
001.EQPT.1.F	001.001.EQPT.1	Painting - NonProduction (equipment painting)	SUE
1405.IPH.1.EP.1	250.1405.IPH.1	Pretreatment – Indirect Heat	Exempt
1412.IPH.1.EP.1	250.1412.IPH.1	Pretreatment – Indirect Heat	Exempt
1421.IPH.1.EP.1	250.1421.IPH.1	Pretreatment – Indirect Heat	Exempt
1442.IPH.1.EP.1	250.1442.IPH.1	Pretreatment – Indirect Heat	Exempt
1481.IPH.1.EP.1	250.1481.IPH.1	Pretreatment – Indirect Heat	Exempt
501.IPH.1.EP.1	501.501.IPH.1	Pretreatment – Indirect Heat	Exempt
102.RICE.1.EP.1	102.102.RICE.1	Cummins Diesel IC Engine	17-A-242
1405.MFCO.1.EP.1	250.1405.MFCO.1	Cure Oven for Powder Coatings & Oven Heater	01-A-744-S3
1405.MFDO.1.EP.1	250.1405.MFDO.1	Washer Dry-off Oven	01-A-742-S2
1405.MFPT.1.EP.1	250.1405.MFPT.1	Washer for Surface Coating Line	01-A-740-S1
1405.MFPT.1.EP.2			01-A-741-S1
1412.MFCO.1.EP.1	250.1412.MFCO.1	Cure Oven	Exempt
1412.MFDO.1.EP.1	250.1412.MFDO.1	Dry Off Oven	Exempt
1421.MFPCO.1.EP.1	250.1421.MFPCO.1	Cure Oven for Powder Coating	18-A-619
1461.MFCO.1.EP.1	250.1461.MFCO.1	Cure Oven	Exempt
1461.MFDO.1.EP.1	250.1461.MFDO.1	Dry Off Oven	Exempt
1461.MFPB.1.EP.1	250.1461.MFPB.1	Paint Spray Booth	89-A-163-S4
	250.1461.MUA.1	Make-up Air Heater	
1461.MFPB.2.EP.1	250.1461.MFPB.2	Paint Spray Booth	89-A-164-S4
1461.MFPT.1.EP.1	250.1461.MFPT.1	Washer for Surface Coating Line	17-A-620
1481.MFDO.2.EP.1	250.1481.MFDO.2	Washer Dry-off Oven	18-A-616
1481.MFPCO.1.EP.1	250.1481.MFPCO.1	Cure Oven for Powder Coat	18-A-617
2010.MFPCO.1.EP.1	250.2010.MFPCO.1	Powder Coating Line & Oven Heater	18-A-618-S1
2043.MFPB.1.EP.1	250.2043.MFPB.1	Color Check Paint Booth	95-A-080-S2
	250.2043.MFMR.1	Paint Mix Room	
250.SUAdh.F	250.250.SUAdh	Adhesives Application – Oak Steel	17-A-479
250.SUAero.F	250.250.SUAero	Aerosol Use – Oak Steel	Exempt

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Construction Permit Number</b>
250.SUCIn.F	250.250.SUCIn	Cleaning Solvent Usage - Oak Steel	17-A-481
253.SUWdStn.F	253.253.SUWdStn	Wood Furniture Stain – Oak Laminate	17-A-483
253.SUAdh.F	253.253.SUAdh	Adhesives Application – Oak Laminate	17-A-480
253.SUAero.F	253.253.SUAero	Aerosol Use – Oak Laminate	Exempt
253.SUCIn.F	253.253.SUCIn	Cleaning Solvent Usage - Oak Laminate	17-A-482
2630.DCW.3.IV.1	253.2630.DCW.3	Woodworking Operations	04-A-904-S2
2630.DCW.4.IV.1	253.2630.DCW.4	Woodworking Operations	98-A-548-S3
2630.DCW.6.IV.1	253.2630.DCW.6	Woodworking Operations	13-A-071-S1
501.CH.1.EP.1	501.501.CH.1	Boiler	Exempt
2012.FPUF.1.EP.1	501.2012.FPUF.1	Flexible Polyurethane Foam Line - 8 Mold Stations	16-A-314-S1
	501.2012.FPUF.2	Mold Release Application - 4 Spray Applicators	

Emission Unit Number Guide:

001 = Solution Center (911, 912, 914 E 5<sup>th</sup> St)

102 = Admin Headquarters (200 Oak St)

250 = Oak Steel Plant (301 Oak St)

253 = Oak Laminate (600 E 2<sup>nd</sup> St)

501 = Central Region Distribution (601 E 2<sup>nd</sup> St) & Central Seating (620 E 5<sup>th</sup> St)

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## Insignificant Activities Equipment List

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Insignificant Emission Unit Number	Insignificant Emission Unit Description
001.001.CH	Comfort Heat (13 Natural Gas Units Totaling 2.78 MMBtu/hr)
001.001.UsedOil	Used Oil Storage Tank (350 Gallons)
102.102.CH	Comfort Heat (10 Natural Gas Units Totaling 3.8 MMBtu/hr)
250.250.CH	Comfort Heat (40 Natural Gas Units Totaling 31.63 MMBtu/hr)
250b.250b.CH	Comfort Heat (6 Natural Gas Units Totaling 0.8875 MMBtu/hr)
250c.250c.CH	Comfort Heat (1 Natural Gas Unit of 4.1125 MMBtu/hr)
253.253.CH	Comfort Heat (10 Natural Gas Units Totaling 7.21 MMBtu/hr)
501.501.CH	Comfort Heat (26 Natural Gas Units Totaling 7.548 MMBtu/hr)
250.250.EGEN	Emergency Generator (54 hp, natural gas)

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## Insignificant Activities Equipment List (Small Unit Exemption) <sup>(1)</sup>

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Insignificant Emission Unit Number	Insignificant Emission Unit Description
001.8685.LSR.1	Sheet Metal Cutting (90,000 in/hr)
001.8685.LSR.2	Sheet Metal Cutting (36,000 in/hr)
250.1102.LSR.1	Sheet Metal Cutting (51,000 in/hr)
250.1102.LSR.2	Sheet Metal Cutting (70,860 in/hr)
250.250.Weld.F	Production Welding – Oak Steel (< 200,000 lb/yr)
501.1227.DCW.1	Chair Mesh Cell (43,200 in/hr)
501.IMLD.All	Resin Pellet Silo (9,500 lb/hr)

### Emission Unit Number Guide:

001 = Solution Center (911, 912, 914 E 5<sup>th</sup> St)

102 = Admin Headquarters (200 Oak St)

250 = Oak Steel Plant (301 Oak St)

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<sup>(1)</sup> Emission Units qualify for Small Unit Exemption under 567 IAC 22.1(2)"w". Records shall be kept in accordance with 567 IAC 22.1(2)"w"(3).

## II. Plant-Wide Conditions

Facility Name: HNI Corporation – Central Campus  
Permit Number: 02-TV-028R2

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: 5 Years  
Commencing on: 9/13/2023  
Ending on: 9/12/2028

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 on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

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

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

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

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

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

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

Volatile Organic Compounds (VOCs): Facility-wide VOC limit is 240.0 tons in any rolling 12 month period and applies to all emissions units at the HNI Central Campus excluding emissions from fuel combustion, storage tanks, and stationary and portable IC engines.

**Recordkeeping Requirements for the Facility-wide VOC limit.**

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

- A. The VOC emission rate from all emission units at the HNI Corporation, North Campus shall not exceed 240.0 tons in any rolling 12 month period. This limit applies to permitted units, permit exempt units, and indoor vented units. This limit shall not include VOC emissions from fuel combustion, storage tanks, and stationary and portable internal combustion engines.
- B. The owner or operator shall maintain records on the identification and the VOC content of any material used at the facility except for the emission units specifically excluded in Condition A above. Safety Data Sheets or manufacturers' formulation sheets shall be



maintained as a record for each material.

- C. By no later than March 1, 2018, the owner or operator shall maintain the following daily records for the liquid paint spray booths used for production painting:
- i. The identification of each VOC-containing material used at the facility.
  - ii. The amount, in gallons, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.

This condition does not apply to coatings applied by nonrefillable hand-held aerosol spray cans. This condition does not apply if no liquid paint spray booths for production painting are in operation at the facility.

- D. With the exception of the emission units excluded from the Facility-Wide VOC limit, to show compliance with the 240.0 tons per year VOC limit, the owner or operator shall maintain the following monthly records:
- i. The identification of each VOC-containing material used at the facility.
  - ii. The amount, in gallons or pounds, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
  - iii. The amount of other material used at the facility in pounds that, when processed, can cause or release VOC emissions. Examples of this material include powder coatings and resins used for plastic parts manufacturing.
  - iv. The amount of VOC emissions from the facility, in tons.
  - v. The 12-month rolling total of the amount of VOC emissions from the facility, in tons.

The owner or operator shall prepare these monthly records by the 30<sup>th</sup> day following the end of the month.

- E. With the exception of the emission units excluded in the facility wide VOC limit, if the 12-month rolling total of the VOC emissions from the facility exceeds 192.0 tons, the owner or operator shall immediately begin keeping the following daily records:
- i. The amount of VOC emissions from the facility, in tons.
  - ii. The 365-day rolling total of the amount of VOC emissions from the facility, in tons.

If daily usage records are not available for every day of a month, then the entire month's emissions must be included in the 365-day rolling total calculation until that month is outside the 365-day time period. Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from the facility drops below 192.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease. If the emissions once again exceed 192.0 tons, daily recordkeeping will be required.

- F. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of the waste shipped off-site for each shipment of waste, and shall analyze the VOC content of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be used as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site. If non-VOC organic solvents are used at the facility (e.g. acetone), the facility shall perform an annual analysis on the amount of non-VOC organic solvents that are in the waste shipped off-site. Records shall be maintained on the date of this analysis and the results. Credit shall not be taken for the amount non-VOC organic solvents that are in the waste shipped off-site.

Authority for Requirement: DNR Construction Permits 01-A-744-S3, 01-A-740-S1, 01-A-741-S1, 18-A-619, 89-A-163-S4, 89-A-164-S4, 17-A-620, 18-A-617, 18-A-618-S1, 95-A-080-S2, 17-A-479, 17-A-480, 17-A-481, 17-A-482, 17-A-483, 16-A-314-S1

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Applicability:

**40 CFR 63 Subpart A Requirements**

This facility has units that are subject to 40 CFR 63 Subpart A: General Provisions.

Authority for Requirement: 40 CFR 63 Subpart A  
567 IAC 23.1(4)"a"

**40 CFR 63 Subpart RRRR Requirements**

This facility has units that are subject to 40 CFR 63 Subpart RRRR: National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Furniture

See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**40 CFR 63 Subpart JJ Requirements**

This facility has units that are subject to 40 CFR 63 Subpart JJ: National Emission Standard for Hazardous Air Pollutants: Wood Furniture Manufacturing Operations

See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**40 CFR 63 Subpart ZZZZ Requirements**

This facility has units that are subject to 40 CFR 63 Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

See appendix for the link to complete text of this standard

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

**40 CFR 63 Subpart DDDDD Requirements**

This facility has units that are subject to 40 CFR 63 Subpart DDDDD: National Emission Standard for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters

See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 63 Subpart DDDDD

**40 CFR 63 Subpart III Requirements**

This facility has units that are subject to 40 CFR 63 Subpart III: National Emission Standard for Hazardous Air Pollutants for Flexible Polyurethane Foam Production.

See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 63 Subpart III  
567 IAC 23.1(4)"bi"

New Source Performance Standards (NSPS) Applicability:

**40 CFR 60 Subpart III Requirements**

This facility has units that are subject to 40 CFR 60 Subpart III: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 60 Subpart III  
567 IAC 23.1(2)"yyy"

### III. Emission Point-Specific Conditions

Facility Name: HNI Corporation – Central Campus  
Permit Number: 02-TV-028R2

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#### Emission Point ID Number: 001.EQPT.1.F

##### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
001.001.EQPT.1	Painting – Nonproduction	Paint	0.33 gal/min	SUE

##### Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

##### Operational Limits & Reporting/Record keeping Requirements

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. This emission unit qualifies for the Small Unit Exemption under 567 IAC 22.1(2)"w". Records shall be kept in accordance with 567 IAC 22.1(2)"w"(3).

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: See Associated Equipment Table**

Associated Equipment

<b>Emission Point</b>	<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
1405.IPH.1.EP.1	250.1405.IPH.1	Pretreatment – Indirect Heat	Natural Gas	2.0 MMBtu/hr	Exempt
1412.IPH.1.EP.1	250.1412.IPH.1	Pretreatment – Indirect Heat	Natural Gas	2.0 MMBtu/hr	Exempt
1421.IPH.1.EP.1	250.1421.IPH.1	Pretreatment – Indirect Heat	Natural Gas	4.0 MMBtu/hr	Exempt
1422.IPH.1.EP.1	250.1442.IPH.1	Pretreatment – Indirect Heat	Natural Gas	4.1 MMBtu/hr	Exempt
1481.IPH.1.EP.1	250.1481.IPH.1	Pretreatment – Indirect Heat	Natural Gas	2.5 MMBtu/hr	Exempt
501.IPH.1.EP.1	501.501.IPH.1	Pretreatment – Indirect Heat	Natural Gas	6.8 MMBtu/hr	Exempt

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.8 lb/MMBtu

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

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: 567 IAC 23.3(3)

**Operational Limits & Reporting/Record keeping Requirements**

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

**NESHAP Applicability:**

These units are subject to 40 CFR 63 Subpart DDDDD: National Emission Standard for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters  
See appendix for the link to complete text of this standard

Authority for Requirement: 40 CFR 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: 102.RICE.1.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
102.102.RICE.1	Cummins Diesel IC Engine	Diesel	755 HP	17-A-242

**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: DNR Construction Permit 17-A-242  
567 IAC 23.3(2)"d"  
40 CFR 60 Subpart III  
567 IAC 23.1(2)"yyy"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.29 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-242  
567 IAC 23.3(2)"a"  
40 CFR 60 Subpart III  
567 IAC 23.1(2)"yyy"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.29 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-242

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.29 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-242

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

Emission Limit(s): 10.0 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-242  
40 CFR 60 Subpart III  
567 IAC 23.1(2)"yyy"



**Operational Limits & Reporting/Record keeping Requirements**

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

- A. This engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
- B. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §60.4219 and in accordance with §60.4211(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition A. is not exceeded. In accordance with §60.4211(f)(2), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.  
In accordance with §60.4211(f)(3), the engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.
- C. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
- D. The owner or operator shall maintain the following monthly records:
  - i. the number of hours that the engine operated for maintenance checks and readiness testing;
  - ii. the number of hours that the engine operated for allowed non-emergency operations;
  - iii. the total number of hours that the engine operated; and
  - iv. the rolling 12-month total amount of the number of hours that the engine operated.
- E. The owner or operator shall maintain the following annual records:
  - i. the number of hours that the engine operated for maintenance checks and readiness testing; and
  - ii. the number of hours that the engine operated for allowed non-emergency operations.
  - iii. the total number of hours that the engine operated for maintenance checks, readiness testing, and allowed non-emergency operations.
- F. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:

<b>Parameter</b>	<b>Limit</b>
Sulfur (S) content	15 ppm (0.0015%) by weight
Minimum cetane index <b>or</b> Maximum aromatic content	40 35% (by volume)

The owner or operator of the engine shall comply with these requirements listed above by one of the following methods:

- i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
- ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or

- iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.
- G. The engine must be installed and configured according to the manufacturer’s emission-related specifications, except as permitted in §60.4211(g).
- H. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer’s emission-related written instructions. The owner or operator may only change emission-related engine settings that are permitted by the manufacturer.
- I. The owner or operator shall obtain a copy of the engine’s Certificate of Conformity and shall maintain the copy as a record.

Authority for Requirement: DNR Construction Permit 17-A-242  
 40 CFR Part 60 Subpart III  
 567 IAC 23.1(2)"yyy"

NSPS Applicability:

This emission unit is subject to 40 CFR 60 Subpart III: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

- A. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards for emergency engines from §60.4205 (b) and §60.4202 (a)(2). The emission standards that the engine must be certified by the manufacturer to meet are:

<b>Pollutant</b>	<b>Emission Standard</b>	<b>Basis</b>
Particulate Matter (PM)	0.20 grams/kW-hr	§ 89.112 Table 1
NMHC <sup>(1)</sup> + NOx	6.4 grams/kW-hr	§ 89.112 Table 1
Carbon Monoxide (CO)	3.5 grams/kW-hr	§ 89.112 Table 1
Opacity – acceleration mode	20%	§ 89.113 (a)(1)
Opacity – lugging mode	15%	§ 89.113 (a)(2)
Opacity – peaks in acceleration or lugging modes	50%	§ 89.113 (a)(3)

<sup>(1)</sup>Non-methane hydrocarbon

- B. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer’s specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205 (b) and §60.4202 (a)(2) is required. However, if the engine is not installed, configured, operated, and maintained according to the manufacturer’s emission-related written instructions, a compliance demonstration is required in accordance with §60.4211(g).

Authority for Requirement: DNR Construction Permit 17-A-242  
 40 CFR Part 60 Subpart III  
 567 IAC 23.1(2)"yyy"

NESHAP Applicability:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

Authority for Requirement: DNR Construction Permit 17-A-242  
40 CFR Part 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 16.5  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): 1,402  
Exhaust Temperature (°F): 901  
Discharge Style: Horizontal  
Authority for Requirement: DNR Construction Permit 17-A-242

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 1405.MFCO.1.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.1405.MFCO.1	Cure Oven for Powder Coatings	Powder Coating	120 lb/hr application rate for coating line	01-A-744-S3
	Oven Heater	Natural Gas	3.5 MMBtu/hr heat input – common with 250.1405.MFDO.1	

**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: DNR Construction Permit 01-A-744-S3  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 01-A-744-S3  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.21 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-744-S3

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.13 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-744-S3

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR construction Permit 01-A-744-S3  
567 IAC 23.3(3)"e"

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 01-A-744-S3

Pollutant: Total HAP

Emission Limit(s): Per §63.4890, no organic HAP shall be emitted from metal furniture surface coating operations during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR Construction Permit 01-A-744-S3  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Operational Limits with Associated Monitoring and Recordkeeping Requirements**

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

- A. This emission unit (250.1405.MFCO.1) is a cure oven for a powder coating line. The coating line consists of three spray booths, each of which are equipped with two spray guns. Only one spray gun in each booth can operate at the same time. Before the number of spray guns used on the coating line is increased so that the maximum powder application rate is greater than 120 pounds per hour, the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- C. This oven (250.1405.MFCO.1) is used to cure coatings that are applied in a powder coating line. To estimate monthly VOC emissions due to the curing of powder, the owner or operator shall multiply the amount of powder cured in this oven (250.1405.MFCO.1) each month by 0.01 (1% loss). The amount of powder cured in the oven shall be determined by multiplying the amount of powder applied in spray booth(s) on this line by the transfer efficiency of the powder coating applicator(s) (for example, 65% or 0.65). To convert from pounds to tons, divide the pounds of emissions per month by 2000. The 1% loss is based on a total loss factor of 1.5%, where 1% of the powder is considered emitted as VOC and 0.5% of the powder is considered emitted as particulate matter. The owner or operator shall adjust the VOC loss factor in the monthly calculations if the total loss factor is determined to be greater than or less than 1.5%. As an alternative, the owner or operate may determine VOC emissions (pounds) from all the powder coating lines at the facility, by using the following equation:

$$E = (P_p - P_w) \times 0.01$$

Where:

E = pounds of VOC emissions from all powder coating lines; divide by 2000 to convert to tons

P<sub>p</sub> = the amount of powder coatings purchased each month

P<sub>w</sub> = the amount of waste powder coating shipped off-site each month

0.01 = Fraction of powder emitted as VOC (subject to the adjustment listed above)

**Requirements for NESHAP Subpart RRRR:**

- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*. After the modifications allowed by project 18-353 are completed, the facility will use the *Compliant material option*.
- E. The owner or operator shall meet all the requirements of §63.4951, *How do I demonstrate initial compliance with the emission limitations?* and §63.4952, *How do I demonstrate continuous compliance with the emission limitations?* Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating of metal furniture.

Authority for Requirement: DNR Construction Permit 01-A-744-S1  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

NESHAP Applicability:

This emission unit is subject to Subpart RRRR<sup>(1)</sup>. The affected source for Subpart RRRR is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981; (including cleaning the substrate, applying coating to the substrate, and drying or curing the coating). Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
  - 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
  - 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
  - 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation. Emission unit 250.1405.MFCO.1 is an oven used for curing the powder coating of metal furniture. Cure ovens are included in the definition of coating operation from §63.4981.
- For information only – U.S. EPA modified Subpart RRRR on December 20, 2018. This amendment to the original 2003 rule has not been adopted into the Iowa Administrative Code at this time.

Authority for Requirement: DNR Construction Permit 01-A-744-S3  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

<sup>(1)</sup>Based on the work done under Project 18-353, the metal furniture surface coating operations are now considered a reconstructed source for 40 CFR Part 63, Subpart RRRR. This does not affect the Central Campus's status as an existing source for other NESHAP (Part 63) regulations.

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 36.5  
Stack Opening, (inches): 20  
Exhaust Flow Rate (scfm): 3,685  
Exhaust Temperature (°F): 200  
Discharge Style: Vertical, unobstructed  
Authority for Requirement: DNR Construction Permit 01-A-744-S3

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: 1405.MFDO.1.EP.1

### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
250.1405.MFDO.1	Washer Dry-off Oven	Natural Gas	3.5 MMBTU/hr, heat input – common with 250.1405.MFCO.1	01-A-742-S2

### 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: DNR Construction Permit 01-A-742-S2  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 01-A-742-S2  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.21 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-742-S2

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.13 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-742-S2

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR construction Permit 01-A-742-S2  
567 IAC 23.3(3)"e"



**Operational Limits & Reporting/Record keeping Requirements**

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

- A. This emission unit adjoins a cure oven (250.1405.MFCO.1) as part of a surface coating line. Except for in the products of combustion, it is assumed that there are no VOC emissions from this emission point (1405.MFDO.1.EP.1). VOC emissions from the curing of powder coatings is accounted for in the construction permit for the cure oven (250.1405.MFCO.1\*). This permit does not establish any operating limits or recordkeeping requirements.

Authority for Requirement: DNR Construction Permit 01-A-742-S2

\* The Construction Permit refers to 250.1481.MFCO.1 here. The correct reference is 250.1405.MFCO.1. The facility should request to permit modification in order to correct this.

**Emission Point Characteristics**

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

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

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 1,375

Exhaust Temperature (°F): 200

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 01-A-742-S2

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 1405.MFPT.1.EP.1, 1405.MFPT.1.EP.2**

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
1405.MFPT.1.EP.1	250.1405.MFPT.1	Washer for Surface Coating Line	1405.MFPT.1.ME Mist Eliminator	Pretreatment Products	1,942 gal/min	01-A-740-S1
1405.MFPT.1.EP.2			NA			01-A-741-S1

**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: DNR Construction Permit 01-A-740-S1, 01-A-741-S1  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.44 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 01-A-740-S1, 01-A-741-S1  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-740-S1, 01-A-741-S1

Pollutant: PM<sub>2.5</sub> – 1405.MFPT.1.EP.1 Only

Emission Limit(s): 0.014 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-740-S1

Pollutant: PM<sub>2.5</sub> – 1405.MFPT.1.EP.2 Only

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-741-S1

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 01-A-740-S1, 01-A-741-S1

Pollutant: Total HAP

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 01-A-740-S1, 01-A-741-S1  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (250.1405.MFPT.1), the owner or operator shall multiply the VOC content of each cleaning chemical (lbs/gal) used by the amount of each cleaning chemical used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

### **Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*.
- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner, or cleaning material used in the surface coating of metal furniture.

### **Requirements on Mist Eliminator**

- H. The owner or operator shall develop an operating and maintenance plan for the Mist Eliminator (1405.MFPT.1.ME), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- I. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Mist Eliminator (1405.MFPT.1.ME).

Authority for Requirement: DNR Construction Permits 01-A-740-S1, 01-A-741-S1  
40 CFR 63 Subpart RRRR

567 IAC 23.1(4)"cr"

NESHAP Applicability:

This emission unit is subject to Subpart RRRR. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981;
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

Emission Unit 250.1405.MFPT.1 is a washer on a surface coating line for metal furniture. Equipment used to clean a substrate to prepare it for coating application is included in the definition of coating operation from §63.4981.

Authority for Requirement: DNR Construction Permits 01-A-740-S1, 01-A-741-S1  
 40 CFR 63 Subpart RRRR  
 567 IAC 23.1(4)"cr"

**Emission Point Characteristics**

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

<b>Characteristics</b>	<b>1405.MFPT.1.EP.1</b>	<b>1405.MFPT.1.EP.2</b>
Stack Height, (ft, from the ground)	Vents Indoors	39.13
Exhaust Flow Rate (scfm)	5,098	5,098
Stack Opening, (inches, dia.)	Vents Indoors	12
Exhaust Temperature (°F)	Vents Indoors	120
Discharge Style	Vents Indoors	Vertical Unobstructed
Authority for Requirement (DNR Construction Permit)	01-A-740-S1	01-A-741-S1

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 1412.MFCO.1.EP.1, 1412.MFDO.1.EP.1**

Associated Equipment

<b>Emission Point</b>	<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
1412.MFCO.1.EP.1	250.1412.MFCO.1	Cure Oven	Natural Gas	2.0 MMBtu/hr	Exempt
1412.MFDO.1.EP.1	250.1412.MFDO.1	Dry Off Oven	Natural Gas	4.0 MMBtu/hr	Exempt

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: 567 IAC 23.3(3)

**Operational Limits & Reporting/Record keeping Requirements**

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

NESHAP Applicability:

These emission units are subject to 40 CFR 63 Subpart RRRR: National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Furniture.

Authority for Requirement: 40 CFR 63 Subpart RRRR

567 IAC 23.1(4)"cr"

**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: 1421.MFPCO.1.EP.1

### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
250.1421.MFPCO.1	Cure Oven for Powder Coatings	Powder Coating	80 lbs powder/hr.	18-A-619
	Oven Heater	Natural Gas	4.0 MMBtu/hr	

### 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: DNR Construction Permit 18-A-619  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.30 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-619  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.30 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-619

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.18 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-619

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit 18-A-619  
567 IAC 23.3(3)"e"

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 18-A-619



Pollutant: Total HAP

Emission Limit(s): Per §63.4890, no organic HAP shall be emitted from metal furniture surface coating operations during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 18-A-619  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. This emission unit (250.1421.MFPCO.1) is a cure oven for a powder coating line. The coating line consists of two spray booths, each of which are equipped with two spray guns. Only one spray gun in each booth can operate at the same time. Before the number of spray guns used on the coating line is increased so that the maximum powder application rate is greater than 80 pounds per hour, the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- C. This oven (250.1421.MFPCO.1) is used to cure coatings that are applied in a powder coating line. To estimate monthly VOC emissions due to the curing of powder, the owner or operator shall multiply the amount of powder cured in this oven (250.1421.MFPCO.1) each month by 0.01 (1% loss). The amount of powder cured in the oven shall be determined by multiplying the amount of powder applied in spray booth(s) on this line by the transfer efficiency of the powder coating applicator(s) (for example, 65% or 0.65). To convert from pounds to tons, divide the pounds of emissions per month by 2000. The 1% loss is based on a total loss factor of 1.5%, where 1% of the powder is considered emitted as VOC and 0.5% of the powder is considered emitted as particulate matter. The owner or operator shall adjust the VOC loss factor in the monthly calculations if the total loss factor is determined to be greater than or less than 1.5%. As an alternative, the owner or operate may determine VOC emissions (pounds) from all the powder coating lines at the facility, by using the following equation:

$$E = (P_p - P_w) \times 0.01$$

Where:

E = pounds of VOC emissions from all powder coating lines; divide by 2000 to convert to tons

P<sub>p</sub> = the amount of powder coatings purchased each month

P<sub>w</sub> = the amount of waste powder coating shipped off-site each month

0.01 = Fraction of powder emitted as VOC (subject to the adjustment listed above)

### **Requirements for NESHAP Subpart RRRR**

- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*. After the modifications allowed by project 18-353 are completed, the facility will use the *Compliant material option*.

- E. The owner or operator shall meet all the requirements of §63.4951, *How do I demonstrate initial compliance with the emission limitations?* and §63.4952, *How do I demonstrate continuous compliance with the emission limitations?* Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating of metal furniture.

Authority for Requirement: DNR Construction Permit 18-A-619  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

NESHAP Applicability:

This emission unit is subject to 40 CFR 63 Subpart RRRR<sup>(1)</sup>: The affected source for Subpart RRRR is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981; (including cleaning the substrate, applying coating to the substrate, and drying or curing the coating). Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation. Emission unit 250.1421.MFPCO.1 is an oven used for curing the powder coating of metal furniture. Cure ovens are included in the definition of coating operation from §63.4981. For information only – U.S. EPA modified Subpart RRRR on December 20, 2018. This amendment to the original 2003 rule has not been adopted into the Iowa Administrative Code at this time.

Authority for Requirement: DNR Construction Permit 18-A-619  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

<sup>(1)</sup>Based on the work done under Project 18-353, the metal furniture surface coating operations are now considered a reconstructed source for 40 CFR Part 63, Subpart RRRR. This does not affect the Central Campus's status as an existing source for other NESHAP (Part 63) regulations.

**Emission Point Characteristics**

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

- Stack Height, (ft., from the ground): 57.5
- Stack Opening, (inches, dia.): 20
- Exhaust Flow Rate (scfm): 3,680
- Exhaust Temperature (°F): 200
- Discharge Style: Vertical, unobstructed
- Authority for Requirement: DNR Construction Permit 18-A-619

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

**Monitoring Requirements**

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

- Agency Approved Operation & Maintenance Plan Required?**                      Yes  No
- Facility Maintained Operation & Maintenance Plan Required?**                      Yes  No
- Compliance Assurance Monitoring (CAM) Plan Required?**                      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 1461.MFCO.1.EP.1, 1461.MFDO.1.EP.1**

Associated Equipment

<b>Emission Point</b>	<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
1461.MFCO.1.EP.1	250.1461.MFCO.1	Cure Oven	Natural Gas	2.0 MMBtu/hr	Exempt
1461.MFDO.1.EP.1	250.1461.MFDO.1	Dry Off Oven	Natural Gas	4.0 MMBtu/hr	Exempt

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

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

Emission Limit(s): 500 ppm<sub>v</sub>

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

**Operational Limits & Reporting/Record keeping Requirements**

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

NESHAP Applicability:

These emission units are subject to 40 CFR 63 Subpart RRRR: National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Furniture.

Authority for Requirement: 40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**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: 1461.MFPB.1.EP.1, 1461.MFPB.2.EP.1**

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
1461.MFPB.1.EP.1	250.1461.MFPB.1	Paint Spray Booth	1461.MFPB.1.Bfl Baffle 1461.MFPB.1.FF.1 Dry Filter 1461.MFPB.1.FF.2 Dry Filter	Paint	7 gal/hr	89-A-163-S4
	250.1461.MUA.1	Make Up Air Heater <sup>(1)</sup>	-	Natural Gas	2.3 MMBtu/hr	
1461.MFPB.2.EP.1	250.1461.MFPB.2	Paint Spray Booth	1461.MFPB.2.Bfl Baffle 1461.MFPB.2.FF.1 Dry Filter 1461.MFPB.2.FF.2 Dry Filter	Paint	7 gal/hr	89-A-164-S4

<sup>(1)</sup> Make up air heater is common to 250.1461.MFPB.1 and 250.1461.MFPB.2

**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: DNR Construction Permit 89-A-163-S4, 89-A-164-S4  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.30 lb/hr<sup>(2)</sup>, 2.03 lb/hr<sup>(3)</sup>, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 89-A-163-S4, 89-A-164-S4  
567 IAC 23.3(2)"a"

<sup>(2)</sup>Emission limit for 1461.MFPB.1.EP.1 only

<sup>(3)</sup>Emission limit for 1461.MFPB.1.EP.2 only

Pollutant: PM<sub>10</sub>

Emission Limit(s): 2.30 lb/hr<sup>(2)</sup>, 2.03 lb/hr<sup>(3)</sup>

Authority for Requirement: DNR Construction Permit 89-A-163-S4, 89-A-164-S4

<sup>(2)</sup>Emission limit for 1461.MFPB.1.EP.1 only

<sup>(3)</sup>Emission limit for 1461.MFPB.2.EP.1 only

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.022 lb/hr

Authority for Requirement: DNR Construction Permit 89-A-163-S4, 89-A-164-S4

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit 89-A-163-S4, 89-A-164-S4  
567 IAC 23.3(3)"e"

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 89-A-163-S4, 89-A-164-S4

Pollutant: Total HAP

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 89-A-163-S4, 89-A-164-S4  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from emission units (250.1461.MFPB.1 and 250.1461.MFPB.2), the owner or operator shall multiply the VOC content of each liquid coating (lbs/gal) used by the amount of each liquid coating used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

### **Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the Emission rate without add-on controls option.
- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating of metal furniture.

## Requirements on Control Equipment

- H. Particulate matter emissions are controlled by Overspray Baffles in series with two sets of dry filters. The owner or operator shall develop an operating and maintenance plan for the Overspray Baffles (1461.MFPB.1.Bfl and 1461.MFPB.2.Bfl), Dry Filter Systems 1 (1461.MFPB.1.FF.1 and 1461.MFPB.2.FF.1) and Dry Filter Systems 2 (1461.MFPB.1.FF.2 and 1461.MFPB.2.FF.2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- I. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Overspray Baffles (1461.MFPB.1.Bfl and 1461.MFPB.2.Bfl), Dry Filter Systems 1 (1461.MFPB.1.FF.1 and 1461.MFPB.2.FF.1) and Dry Filter Systems 2 (1461.MFPB.1.FF.2 and 1461.MFPB.2.FF.2).

Authority for Requirement: DNR Construction Permits 89-A-163-S4, 89-A-164-S4  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### NESHAP Applicability:

These emission units are subject to NESHAP Subpart RRRR. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981;
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

Emission units 250.1461.MFPB.1 and 250.1461.MFPB.2 are paint spray booths for the surface coating of metal furniture.

Authority for Requirement: DNR Construction Permits 89-A-163-S4, 89-A-164-S4  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Emission Point Characteristics**

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

<b>Characteristics</b>	<b>1461.MFPB.1.EP.1</b>	<b>1461.MFPB.2.EP.1</b>
Stack Height, (ft, from the ground)	34.95	34.73
Exhaust Flow Rate (scfm)	26,910	23,725
Stack Opening, (inches, dia.)	43	43
Exhaust Temperature (°F)	82	79
Discharge Style	Vertical Unobstructed	Vertical Unobstructed
Authority for Requirement	89-A-163-S4	89-A-164-S4

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

**Monitoring Requirements**

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

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

*Agency O&M required for the Dry Filters as follows:*

**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.

**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: 1461.MFPT.1.EP.1

### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
250.1461.MFPT.1	Washer for Surface Coating Line	Pretreatment Products	300 gal/hr	17-A-620

### 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: DNR Construction Permit 17-A-620  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.44 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-620  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-620

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-620

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 17-A-620

Pollutant: Total HAP

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 17-A-620  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (250.1461.MFPT.1), the owner or operator shall multiply the VOC content of each cleaning chemical (lbs/gal) used by the amount of each cleaning chemical used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.
- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the Emission rate without add-on controls option.
- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931.

Authority for Requirement: DNR Construction Permit 17-A-620  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

#### NESHAP Applicability:

This emission unit is subject to NESHAP Subpart RRRR. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981;
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

EU 250.1461.MFPT.1 is a washer on a surface coating line for metal furniture. Equipment used to clean a substrate to prepare it for coating application is included in the definition of coating operation from §63.4981.

Authority for Requirement: DNR Construction Permit 17-A-620  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 27.0  
Stack Opening, (inches, dia.): 26  
Exhaust Flow Rate (scfm): 1,634  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 17-A-620

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

**Monitoring Requirements**

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

- Agency Approved Operation & Maintenance Plan Required?**                      Yes  No
- Facility Maintained Operation & Maintenance Plan Required?**                      Yes  No
- Compliance Assurance Monitoring (CAM) Plan Required?**                      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1481.MFDO.2.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.1481.MFDO.2	Washer Dry-off Oven	Natural Gas	3.2 MMBtu/hr	18-A-616

**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: DNR Construction Permit 18-A-616  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.15 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-616  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-616

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-616

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR construction Permit 18-A-616  
567 IAC 23.3(3)"e"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. This emission unit adjoins a cure oven (250.1481.MFPCO.1) as part of a surface coating line. Except for in the products of combustion, it is assumed that there are no VOC emissions from this emission point (1481.MFDO.2.EP.1). VOC emissions from the curing of powder coatings is accounted for in the construction permit for the cure oven (250.1481.MFPCO.1). This permit does not establish any operating limits or recordkeeping requirements.

Authority for Requirement: DNR Construction Permit 18-A-616

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 57.5

Stack Opening, (inches, dia.): 22

Exhaust Flow Rate (scfm): 520

Exhaust Temperature (°F): 200

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 18-A-616

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: 1481.MFPCO.1.EP.1

### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
250.1481.MFPCO.1	Cure Oven for Powder Coatings	Powder Coating	80 lb/hr	18-A-617
	Oven Heater	Natural Gas	3.2 MMBtu/hr	

### 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: DNR Construction Permit 18-A-617  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.15 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-617  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-617

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-617

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR construction Permit 18-A-617  
567 IAC 23.3(3)"e"

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 18-A-617

Pollutant: Total HAP

Emission Limit(s): Per §63.4890, no organic HAP shall be emitted from metal furniture surface coating operations during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 18-A-617  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. This emission unit (250.1481.MFPCO.1) is a cure oven for a powder coating line. The coating line consists of two spray booths, each of which are equipped with two spray guns. Only one spray gun in each booth can operate at the same time. Before the number of spray guns used on the coating line is increased so that the maximum powder application rate is greater than 80 pounds per hour, the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- C. This oven (250.1481.MFPCO.1) is used to cure coatings that are applied in a powder coating line. To estimate monthly VOC emissions due to the curing of powder, the owner or operator shall multiply the amount of powder cured in this oven (250.1481.MFPCO.1) each month by 0.01 (1% loss). The amount of powder cured in the oven shall be determined by multiplying the amount of powder applied in spray booth(s) on this line by the transfer efficiency of the powder coating applicator(s) (for example, 65% or 0.65). To convert from pounds to tons, divide the pounds of emissions per month by 2000. The 1% loss is based on a total loss factor of 1.5%, where 1% of the powder is considered emitted as VOC and 0.5% of the powder is considered emitted as particulate matter. The owner or operator shall adjust the VOC loss factor in the monthly calculations if the total loss factor is determined to be greater than or less than 1.5%. As an alternative, the owner or operate may determine VOC emissions (pounds) from all the powder coating lines at the facility, by using the following equation:

$$E = (P_p - P_w) \times 0.01$$

Where:

E = pounds of VOC emissions from all powder coating lines; divide by 2000 to convert to tons

P<sub>p</sub> = the amount of powder coatings purchased each month

P<sub>w</sub> = the amount of waste powder coating shipped off-site each month

0.01 = Fraction of powder emitted as VOC (subject to the adjustment listed above)

## Requirements for NESHAP Subpart RRRR

D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*. After the modifications allowed by project 18-353 are completed, the facility will use the *Compliant material option*.

The owner or operator shall meet all the requirements of §63.4951, *How do I demonstrate initial compliance with the emission limitations?* and §63.4952, *How do I demonstrate continuous compliance with the emission limitations?* Each month following the initial compliance period is a compliance period.

E. The owner or operator shall submit semiannual reports in accordance with §63.4920.

F. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating

Authority for Requirement: DNR Construction Permit 18-A-617  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### NESHAP Applicability:

This emission unit is subject to NESHAP Subpart RRRR. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981; (including cleaning the substrate, applying coating to the substrate, and drying or curing the coating). Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

Emission unit 250.1481.MFPCO.1 is an oven used for curing the powder coating of metal furniture. Cure ovens are included in the definition of coating operation from §63.4981. For information only – U.S. EPA modified Subpart RRRR on December 20, 2018. This amendment to the original 2003 rule has not been adopted into the Iowa Administrative Code at this time.

Authority for Requirement: DNR Construction Permit 18-A-617  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"



**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 57.5  
Stack Opening, (inches, dia.): 22  
Exhaust Flow Rate (scfm): 1,010  
Exhaust Temperature (°F): 200  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 18-A-617

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: 2010.MFPCO.1.EP.1

### Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
250.2010.MFPCO.1	Powder Coating Line	Powder Coating	40 lb/hr	18-A-618-S1
	Oven Heater	Natural Gas	1.2 MMBtu/hr	

### Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 18-A-618-S1  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.15 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-618-S1  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-618-S1

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-618-S1

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

Emission Limit(s): 500 ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit 18-A-618-S1  
567 IAC 23.3.(3)"e"

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 18-A-618-S1

Pollutant: Total HAP

Emission Limit(s): Per §63.4890, no organic HAP shall be emitted from metal furniture surface coating operations during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR construction Permit 18-A-618-S1  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. This emission unit (250.2010.MFPCO.1) is a cure oven for a powder coating line. The coating line consists of one spray booth, which is equipped with two spray guns. Only one spray gun in the booth can operate at any time. Before the number of spray guns used on the coating line is increased so that the maximum powder application rate is greater than 40 pounds per hour, the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- C. This oven (250.2010.MFPCO.1) is used to cure coatings that are applied in a powder coating line. To estimate monthly VOC emissions due to the curing of powder, the owner or operator shall multiply the amount of powder cured in this oven (250.2010.MFPCO.1) each month by 0.01 (1% loss). The amount of powder cured in the oven shall be determined by multiplying the amount of powder applied in spray booth(s) on this line by the transfer efficiency of the powder coating applicator(s) (for example, 65% or 0.65). To convert from pounds to tons, divide the pounds of emissions per month by 2000. The 1% loss is based on a total loss factor of 1.5%, where 1% of the powder is considered emitted as VOC and 0.5% of the powder is considered emitted as particulate matter. The owner or operator shall adjust the VOC loss factor in the monthly calculations if the total loss factor is determined to be greater than or less than 1.5%. As an alternative, the owner or operate may determine VOC emissions (pounds) from all the powder coating lines at the facility, by using the following equation:

$$E = (P_p - P_w) \times 0.01$$

Where:

E = pounds of VOC emissions from all powder coating lines; divide by 2000 to convert to tons

P<sub>p</sub> = the amount of powder coatings purchased each month

P<sub>w</sub> = the amount of waste powder coating shipped off-site each month

0.01 = Fraction of powder emitted as VOC (subject to the adjustment listed above)

### **Requirements for NESHAP Subpart RRRR**

- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*. After the modifications allowed by project 18-353 are completed, the facility will use the *Compliant material option*.

- E. The owner or operator shall meet all the requirements of §63.4951, *How do I demonstrate initial compliance with the emission limitations?* and §63.4952, *How do I demonstrate continuous compliance with the emission limitations?* Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating of metal furniture.

Authority for Requirement: DNR Construction Permit 18-A-618-S1  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

NESHAP Applicability:

This emission unit is subject to NESHAP Subpart RRRR. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981; (including cleaning the substrate, applying coating to the substrate, and drying or curing the coating). Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

Emission unit 250.1481.MFPCO.1 is an oven used for curing the powder coating of metal furniture. Cure ovens are included in the definition of coating operation from §63.4981. For information only – U.S. EPA modified Subpart RRRR on December 20, 2018. This amendment to the original 2003 rule has not been adopted into the Iowa Administrative Code at this time.

Authority for Requirement: DNR Construction Permit 18-A-618-S1  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 65  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): 383  
Exhaust Temperature (°F): 200  
Discharge Style: Vertical unobstructed  
Authority for Requirement: DNR Construction Permit 18-A-618-S1

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

**Monitoring Requirements**

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

- Agency Approved Operation & Maintenance Plan Required?**      Yes  No
- Facility Maintained Operation & Maintenance Plan Required?**      Yes  No
- Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 2043.MFPB.1.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.2043.MFPB.1	Color Check Paint Booth	2043.MFPB.1.FF.1 Dry Filter 2043.MFPB.1.FF.2 Dry Filter	Paint	3.5 gal/hr, 1 spray gun	95-A-080-S2
250.2043.MFMR.1	Paint Mix Room	None	Paint	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%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 95-A-080-S2  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.102 lb/hr, 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 95-A-080-S2  
567 IAC 23.4(13)

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.102 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-080-S2

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-080-S2

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 95-A-080-S2

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from the Color Check Spray Booth (250.2043.MFPB.1), the owner or operator shall multiply the VOC content of each liquid coating (lbs/gal) used by the amount of each liquid coating used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.
- C. The paint mix room (250.2043.MFMR.1) is used to mix liquid coatings that are applied in paint spray booths at the facility. The emissions of VOC during the mixing of the coatings in the paint mix room shall be accounted for by maintaining records on the VOC content and the amount of coatings applied in the spray booths at the facility. No additional recordkeeping is required for the paint mix room (250.2043.MFMR.1).

### **Requirements for NESHAP Subpart RRRR**

- D. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- E. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the *Emission rate without add-on controls option*.
- F. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- G. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- H. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931. This shall include the identification and the organic HAP content of any coating, thinner or cleaning material used in the surface coating of metal furniture.

### **Requirements on Control Equipment**

- I. Particulate matter emissions from 250.2043.MFPB.1 are controlled in series with two sets of dry filters. The owner or operator shall develop an operating and maintenance plan for Dry Filter System 1 (2043.MFPB.1.FF.1) and Dry Filter System 2 (2043.MFPB.1.FF.2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- J. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Dry Filter System 1 (2043.MFPB.1.FF.1) and Dry Filter System 2 (2043.MFPB.1.FF.2)

### **Additional Requirements**

K. The Color Check Paint Booth (250.2043.MFPB.1) shall be limited to operating between 6:00 AM and 3:00 PM. For this condition, operation means the spray application of coatings.

a. The owner or operator shall maintain a daily record on the initial start-up time and the final shutdown time of the Color Check Spray Booth (250.2043.MFPB.1).

Authority for Requirement: DNR Construction Permits 95-A-080-S2  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

### NESHAP Applicability:

The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes:

- 1.) All coating operations as defined in §63.4981;
- 2.) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- 3.) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and
- 4.) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.

Emission unit 250.2043.MFMR.1 is a mix room for the liquid coatings used in the surface coating of metal furniture. Emission unit 250.2043.MFPB.1 is not subject to any NESHAP subpart at this time as there are no applicable subparts for its source category. The paint booth (250.2043.MFPB.1) is not used to surface coat metal furniture or miscellaneous metal parts. The booth is used to check that paint colors are correct.

Authority for Requirement: DNR Construction Permit 95-A-080-S2  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"



**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 23.5  
Stack Opening, (inches, dia.): 30  
Exhaust Flow Rate (scfm): 1,200  
Exhaust Temperature (°F): 68  
Discharge Style: Vertical unobstructed  
Authority for Requirement: DNR Construction Permit 95-A-080-S2

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 250.SUAdh.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.250.SUAdh	Adhesives Application – Oak Steel	Adhesives	5 lb/hr	17-A-479

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 17-A-479

Pollutant: Total HAP – Metal furniture

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period. See NESHAP applicability below.

Authority for Requirement: DNR Construction Permit 17-A-479  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

Pollutant: Total HAP –Wood furniture

Emission Limit(s): For contact adhesives, Volatile HAP emissions shall not exceed emissions limits from Subpart JJ, Table 3.

Authority for Requirement: DNR Construction Permit 17-A-479  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (250.250.SUAdh), the owner or operator shall multiply the VOC content of each adhesive (lbs/gal) used by the amount of each adhesive used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

### **Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the Emission rate without add-on controls option.
- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931.

### **Requirements for NESHAP Subpart JJ**

- H. The owner or operator shall keep records on the types of adhesives used and shall identify any contact adhesives, as defined in §63.801.
- I. For contact adhesive usage, the owner or operator shall comply with the emission limits from §63.802 and Table 3 of Subpart JJ. There are no limits for other types of adhesives used in wood furniture manufacturing.
- J. If applicable, the owner or operator shall comply with the requirements of §63.803, Work Practice Standards; §63.804, Compliance procedure and monitoring requirements; §63.806, Recordkeeping requirements; and §63.807, Reporting requirements.

Authority for Requirement: DNR Construction Permit 17-A-749  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

#### NESHAP Applicability:

This facility manufactures both wood furniture and metal furniture. In the Wood Furniture Manufacturing NESHAP, (40 CFR Part 63, Subpart JJ), a contact adhesive (as defined in §63.801) is the only type of adhesive that is regulated. In the Metal Furniture NESHAP, (40 CFR Part 63, Subpart RRRR), all types of adhesives are included under the definition of coating from §63.4981.

Adhesives applied to the metal components of wood furniture are subject to Subpart JJ in accordance with §63.800(d)(4). Adhesives applied to wood components of metal furniture are subject to Subpart RRRR.

Authority for Requirement: DNR Construction Permit 17-A-479  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**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: 250.SUAero.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.250.SUAero	Aerosol Use – Oak Steel	Aerosols	N/A	Exempt

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: See Plant-Wide Conditions

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.

Authority for Requirement: See Plant-Wide Conditions

**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: 250.SUCIn.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
250.250.SUCIn	Cleaning Solvent Usage – Oak Steal	Solvents	N/A	17-A-481

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 17-A-481

Pollutant: Total Hazardous Air Pollutants (HAP)

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR Construction Permit 17-A-481  
4 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (250.250.SUCIn), the owner or operator shall multiply the VOC content of each cleaning solvent (lbs/gal) used by the amount of each solvent used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

**Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the

present time, the facility is using the Emission rate without add-on controls option.

- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931.

**Requirements for NESHAP Subpart JJ**

- H. The owner or operator shall comply with all applicable work practice requirements from §63.803, Work practice standards.
- I. In accordance with §63.803 (e), Chemical composition of cleaning and washoff solvents, the owner or operator shall not use cleaning solvents that contain any of the pollutants listed in Table 4 of Subpart JJ in concentrations subject to MSDS reporting as required by OSHA.

Authority for Requirement: DNR Construction Permit 17-A-481  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

NESHAP Applicability:

This facility manufactures both wood furniture and metal furniture. This emission unit is the cleaning solvents that are used on substrates and on equipment associated with the coating operations.

In the Wood Furniture Manufacturing NESHAP, (40 CFR Part 63, Subpart JJ), cleaning operations are defined in §63.801 as “operations in which organic HAP solvent is used to remove coating material or adhesives from equipment used in wood furniture manufacturing operations.”

In the Metal Furniture Coating NESHAP, (40 CFR Part 63, Subpart RRRR), organic HAP emissions from cleaning solvents must be included in demonstrating compliance with the organic THAP emission limit of 0.10 kilogram per liter (0.83 lb/gal) of coating solids. The definition of coating operations in §63.4981 is “equipment used to apply cleaning materials to a substrate to prepare it for coating application or to remove dried or wet coating (surface preparation); to apply coating to a substrate (coating application) and to dry or cure the coating after application; and to clean coating operation equipment (equipment cleaning).” The definition of cleaning material in §63.4981 is “a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g. depainting), from a substrate before or after coating application or from equipment associated with a coating operation such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.”

Authority for Requirement: DNR Construction Permit 17-A-481  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**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: 253.SUWdStn.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.253.SUWdStn	Wood Furniture Stain – Oak Laminate	Wood Stain	0.05 gal/hr	17-A-483

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 17-A-483

Pollutant: Total Hazardous Air Pollutants (HAP)

Emission Limit(s): Per §63.802(a)(1) and Table 3, the as-applied VHAP content of each stain shall not exceed 1.0 lb VHAP/lb solids. VHAP is any volatile hazardous air pollutant listed in Table 2 of Subpart JJ.

Authority for Requirement: DNR Construction Permit 17-A-483  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (253.253.WdStn), the owner or operator shall multiply the VOC content of each stain (lbs/gal) used by the amount of each stain used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

**Requirements for NESHAP Subpart JJ**

- C. The owner or operator shall comply with all applicable work practice requirements from §63.803, Work practice standards.
- D. The owner or operator shall follow one of the compliance options from §63.804.
- E. The owner or operator shall keep records, as applicable, in accordance with §63.806.
- F. The owner or operator shall submit reports, as applicable, in accordance with §63.807.

Authority for Requirement: DNR Construction Permit 17-A-483  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

NESHAP Applicability:

This emission unit is subject to NESHAP Subpart JJ. This facility manufactures wood furniture.  
This emission unit is for the application of wood stains.

Authority for Requirement: DNR Construction Permit 17-A-483  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**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: 253.SUAdh.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.253.SUAdh	Adhesives Application – Oak Laminate	Adhesives	N/A	17-A-480

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 17-A-480

Pollutant: Total Hazardous Air Pollutants (HAP) – Metal furniture

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR Construction Permit 17-A-480  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

Pollutant: Total Hazardous Air Pollutants (HAP) – Metal furniture

Emission Limit(s): For contact adhesives, Volatile HAP emissions shall not exceed emissions limits from Subpart JJ, Table 3.

Authority for Requirement: DNR Construction Permit 17-A-480  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (253.253.SUAdh), the owner or operator shall multiply the VOC content of each adhesive (lbs/gal) used by the amount of each adhesive used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

### **Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the present time, the facility is using the Emission rate without add-on controls option.
- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931.

### **Requirements for NESHAP Subpart JJ**

- H. The owner or operator shall keep records on the types of adhesives used and shall identify any contact adhesives, as defined in §63.801.
- I. For contact adhesive usage, the owner or operator shall comply with the emission limits from §63.802 and Table 3 of Subpart JJ. There are no limits for other types of adhesives used in wood furniture manufacturing.
- J. If applicable, the owner or operator shall comply with the requirements of §63.803, Work Practice Standards; §63.804, Compliance procedure and monitoring requirements; §63.806, Recordkeeping requirements; and §63.807, Reporting requirements.

Authority for Requirement: DNR Construction Permit 17-A-480  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

#### NESHAP Applicability:

This facility manufactures both wood furniture and metal furniture. In the Wood Furniture Manufacturing NESHAP, (40 CFR Part 63, Subpart JJ), a contact adhesive (as defined in §63.801) is the only type of adhesive that is regulated. In the Metal Furniture NESHAP, (40 CFR Part 63, Subpart RRRR), all types of adhesives are included under the definition of *coating* from §63.4981.

Adhesives applied to the metal components of wood furniture are subject to Subpart JJ in accordance with §63.800(d)(4). Adhesives applied to wood components of metal furniture are subject to Subpart RRRR.

Authority for Requirement: DNR Construction Permit 17-A-480  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

**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: 253.SUAero.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.253.SUAero	Aerosol Usage – Oak Laminate	Aerosols	N/A	Exempt

**Applicable Requirements**

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: See Plant-Wide Conditions

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.

Authority for Requirement: See Plant-Wide Conditions

**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: 253.SUCIn.F**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.253.SUCIn	Cleaning Solvent Usage – Oak Laminate	Solvents	N/A	17-A-482

**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: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR Construction Permit 17-A-482

Pollutant: Total Hazardous Air Pollutants (HAP) – Metal furniture

Emission Limit(s): Organic THAP emissions shall not exceed 0.10 kilogram per liter (0.83 lb/gal) of coating solids used during each compliance period. Each calendar month is a compliance period.

Authority for Requirement: DNR Construction Permit 17-A-482  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from this emission unit (253.253.SUCIn), the owner or operator shall multiply the VOC content of each cleaning solvent (lbs/gal) used by the amount of each solvent used each month (gallons), and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

**Requirements for NESHAP Subpart RRRR**

- C. The owner or operator shall demonstrate that, based on the coatings, thinners, and cleaning materials used in the surface coating of metal furniture, the organic HAP emission rate is less than the organic HAP limit of 0.83 lb/gal of coating solids, calculated as a monthly emission rate. This limit applies to all equipment at the facility that is used for the surface coating of metal furniture. Coating materials applied with hand-held non-refillable aerosol containers, touchup markers, or marking pens are not considered a coating for Subpart RRRR per the definition in §63.4981.
- D. The owner or operator shall follow one of the compliance options from §63.4891. At the

present time, the facility is using the Emission rate without add-on controls option.

- E. The owner or operator shall meet all the requirements of §63.4951 and §63.4952. Each month following the initial compliance period is a compliance period.
- F. The owner or operator shall submit semiannual reports in accordance with §63.4920.
- G. The owner or operator shall keep records, as applicable, in accordance with §63.4930 and §63.4931.

**Requirements for NESHAP Subpart JJ**

- H. The owner or operator shall comply with all applicable work practice requirements from §63.803, Work practice standards.
- I. In accordance with §63.803 (e), Chemical composition of cleaning and washoff solvents, the owner or operator shall not use cleaning solvents that contain any of the pollutants listed in Table 4 of Subpart JJ in concentrations subject to MSDS reporting as required by OSHA.

Authority for Requirement: DNR Construction Permit 17-A-482  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"

NESHAP Applicability:

This facility manufactures both wood furniture and metal furniture. This emission unit is for the cleaning solvents that are used on substrates and on equipment associated with the coating operations.

In the Wood Furniture Manufacturing NESHAP, (40 CFR Part 63, Subpart JJ), cleaning operations are defined in §63.801 as “operations in which organic HAP solvent is used to remove coating material or adhesives from equipment used in wood furniture manufacturing operations.”

In the Metal Furniture Coating NESHAP, (40 CFR Part 63, Subpart RRRR), organic HAP emissions from cleaning solvents must be included in demonstrating compliance with the organic THAP emission limit of 0.10 kilogram per liter (0.83 lb/gal) of coating solids. The definition of coating operations in §63.4981 is “equipment used to apply cleaning materials to a substrate to prepare it for coating application or to remove dried or wet coating (surface preparation); to apply coating to a substrate (coating application) and to dry or cure the coating after application; and to clean coating operation equipment (equipment cleaning).” The definition of cleaning material in §63.4981 is “a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g. depainting), from a substrate before or after coating application or from equipment associated with a coating operation such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.”

Authority for Requirement: DNR Construction Permit 17-A-482  
40 CFR 63 Subpart RRRR  
567 IAC 23.1(4)"cr"  
40 CFR 63 Subpart JJ  
567 IAC 23.1(4)"aj"



**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: 2630.DCW.3.IV.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.2630.DCW.3	Woodworking Operations	2630.DCW.3.BGH Fabric Filter Baghouse	Wood	50,000 scfm	04-A-904-S2

**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: DNR Construction Permit 04-A-904-S2  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.83 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-904-S2  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-904-S2

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-904-S2

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. The baghouse shall be equipped with high efficiency bags designed to meet the emission limits of this permit.
- B. The owner or operator shall develop an operating and maintenance plan for the fabric filter baghouse (2630.DCW.3.BGH), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the fabric filter baghouse (2630.DCW.3.BGH).

Authority for Requirement: DNR Construction Permit 04-A-904-S2

**Emission Point Characteristics**

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

Exhaust Flow Rate (scfm): 50,000

Discharge Style: Vents inside building

Authority for Requirement: DNR Construction Permit 04-A-904-S2

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

**Monitoring Requirements**

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

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

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

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No   
*(See Appendix B for CAM Plan)*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 2630.DCW.4.IV.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.2630.DCW.4	Woodworking Operations	2630.DCW.4.BGH Fabric Filter Baghouse	Wood	48,000 scfm	98-A-548-S3

**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: DNR Construction Permit 98-A-584-S3  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.83 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 98-A-584-S3  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.83 lb/hr

Authority for Requirement: DNR Construction Permit 98-A-584-S3

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 98-A-584-S3

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. The owner or operator shall maintain a record of the completion date of when the high efficiency filter bags were installed on the fabric filter baghouse (2630.DCW.4.BGH).
- B. The owner or operator shall develop an operating and maintenance plan for the fabric filter baghouse (2630.DCW.4.BGH), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the fabric filter baghouse (2630.DCW.4.BGH).

Authority for Requirement: DNR Construction Permit 98-A-548-S3

**Emission Point Characteristics**

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

Exhaust Flow Rate (scfm): 48,000

Discharge Style: Vents inside building

Authority for Requirement: DNR Construction Permit 98-A-548-S3

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

**Monitoring Requirements**

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

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

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

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No   
*(See Appendix B for CAM Plan)*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 2630.DCW.6.IV.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
253.2630.DCW.6	Woodworking Operations	2630.DCW.6.BGH Fabric Filter Baghouse	Wood	50,000 scfm	13-A-071-S1

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 13-A-071-S1  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.83 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 13-A-071-S1  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-071-S1

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.050 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-071-S1

**Operational Limits & Reporting/Record keeping Requirements**

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

- A. The baghouse shall be equipped with high efficiency bags designed to meet the emission limits of this permit.
- B. The owner or operator shall develop an operating and maintenance plan for the fabric filter baghouse (2630.DCW.6.BGH), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the fabric filter baghouse (2630.DCW.6.BGH).

Authority for Requirement: DNR Construction Permit 13-A-071-S1

**Emission Point Characteristics**

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

Exhaust Flow Rate (scfm): 50,000

Discharge Style: Vents inside building

Authority for Requirement: DNR Construction Permit 13-A-071-S1

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

**Monitoring Requirements**

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

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

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

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No   
*(See Appendix B for CAM Plan)*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 501.CH.1.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
501.501.CH.1	Boiler	Natural Gas	6.8 MMBtu/hr	Exempt

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.8 lb/MMBtu

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

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

Emission Limit(s): 500ppm<sub>v</sub>

Authority for Requirement: 567 IAC 23.3(3)

**Operational Limits & Reporting/Record keeping Requirements**

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

NESHAP Applicability:

These units are subject to 40 CFR 63 Subpart DDDDD: National Emission Standard for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters

See Appendix A for the link to complete text of this standard

Authority for Requirement: 40 CFR 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: 2012.FPUF.1.EP.1**

Associated Equipment

<b>Emission Unit</b>	<b>Emission Unit Description</b>	<b>Control Equipment</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit</b>
501.2012.FPUF.1	Flexible Polyurethane Foam Line – 8 Mold Stations	-	Reactant Chemicals	260 lbs/hr	16-A-314-S1
501.2012.FPUF.2	Mold Release Application – 4 Spray Applicators	2012.FPUF.1.CE.1 Primary Dry Filter 2012.FPUF.1.CE.2 Pocket Filter	Mold Release	7.2 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: DNR Construction Permit 16-A-314-S1  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.68 lb/hr, 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-314-S1  
567 IAC 23.4(13)

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.68 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-314-S1

Pollutant: PM<sub>2.5</sub>

Emission Limit(s): 0.13 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-314-S1

Pollutant: VOC

Emission Limit(s): See Plant-Wide Conditions

Authority for Requirement: DNR construction Permit 16-A-314-S1

### **Operational Limits & Reporting/Record keeping Requirements**

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

- A. See Plant Wide Conditions Section of this permit for reporting and recordkeeping requirements for the 240.0 ton/yr VOC facility wide limit.
- B. To estimate monthly VOC emissions from these emission units (501.2012.FPUF.1 and 501.2012.FPUF.2), the owner or operator shall use the following methods:
  - i. For the Isocyanate reactant, use the MDI Estimator from the American Chemistry Council – Center for Polyurethanes Industry and the amount of isocyanate reactant used each month.
  - ii. For the Polyol reactant, multiply the VOC content of the chemical (% weight) by the amount of polyol used (pounds) and then divide pounds per month by 2000 to convert to tons. For example, Dow Voralux™ HM 731 Polyol contains 0.5% (% weight) N,N-Diethanolamine, which is a VOC.
  - iii. For any mold release material or cleaning chemical used, multiple the VOC content (lbs/gal) by the amount of each material used per month (gallons) and then sum the total. To convert from pounds to tons, divide the pounds per month by 2000.

### **Requirements for NESHAP Subpart III**

- C. In accordance with §63.1300(a), a HAP or HAP-based material shall not be used as an equipment cleaner to flush the mixhead, nor shall it be used elsewhere as an equipment cleaner in the molded flexible polyurethane foam process, with the following exception. Diisocyanates may be used to flush the mixhead and associated piping during periods of startup or maintenance, provided that the diisocyanate compounds are contained in a closed-loop system and are re-used in production.
- D. In accordance with §63.1300(b), a HAP-based mold release agent shall not be used in the molded flexible polyurethane foam process.
- E. The owner or operator shall submit all required reports in accordance with §63.1306. The Notification of Compliance Status report is due no later than 180 days after the initial startup of the equipment.
- F. The owner or operator shall keep records, as applicable, in accordance with §63.1307(f) and §63.1307(g). The owner or operator shall maintain a product data sheet for each mold release agent used that includes the HAP content in pound HAP per pound solids.

**Requirements on Dry Filters**

G. The owner or operator shall develop an operating and maintenance plan for the Primary dry filter (2012.FPUF.1.CE.1) and the pocket filter (2012.FPUF.1.CE.1), including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.

H. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Primary dry filter (2012.FPUF.1.CE.1) and the Pocket filter (2012.FPUF.1.CE.1). A record shall be maintained on when the filters are changed.

Authority for Requirement: DNR Construction Permit 16-A-314-S1  
40 CFR 63 Subpart III  
567 IAC 23.1(4)"bi"

NESHAP Applicability:

The flexible polyurethane line (2012.FPUF.1.EP.1) is subject to NESHAP Subpart III.

Authority for Requirement: DNR Construction Permit 16-A-314-S1  
40 CFR 63 Subpart III  
567 IAC 23.1(4)"bi"

Emission Point Characteristics

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

Stack Height, (ft, from the ground): 36.0

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 8,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-314-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## IV. General Conditions

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

### G1. Duty to Comply

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

### G2. Permit Expiration

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

### G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable

inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

#### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

#### **G5. Semi-Annual Monitoring Report**

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

#### **G6. Annual Fee**

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

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

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

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

### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

### **G9. General Maintenance and Repair Duties**

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

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

### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
  - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

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

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

**G13. Hazardous Release**

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

**G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

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

## 2. Excess Emissions Reporting

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

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.



v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

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

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

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

#### **G15. Permit Deviation Reporting Requirements**

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

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

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change.
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

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

### **G18. Duty to Modify a Title V Permit**

#### **1. Administrative Amendment.**

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

#### **2. Minor Title V Permit Modification.**

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
  - i. Do not violate any applicable requirement;
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

### 3. Significant Title V Permit Modification.

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

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

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

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

#### **G20. Asbestos**

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

#### **G21. Open Burning**

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

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

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

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle

has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

#### **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

#### **G25. Permit Shield**

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

#### **G26. Severability**

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

#### **G27. Property Rights**

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

#### **G28. Transferability**

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

#### **G29. Disclaimer**

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

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

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

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

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-9545

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

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

### **G31. Prevention of Air Pollution Emergency Episodes**

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

*567 IAC 26.1(1)*



**G32. Contacts List**

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

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

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

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-8200

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

**Field Office 1**

1101 Commercial Court, Suite 10  
Manchester, IA 52057  
(563) 927-2640

**Field Office 2**

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

**Field Office 3**

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

**Field Office 4**

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

**Field Office 5**

Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-0268

**Field Office 6**

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

**Polk County Public Works Dept.**

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

**Linn County Public Health**

Air Quality Branch  
1020 6<sup>th</sup> Street SE  
Cedar Rapids, IA 52401  
(319) 892-6000

## V. Appendix A: Web Link References

**40 CFR 63 Subpart RRRR: NESHAP Surface Coating of Metal Furniture**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.13.63.rrrr>

**40 CFR 63 Subpart JJ: NESHAP Wood Furniture Manufacturing Operations**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.11.63.jj>

**40 CFR 63 Subpart III: Polyurethane Foam Production**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.12.63.iii>

**40 CFR 63 Subpart ZZZZ: NESHAP Stationary Reciprocating Internal Combustion Engines**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.zzzz>

**40 CFR 63 Subpart DDDDD: NESHAP Industrial, Commercial and Institutional Boilers and Process Heaters**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.ddddd>

**40 CFR 60 Subpart IIII: NSPS Stationary Compression Ignition Internal Combustion Engines**

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii>

## Appendix B: Compliance Assurance Monitoring Plan for Baghouses

Emission Point	Emission Unit	Control Equipment	Control Equipment Description	PM Limit (lb/hr)	Construction Permit
2630.DCW.3.IV.1	253.2630.DCW.3	2630.DCW.3.BGH	Fabric Filter Baghouse <sup>(1)</sup>	1.83	04-A-904-S2
2630.DCW.4.IV.1	253.2630.DCW.4	2630.DCW.4.BGH	Fabric Filter Baghouse <sup>(1)</sup>	1.83	98-A-548-S3
2630.DCW.6.IV.1	253.2630.DCW.6	2630.DCW.6.BGH	Fabric Filter Baghouse <sup>(1)</sup>	1.83	13-A-071-S1

<sup>(1)</sup>Vents inside building therefore not subject to Visible Emissions

### I. Background

Baghouses are used to control particulate emissions from these emission points. The potential uncontrolled emissions from these emission units are greater than the major source threshold for PM. These baghouses are used to achieve compliance with the referenced emission limits.

### II. Monitoring Approach

<b>Indicator #1 – Pressure Drop</b>	
Measurement Approach	The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per day.
Indicator Range	The baghouse differential pressure drop shall be maintained between 0.5 and 4 inches water column. If the pressure drop across the baghouse falls outside this range the owner or operator shall investigate the baghouse and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken.

### III. Performance Criteria

	<b>Indicator #1 – Pressure Drop</b>
Data Representativeness	The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the baghouse.
Verification of Operational Status	The owner or operator shall develop an operating and maintenance plan for the baghouse, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
QA/QC Practices and Criteria	The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to ensure that the indicator is within the indicator range.
Monitoring Frequency	The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per day while the baghouse is operating.
Data Collection Procedures	Records of the pressure drop readings shall be kept for a minimum of 5 years. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the baghouse.