

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

**Name of Permitted Facility: John Deere Waterloo Works –  
Drive Train Operations**

**Facility Location: 400 Westfield Avenue  
Waterloo, Iowa 50701**

**Air Quality Operating Permit Number: 03-TV-027R1**

**Expiration Date: June 20, 2016**

**Permit Renewal Application Deadline: December 20, 2015**

**EIQ Number: 92-1319**

**Facility File Number: 07-01-077**

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**Responsible Official**

**Name: Michael J. Hilby**

**Title: Operations Manager**

**Mailing Address: P.O. Box 270, Waterloo, IA 50704**

**Phone #: 319/292-7686**

**Permit Contact Person for the Facility**

**Name: Lisa Hurban**

**Title: Environmental Engineer**

**Mailing Address: P.O. Box 270, Waterloo, IA 50704**

**Phone #: 319/292-6828**

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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. Separate Title V Permits have been issued for John Deere Waterloo Works – Drive Train Operations, John Deere Tractor Cab Assembly Operations, John Deere Waterloo – Coating Service Center and John Deere Foundry which are all considered one stationary source. This permit is for John Deere Waterloo Works – Drive Train Operations.

**For the Director of the Department of Natural Resources**

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Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

# Table of Contents

<b>I. Facility Description and Equipment List .....</b>	<b>4</b>
<b>II. Plant - Wide Conditions.....</b>	<b>9</b>
<b>III. Emission Point Specific Conditions .....</b>	<b>11</b>
<b>IV. General Conditions.....</b>	<b>44</b>
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	

**V. Appendix A: 40 CFR Part 63, Subpart ZZZZ:** Web Link to National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines.....**58**

**VI. Appendix B: 40 CFR Part 63, Subpart DDDDD:** Web Link to National Emissions Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters.....**59**

## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
°F .....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS .....	new source performance standard
ppmv .....	parts per million by volume
lb./hr .....	pounds per hour
lb./MMBtu .....	pounds per million British thermal units
SCC .....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency
Pollutants	
PM.....	particulate matter
PM <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: John Deere Waterloo Works – Drive Train Operations  
 Permit Number: 03-TV-027R1

Facility Description: Farm Machinery and Equipment Manufacture (SIC 3523)

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## Equipment List

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Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description	
<b>Welding Stations</b>			<b>Construction Permit</b>
1020-01	1020-01	Three Station Welding Booth	96-A-971
1020-12	1020-12	Two Station Welding Booth	96-A-969
<b>Natural Gas Boilers</b>			
1020-13	1020-13	Boiler 1020-13 (10.46 MMBtu/hr)	97-A-289-S3
1020-14	1020-14	Boiler 1020-14 (25.11 MMBtu/hr)	97-A-290-S3
A1-01	A1-01	Boiler (6.28 MMBtu/hr)	Exempt
A1-02	A1-02	Boiler (6.28 MMBtu/hr)	Exempt
<b>Tumblast Systems</b>			
P5-02	P5-02	Tumblast 2830	79-A-229
P5-03	P5-03	Tumblast 5252	78-A-003
<b>Sludge Conditioning</b>			
J7-03	J7-03	Sludge Conditioning Tanks	91-A-078
J7-04	J7-04	Lime Slurry Tank	91-A-079
<b>"Z" Boilers</b>			
Z1-05	Z1-05	Boiler Z1-05 (33.475 MMBtu/hr)	97-A-512-S4
Z1-06	Z1-06	Boiler Z1-06 (33.475 MMBtu/hr)	97-A-513-S4
Z1-07	Z1-07	Boiler Z1-07 (33.475 MMBtu/hr)	97-A-514-S4

<b>Miscellaneous Sources</b>			
1020-09	1020-09	Thermal Deburr 2328	96-A-970
1020-15	1020-15	Solvent Washer Machine 6269	00-A-001-S1
J7-01	J7-01	Dry Lime Storage Silo	86-A-030
J7-02	J7-02	Dry Lime Storage Silo	89-A-229
P5-15	K2-04	Plasma Cutting Booth	02-A-588-S3
Z1-02 (vents inside)	Z1-03	Magnaglo (Magnetic Parts Inspection Machines)	96-A-967-S3
<b>Emergency Generators</b>			
A-01	A-01	Emergency Generator (16 bhp)	Exempt
A-02	A-02	Emergency Generator (181 bhp)	Exempt
P5-21	P5-21	Emergency Generator (16 bhp)	Exempt
H3-36	H3-36	Emergency Generator (48 bhp)	Exempt
<b>Process Heaters</b>			
H3-BF-1	H3-6041	TQF Carburizing Furnaces Each 1.56 MMBtu/hr	Exempt
	H3-6073		
H3-BF-2	H3-6084		
	H3-6090		
	H3-6097		
	H3-6098		
H3-BF-3	H3-6104		
	H3-6105		
	H3-6106		
	H3-6107		
H3-BF-1	H3-6192	TQF Carburizing Furnaces	Exempt
H3-WF-2	H3-6217	Each 1.19 MMBtu/hr	
H3-37	H3-105003	TQF Carburizing Furnace 3.5 MMBtu/hr	Exempt
H4-2A	H4-123982	TQF Carburizing Furnaces Each 1.2 MMBtu/hr	Exempt
	H4-123994		
	H4-123997		
	H4-123998		
H4-2B	H4-123983		
	H4-123995		
	H4-123999		
	H4-124000		
P5-01	P5-13 furnace 9963	Normalizing Furnace 1.47 MMBtu/hr	Exempt
H3-33	H3-5673	Endo Gas Furnaces Each 1.8 MMBtu/hr	Exempt
H3-34	H3-5674		

H3-35	H3-5675		
1020-17	1020-17	Endo Gas Furnace 0.85 MMBtu	Exempt
H3-WF-1	WSD Washer 6130	Natural Gas Fired Washers 0.35 MMBtu	Exempt
	WSD Washer 6132	0.35 MMBtu	Exempt
HS-30	WSD Washer 6134	0.40 MMBtu	Exempt
H4-5A	H4-Washer A	0.50 MMBtu	Exempt
H4-6A	H4-Washer A rinse	0.30 MMBtu	Exempt
H4-5B	H4-Washer B	0.50 MMBtu	Exempt
H4-6B	H4-Washer B rinse	0.30 MMBtu	Exempt

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**Insignificant Equipment List**

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
Z2-01	Emergency Generator (347 bhp) <sup>(1)</sup>
1020-16	Emergency Generator (64 bhp) <sup>(1)</sup>
1020-24	Welding Training
J7X-01	Waste Oil Heating Tank T35 (5,331 gal.)
J7X-02	Waste Oil Heating Tank T36 (5,331 gal.)
1020-17b	RX Furnace 8727 ( 2.96 MMBtu)
Misc Fugitive	Part Cleaning Plant Wide
Welding Fugitive	Welding Plant Wide
1020-19	RX Furnace 5184 (0.75 MMBtu)
1021-01	Washer – Manganese Phosphate Line
1021-02	Manganese Phosphate Line
1021-03	Manganese Phosphate Line
H3-02	Manganese Phosphate Line
Misc Acid Fugitive	Acid Etch Plant Wide
Adhesive Fugitive	Adhesive Application Plant Wide
Cleaner Fugitive	Cleaner Use Plant Wide
Misc. Lubricant	Fugitive Lubricants Plant Wide
Misc Solvent	Fugitive Solvent Use Plant Wide
P5-12	Natural Gas Furnace 9962 (<10 MMBtu)
1010-Nat	Natural Gas Fired Heaters (10 units each < 1 mmbtu)
H3-105004	Holcroft Temper Furnace (1.1 MMBtu)
H3-5646	Flame Hardener 5646 (0.0025 MMBtu)
H3-6108	DL Pre Heat Furnace 6108 (0.7 MMBtu)
H3-6116	DL Pre Heat Furnace 6116 (0.7 MMBtu)

H3-6138	Temper Furnace 6138 (0.33 MMBtu)
H3-6144	Temper Furnace 6144 (0.33 MMBtu)
H3-6149	Temper Furnace 6149 (0.33 MMBtu)
H3-6151	Temper Furnace 6151 (0.33 MMBtu)
H3-6154	Temper Furnace 6154 (0.33 MMBtu)
H3-6159	Temper Furnace 6159 (0.33 MMBtu)
H3-6162	Temper Furnace 6162 (0.33 MMBtu)
H3-6171	Temper Furnace 6171 (0.33 MMBtu)
H3-6172	Temper Furnace 6172 (0.33 MMBtu)
H3-6175	Temper Furnace 6175 (0.50 MMBtu)
T-6022A	Cold Quench Oil Tank (8,000 gal.)
T-6022B	Cold Quench Oil Tank (8,000 gal.)
T-6022C	Hot Quench Oil Tank (4,000 gal.)
T-18544D	Plant Diesel Fuel Tank (1,000 gal.)
T-18544G	Plant Gasoline Fuel Tank (800 gal.)
T-2648	Hy-sol Mb 20 Coolant Tank (7,600 gal.)
T-2749	Castrol 9904 Synthetic Coolant Tank (7,600 gal.)
T-2756	Castrol 3660 Cleaner Tank (7,600 gal.)
T-2760	T-200 Cutting Oil Tank (7,600 gal.)
T-2779	Hy-guard Hydraulic Oil Tank (14,700 gal.)
T-Fuel Oil	Boiler # 2 Fuel Oil Tank (20,000 gal.)
1020-23	Robotic Welder
1021-04	Shot Blast 104482
Fugitive	Fugitive Dust Collectors – Machining
Endo gas	Endothermic Gas for Carburization (Facility-wide)
H-4862	Glass Bead Shot Machine
H3-6217F7	Press Quench Operation
H3-109729	Press Quench Operation
H3-Quench	Heat Treat Oil Operation
P5-20	Spinner Cabinet 2350
Z1-11	DFO@4Dust Collector
Z1-6460	Ring Gear Shot Blast 6460
H3-113349	Torit Donaldson Dust Collector
Z1-09	Autophoretic Line # 1
Z1-10	Autophoretic Line # 2 (electric unit, residual emissions accounted for in other units.)
H4-124001	UNIDRAW #1A
H4-124002	UNIDRAW #2A
H4-124003	UNIDRAW #3A
H4-124004	UNIDRAW #1B
H4-124005	UNIDRAW #2B
H4-124006	UNIDRAW #3B

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<sup>(1)</sup> This generator is an affected unit under 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines. However, according to 40 CFR 63.6590(c)(6), this new emergency stationary engine must meet the requirements of 40 CFR 60, Subpart IIII. Because this engine was manufactured prior to April 1, 2006, it is not required to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 60, Subpart IIII.

### **Insignificant Activities Equipment List (Small Unit Exemption) <sup>(2)</sup>**

<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
H3-01	Acid Etch Station
H3-4990	Heat Treat Shot Blast 4990
Z1-04	Wheelabrator JPSM-15
Magnaglo Fugitive	Magnaglo Operations Plant Wide
1020-03	Magnaglo 2859
Quench Operations	Quench Operations Plant Wide

<sup>(2)</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: John Deere Waterloo Works – Drive Train Operations  
Permit Number: 03-TV-027R1

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

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### Permit Duration

The term of this permit is: Five (5) Years  
Commencing on: June 21, 2011  
Ending on: June 20, 2016

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

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### Emission Limits

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

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

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

#### Particulate Matter:

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

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

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking

reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

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

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

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#### Compliance Plan

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

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

Authority for Requirement: 567 IAC 22.108(15)

### III. Emission Point-Specific Conditions

Facility Name: John Deere Waterloo Works – Drive Train Operations  
 Permit Number: 03-TV-027R1

#### Emission Point ID Number: See Table: Welding Stations

**Table: Welding Stations**

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit #
1020-01	1020-01	Three Station Welding Booth	Welding Rod	42 lb/hr	96-A-971
1020-12	1020-12	Two Station Welding Booth	Welding Rod	28 lb/hr	96-A-969

#### Applicable Requirements

(The following requirements apply to the emission units identified in Table: Welding Stations)

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

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

Pollutant: Opacity

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

Authority for Requirement: Iowa DNR Construction Permits 96-A-971 & 96-A-969  
 567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit(s): 0.43 lb/hr (Applies to EP 1020-01 only)

Authority for Requirement: Iowa DNR Construction Permit 96-A-971

Pollutant: PM-10

Emission Limit(s): 0.12 lb/hr (Applies to EP 1020-12 only)

Authority for Requirement: Iowa DNR Construction Permit 96-A-969

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permits 96-A-971 & 96-A-969  
 567 IAC 23.3(2)"a"

**Operational Limits & Requirements**

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

The following limits and requirements apply to Emission Unit 1020-12 only.

Process throughput:

- 1. The twelve month total, rolled monthly, use of electrode in the welding operation administered under DNR permit 96-A-969 shall not exceed three (3) tons.

Reporting & Record keeping:

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.

- 1. The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, use of electrode in the welding operation administered under DNR permit 96-A-969. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 96-A-969

**Emission Point Characteristics**

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

EP	Stack Height (ft, from the ground)	Stack Opening (inches, diameter)	Exhaust Flow Rate (scfm)	Exhaust Temp. (°F)	Discharge Style	Authority for Requirement
1020-01	45	24	5009	70	Not given	96-A-971
1020-12	36	14	1367	70	Not given	96-A-969

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Natural Gas Boilers**

**Table: Natural Gas Boilers**

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit #</b>
1020-13	1020-13	Boiler 1020-13	Natural Gas or Propane	10.46 MMBtu/hr	97-A-289-S3
1020-14	1020-14	Boiler 1020-14	Natural Gas or Propane	25.11 MMBtu/hr	97-A-290-S3

**Applicable Requirements**

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

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

Pollutant: Opacity

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

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3 & 97-A-290-S3  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3 & 97-A-290-S3  
567 IAC 23.3(2)"b"

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

Emission Limit(s): 0.01 lb/hr and 500 ppmv (Applies to EP 1020-13 only)

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3  
567 IAC 23.3(3)"e"

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

Emission Limit(s): 0.025 lb/hr and 500 ppmv (Applies to EP 1020-14 only)

Authority for Requirement: Iowa DNR Construction Permits 97-A-290-S3  
567 IAC 23.3(3)"e"

**Operational Limits & Requirements**

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

**NSPS:**

These boilers are subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc & Subpart A, General Provisions.

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3 & 97-A-290-S3  
567 IAC 23.1(2)"III"

**NESHAP:**

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

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Process throughput:

- 1. These sources shall burn either propane or natural gas.

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3 & 97-A-290-S3

Reporting & Record keeping:

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.

- 1. At the end of each calendar month, record the quantity of each fuel used in this unit over the previous month. As an alternative to meeting the above requirement [40 CFR 60.48c(g)(2)] the facility may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month [40 CFR 60.48c(g)(3)].

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S3 & 97-A-290-S3

**Emission Point Characteristics**

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

EP	Stack Height (ft, from the ground)	Stack Opening (inches, diameter)	Exhaust Flow Rate (scfm)	Exhaust Temp. (°F)	Discharge Style	Authority for Requirement
1020-13	45	20	2040	300	Vertical unobstructed	97-A-289-S3
1020-14	45	24	4900	300	Vertical unobstructed	97-A-290-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Natural Gas Boilers II**

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**Table: Natural Gas Boilers II**

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit #</b>
A1-01	A1-01	Boiler	Natural gas	6.28 MMBtu/hr	Exempt
A1-02	A1-02	Boiler	Natural gas	6.28 MMBtu/hr	Exempt

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

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

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

Emission Limit(s): 500 ppmv

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

**Operational Limits & Requirements**

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

**NESHAP:**

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

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Tumblast Systems**

**Table: Tumblast Systems**

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Control Equipment Description & Number	Rated Capacity	Construction Permit
P5-02	P5-02	Tumblast 2830	Steel Parts	Baghouse CE-15	54.81 tpy	79-A-229
P5-03	P5-03	Tumblast 5252	Steel Parts	Baghouse CE-16	54.81 tpy	78-A-003

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: Iowa DNR Construction Permits 79-A-229 and 78-A-003  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permits 79-A-229 and 78-A-003  
567 IAC 23.3(2)"a"

**Monitoring Requirements**

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Sludge Conditioning**

**Table: Sludge Conditioning**

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Control Equipment Description & Number	Rated Capacity (tons/hr)	Construction Permit
J7-03	J7-03	Sludge Conditioning Tanks	Lime	Baghouse CE-10	12.5	91-A-078
J7-04	J7-04	Lime Slurry Tank	Lime	Baghouse CE-11	12.5	91-A-079

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permits 91-A-078 & 91-A-079  
567 IAC 23.3(2)"a"

**Monitoring Requirements**

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: See Table: "Z" Boilers**

**Table: "Z" Boilers**

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity (MMBtu/hr)</b>	<b>Construction Permit</b>
Z1-05	Z1-05	Boiler Z1-05	Natural Gas or #2 Fuel Oil	33.475	97-A-512-S4
Z1-06	Z1-06	Boiler Z1-06	Natural Gas or #2 Fuel Oil	33.475	97-A-513-S4
Z1-07	Z1-07	Boiler Z1-07	Natural Gas or #2 Fuel Oil	33.475	97-A-514-S4

**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): 20%

Authority for Requirement: 40 CFR Part 60, Subpart Dc  
40 CFR 60.43c(c)  
567 IAC 23.1(2)"III"

Pollutant: Opacity

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

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers  
567 IAC 23.3(2)"d"

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

Pollutant: PM-10

Emission Limit(s): 0.81 lb/hr

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

Pollutant: Particulate Matter

Emission Limits: 0.8 lb/MMBtu, 2.27 lb/hr

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 0.04 lb/hr, 500 ppmv (When combusting natural gas.)  
Emission Limit(s): 6.9 lb/hr, 2.5 lb/MMBtu (When combusting fuel oil.)  
Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)  
Emission Limit(s): 3.75 lb/hr (When combusting natural gas.)  
Emission Limit(s): 8.3 lb/hr, 22.58 lb/1000 gal (When combusting fuel oil.)  
Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 0.58 lb/hr  
Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

Pollutant: Carbon Monoxide (CO)  
Emission Limit(s): 3.0 lb/hr  
Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

**Operational Limits & Requirements**

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

**NSPS:**

This boiler is subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc & Subpart A, General Provisions.

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers  
567 IAC 23.1(2)"III"

**NESHAP:**

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

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

**Process throughput:**

1. These sources shall burn either #1 / #2 fuel oil or natural gas.
2. The sulfur content of the #1 / #2 fuel oil burned shall not exceed 0.2% by weight.
3. The total amount of #1 / #2 fuel oil burned by the emission units venting through emission points EP Z1-05, EP Z1-06 and EP Z1-07 shall not exceed 286,929 gallons of #1 / #2 fuel oil per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

**Reporting & Record keeping:**

Reports shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources. These records shall show the following:

1. A fuel certification shall be obtained from the supplier for each delivery of fuel oil received. This certification shall contain at a minimum the following items:
  - A. The name of the oil supplier;
  - B. A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil found in 40 CFR 60.41c;
  - C. The sulfur content of the oil.
2. At the end of each calendar month, record the quantity of each fuel used in this unit over the previous month.
3. Determine the cumulative amount of #1 / #2 fuel oil burned by the emission units venting through emission points EP Z1-05, EP Z1-06 and EP Z1-07 for each month of operation.
4. Determine the amount of #1 / #2 fuel oil burned by the emission units venting through emission points EP Z1-05, EP Z1-06 and EP-Z1-07 on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits listed Table "Z" Boilers  
567 IAC 23.1(2)"III"  
40 CFR 60.46c

**Emission Point Characteristics**

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

Stack Height (ft, from the ground): 52

Stack Opening (inches, diameter): 24

Exhaust Flow Rate (scfm): 7300

Exhaust Temperature (°F): 300

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permits listed in Table "Z" Boilers

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

The following applies to these Emission Points *only while burning fuel oil*, and is only required a maximum of once per calendar week.

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

If an opacity > 20% during a 6 minute average, except for one 6 minute period per hour of not more than 27% is observed, would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

**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: 1020-09**

Associated Equipment

Associated Emission Unit ID Number: 1020-09

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Emission Unit vented through this Emission Point: 1020-09  
Emission Unit Description: Thermal Deburr 2328  
Raw Material/Fuel: Metal Parts  
Rated Capacity: 0.30 TPH

**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: Iowa DNR Construction Permit 96-A-970  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit(s): 0.05 gr./scf  
Authority for Requirement: Iowa DNR Construction Permit 96-A-970  
567 IAC 23.4(6)

Pollutant: PM<sub>10</sub>  
Emission Limit(s): 0.054 lb./hr  
Authority for Requirement: Iowa DNR Construction Permit 96-A-970

**Operational Limits & Requirements**

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

Process throughput:

1. The twelve month total, rolled monthly, amount of material processed in the thermal deburr administered under DNR permit 96-A-970 shall not exceed 115 tons.

**Reporting & Record keeping:**

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.

1. The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly amount of material processed in the thermal deburr administered under DNR permit 96-A-970. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 96-A-970

**Emission Point Characteristics**

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

Stack Height (feet): 36

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (acfm): 258

Stack Temperature (°F): Ambient

Authority for Requirement: Iowa DNR Construction Permit 96-A-970

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 1020-15**

### Associated Equipment

Associated Emission Unit ID Number: 1020-15

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Emission Unit vented through this Emission Point: 1020-15  
Emission Unit Description: Solvent Washer Machine 6269  
Raw Material/Fuel: Solvent  
Rated Capacity: 3.01 lb/hr

### **Applicable Requirements**

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

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

There are no emission limits at this time.

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

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

Process throughput:

1. The total amount of material (solvent) used in this emission unit (EU 1020-15) shall not exceed 4000 gallons in any rolling 12-month period.
2. The maximum VOC content of any material (solvent) used in this emission unit (EU 1020-15) shall not exceed 8.0 pounds per gallon.

Authority for Requirement: Iowa DNR Construction Permit 00-A-001-S1

Reporting & Record keeping:

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.

1. The permittee shall maintain records on the identification and the VOC content of each solvent used in this emissions unit.
2. The permittee shall maintain the following monthly records:
  - A. The amount of material (solvent) used in emission unit (EU 1020-15) in gallons; and
  - B. The rolling 12-month total of the amount of material (solvent) used in emission unit (EU 1020-15) in gallons.

Authority for Requirement: Iowa DNR Construction Permit 00-A-001-S1

**Emission Point Characteristics**

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

Stack Height (feet): 42

Stack Diameter (inches, diameter): 12

Stack Exhaust Flow Rate (scfm): 1,900

Stack Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 00-A-001-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Dry Lime Storage Silos**

**Table: Dry Lime Storage Silos**

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Control Equipment Description &amp; Number</b>	<b>Rated Capacity (tph)</b>	<b>Construction Permit</b>
J7-01	J7-01	Dry Lime Storage Silo	Lime	Baghouse CE-08	12.5	86-A-030
J7-02	J7-02	Dry Lime Storage Silo	Lime	Baghouse CE-09	12.5	89-A-229

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permits 86-A-030 & 89-A-229  
567 IAC 23.3(2)"a"

**Monitoring Requirements**

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: P5-15**

### Associated Equipment

Associated Emission Unit ID Numbers: P5-15

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### Emission Unit Description

Emission Unit vented through this Emission Point: P5-15

Emission Unit Description: Plasma Cutting Booth

Raw Material/Fuel: Steel

Rated Capacity: 30 inches of steel per minute

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S3  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.05 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S3  
567 IAC 23.4(6)

Pollutant: PM-10

Emission Limit(s): 4.55 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S3

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

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

Hours of operation:

1. The plasma cutter, EU P5-15, shall not operate more than 500 hours per rolling 12-month period.

**Reporting & Record keeping:**

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.

1. The owner or operator shall record monthly the number of hours the plasma cutter, EU P5-15 operated. Calculate and record 12-month rolling total.
2. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each material cut in the plasma cutter, EU P5-15.

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S3

**Emission Point Characteristics**

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

Stack Height (feet): 33.1

Stack Diameter (inches, diameter): 42

Stack Exhaust Flow Rate (scfm): 28,000

Stack Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing:**

Pollutant – PM-10

Should the permitted hours of operation increase above 500 hours per rolling 12-month period, a stack test will be required to demonstrate compliance.

Test Method – 40 CFR 51, Appendix M, 201A with 202 or approved alternative

Authority for Requirement - IDNR Construction Permit 02-A-588-S3

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP Z1-02 (vents inside)**

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<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	<b>Construction Permit No.</b>
Z1-02 (vents inside)	Z1-03	Magnaglo (Magnetic Particle Inspection Machine)	Mineral Oil Solution	270 gallons	96-A-967-S3

**Applicable Requirements**

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 6 tons per 12-month rolling total

Authority for Requirement: Iowa DNR Construction Permit 96-A-967-S3

**Operational Limits & Requirements**

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

Process throughput:

1. The usage of VOC-containing materials (i.e. magnaflex) in emission unit Z1-03 shall not exceed 1,500 gallons combined in any rolling 12-month period.
2. The VOC content of VOC-containing materials used in emission units Z1-03 shall not exceed 8.00 pounds of VOC per gallon.

Reporting & Record keeping:

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.

1. The owner or operator shall maintain a log of all materials used in emission unit Z1-03 and the materials VOC content in pounds per gallon.
2. The owner or operator shall record monthly the amount of VOC-containing material used in emission unit Z1-03 in gallons. Calculate and record 12-month rolling total.
3. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each material used in emission unit Z1-03.

Authority for Requirement: Iowa DNR Construction Permit 96-A-967-S3

**Emission Point Characteristics**

This emission point shall conform to the conditions specified in Table: Magnaglo-EP Characteristics.

Table: Magnaglo-EP Characteristics

Emission Point Number	Emission Unit Number	Construction Permit #	Stack Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Discharge Style
Z1-02	Z1-03	96-A-967-S3	Vents inside	NA	NA	NA	NA

Authority for Requirement: Iowa DNR Construction Permit 96-A-967-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Engine Table 1**

Associated Equipment

**Engine Table 1**

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>
A-01	A-01	Emergency Generator	Diesel Fuel	16 bhp
A-02	A-02	Emergency Generator	Diesel Fuel	181 bhp
P5-21	P5-21	Emergency Generator	Diesel Fuel	16 bhp

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

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

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

**Operational Limits & Requirements**

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

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

**Reporting & Record keeping:**

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.

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

**NESHAP:**

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

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

**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: H3-36**

Associated Equipment

Associated Emission Unit ID Number: H3-36

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Emission Unit vented through this Emission Point: H3-36  
Emission Unit Description: Emergency Generator (48 bhp)  
Raw Material/Fuel: Diesel  
Rated Capacity: 2.80 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 %  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit(s): 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 2.5 lb/MMBtu  
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

**Operational Limits & Requirements**

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

Process throughput:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

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.

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

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

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

NSPS:

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 10 liters/cylinder. This engine is model year 2008. Therefore, this source must comply with the emission standards in Table 2 of Subpart IIII and all other applicable requirements of that Subpart.

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table Process Heaters**

**Table: Process Heaters**

(All of these sources are exempt from construction permitting and use natural gas)

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
H3-BF-1	H3-6041 H3-6073	TQF Carburizing Furnaces	Natural gas	1.56 MMBtu/hr Each
H3-BF-2	H3-6084 H3-6090 H3-6097 H3-6098			
H3-BF-3	H3-6104 H3-6105 H3-6106 H3-6107			
H3-BF-1	H3-6192	TQF Carburizing Furnaces	Natural gas	1.19 MMBtu/hr Each
H3-WF-2	H3-6217			
H3-37	H3-105003	TQF Carburizing Furnace	Natural gas	3.50 MMBtu/hr
H4-2A	H4-123982 H4-123994 H4-123997 H4-123998	TQF Carburizing Furnace	Natural gas	1.20 MMBtu/hr Each
H4-2B	H4-123983 H4-123995 H4-123999 H4-124000			
P5-01	P5-13 Furnace 9963	Normalizing Furnace	Natural gas	1.47 MMBtu/hr
H3-33	H3-5673	Endo Gas Furnaces	Natural gas	1.80 MMBtu/hr Each
H3-34	H3-5674			
H3-35	H3-5675			
1020-17	1020-17	Endo Gas Furnace	Natural gas	0.85 MMBtu/hr
H3-WF-1	WSD Washer 6130	Natural Gas Fired Washers	Natural gas	0.35 MMBtu/hr
	WSD Washer 6132			0.35 MMBtu/hr
HS-30	WSD Washer 6134			0.40 MMBtu/hr
H4-5A	H4-Washer A			0.50 MMBtu/hr
H4-6A	H4-Washer A rinse			0.30 MMBtu/hr
H4-5B	H4-Washer B			0.50 MMBtu/hr
H4-6B	H4-Washer B rinse			0.30 MMBtu/hr

## Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

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

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

Emission Limit(s): 500 ppmv

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

### Operational Limits & Requirements

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

#### NESHAP:

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

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

### Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **IV. General Conditions**

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

### **G1. Duty to Comply**

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

### **G2. Permit Expiration**

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

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

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

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

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the

identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

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

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

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

1. The permittee is required under subrule *567 IAC 22.106* to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

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

**G8. Duty to Provide Information**

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

**G9. General Maintenance and Repair Duties**

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

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

**G10. Recordkeeping Requirements for Compliance Monitoring**

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

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

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

records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

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

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

**G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

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

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process

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

## 2. Excess Emissions Reporting

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

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

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

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

- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

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

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

**G15. Permit Deviation Reporting Requirements**

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

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

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

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

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

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act.
  - e. The changes comply with all applicable requirements.
  - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change.
- 567 IAC 22.110(1)*

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

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

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

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

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

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:

- i. Correct typographical errors
    - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
    - iii. Require more frequent monitoring or reporting by the permittee; or
    - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
  - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
  - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
2. Minor Permit Modification.
- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
    - i. Do not violate any applicable requirements
    - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
    - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
    - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
    - v. Are not modifications under any provision of Title I of the Act; and
    - vi. Are not required to be processed as significant modification.
  - b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
    - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
    - ii. The permittee's suggested draft permit
    - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
    - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
  - c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this

change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify.

However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

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

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

#### **G20. Asbestos**

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

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

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

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

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

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

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

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

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

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

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

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

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

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

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

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

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

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

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

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

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

### **G25. Permit Shield**

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

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

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

**G26. Severability**

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

**G27. Property Rights**

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

**G28. Transferability**

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

**G29. Disclaimer**

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be

demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
7900 Hickman Road, Suite #1  
Windsor Heights, IA 50324  
(515) 242-6001

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

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

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

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

567 IAC 26.1(1)

**G32. Contacts List**

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

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(913) 551-7020

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

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite #1  
Windsor Heights, IA 50324  
(515) 242-5100

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

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

**Field Office 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**  
401 SW 7<sup>th</sup> Street, Suite I  
Des Moines, IA 50309  
(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 Dept.**  
Air Pollution Control Division  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 892-6000

## **Appendix A: 40 CFR Part 63, Subpart ZZZZ**

**Web Link to the National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines**

**[www.gpo.gov/fdsys/](http://www.gpo.gov/fdsys/)**

### **See Featured Collections**

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 63**

**Appendix B: 40 CFR Part 63, Subpart DDDDD**

**Web Link to National Emissions Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters**

**[www.epa.gov/airquality/combustion/actions.html](http://www.epa.gov/airquality/combustion/actions.html)**

**See Emission Standards for Major Source  
- Final Rule**