Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: WDC Acquisition LLC
Facility Location: 1746 Commerce Road, Creston, IA 50801
Air Quality Operating Permit Number: 99-TV-018R4
Expiration Date: 10/19/2027
Permit Renewal Application Deadline: 4/19/2027

EIQ Number: 92-5380
Facility File Number: 88-01-002

Responsible Official
Name: Ralph Clendenin
Title: Chief Operating Officer
Mailing Address: 1746 Commerce Road, Creston, IA 50801
Phone #: (641) 782-0210

Permit Contact Person for the Facility
Name: Matt Thelen
Title: Environmental Engineer
Mailing Address: 1746 Commerce Road, Creston, IA 50801
Phone #: (641) 782-0283

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

For the Director of the Department of Natural Resources

10/20/2022

Marnie Stein, Supervisor of Air Operating Permits Section — Date

Table of Contents

Abbreviations

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

Pollutants
PM.....particulate matter
PM_{10} .....particulate matter ten microns or less in diameter
SO_2 .....sulfur dioxide
NO_x .....nitrogen oxides
VOC .....volatile organic compound
CO.....carbon monoxide
HAP.....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: WDC Acquisition LLC
Permit Number: 99-TV-018R4

Facility Description: Aluminum Foundries (SIC 3365)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1	1-1	OMCO Mixer	85-A-055-S8
	6-1	450 Mixer	
	15-1	Palmer Mixer	
	16-1	250 Mixer	
	28-1	Wheelabrator Shot Blast Cabinet	
1A	15-1	Palmer Mixer	07-A-735-S4
2	2-1	South Bench Core Station	99-A-576-S5
	2-2	SANBLO Core Station	
	82-1	Gaylord Core Blower	
	90-1	Redford Core Blower	
	91-1	CB-10	
	92-1	CB-5	
3	71-1	Silo A	99-A-144-S4
	72-1	Silo B	
5	18-1	Chill Spray Booth	99-A-784-S5
10	31-1	Shakeout/Lump Reduction	88-A-040-S3
	32-1	Calciner	
	33-1	Cooler/Classifier	
	68-1	EDC Silo G	
	69-1	EDC Silo H	
	29-1	EDC Mixer	
11	34-1	Laempe Core Blower	99-A-145-S6
	35-1	Laempe Core Blower	
12	36-1	West Pattern Room Wood Working	99-A-577
13	37-1	Outer Pattern Room Wood Working	99-A-578
14	39-1	Wheelabrator Blast Cabinet	85-A-054-S4
15	41-1	Saw Room Sand Blast	83-A-067-S3
18	45-2	Wheelabrator Blast Cabinet	01-A-771-S3
	55-1	Pangborn Mini Cabinet	
19A 19B	57-1a	Acid Dip Tank 1	07-A-738-S2 07-A-739-S2
	57-1b	Acid Dip Tank 2	
	57-1c	Acid Dip Tank 3	
	57-1d	Acid Dip Tank 4	
	57-1f	Acid Dip Tank 6	
	57-1g	Acid Dip Tank 7	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
19A	57-1h	Acid Dip Tank 8	07-A-738-S2
19B	57-1i	Acid Dip Tank 9	07-A-739-S2
23	74-1	Silo E	99-A-146-S3
	75-1	Silo F	
23A	74-1	Silo E	04-A-039-S2
59	59-1	Welding Stations	99-A-147
81	81-1	Inhibitor Tumbler	07-A-740-S2
82	2-1	South Bench Core Stations	12-A-039-S3
	2-2	SANBLO Core Stations	
	82-1	Gaylord Core Blower	
	90-1	Redford Core Blower	
	91-1	CB-10	
	92-1	CB-5	
94	94-1	Silo C	21-A-130
	95-1	Silo D	
97	97-1	Silo J	21-A-132-S1
	98-1	Silo K	
96	96-1	Simpson Sand Reclaim	21-A-131-S1
EF-1	84-1 85-1	Metal Pouring Mold Cooling	07-A-741-S2
EF-2			07-A-742-S2
EF-3			07-A-743-S2
EF-4			07-A-744-S2
EF-5			07-A-745-S2
EF-6			07-A-746-S2
EF-7			07-A-747-S2
EF-8			07-A-748-S2
EF-9			12-A-040-S1
EF-10			07-A-749-S2
EF-11			07-A-750-S2
EF-12			12-A-041-S1
EF-35			12-A-042-S1
EF-36			12-A-043-S1
EF-13	86-1*	Aluminum Melting Exhaust	N/A
EF-14			
EF-15			
EF-18	24-1	Magnesium Tilter/Pot Furnaces (19)	07-A-751-S3
EF-19			07-A-752-S3
EF-20			07-A-753-S3
EF-21			07-A-754-S3
EF-32			07-A-755-S3
EF-24	EF-24	Heat Treat 1	07-A-756
	EF-26	Heat Treat 2	
EF-26	EF-27	Heat Treat 3	07-A-757
EF-27			07-A-758
BLDG F (Vent Internally)	4-1	East Cell Mixer	07-A-759-S4
	38-1	Old Knockout	
	47-1	West Cell Mixer	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
BLDG F (Vent Internally)	50-1	Cleaning and Grinding Room	07-A-759-S4
	88-1	Tinker Omega Mixer	
	93-1	300 Mixer	

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
30-1*	Aluminum Melt Pressure Pourer
49-1*	Core Drying Oven
102-1*	Core Smoke Check
103-1*	Mudding Compound
104-1*	Core Coating
105-1*	Core Wash
106-1*	Mold Wash
107-1*	Electric Bakeout Oven
108-1*	Electric Bakeout Oven
109-1*	Zyglo Penetrant Dip
80-1*	Zyglo Powder Booth
EU NG	All Insignificant Natural Gas Units Combined (Individual units range from <1MMBtu to <10MMBtu/unit)

* 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: WDC Acquisition LLC
Permit Number: 99-TV-018R4

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

Permit Duration

The term of this permit is: 5 years
Commencing on: 10/20/2022
Ending on: 10/19/2027

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

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

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

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

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

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

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

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

Facility-Wide Emission Limits

1. The permittee (or owner or operator) shall maintain the following daily records:
   A. The identification of each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources.
   B. The VOC and HAP content of each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources.
   C. The amount of each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources. For the purposes of calculating emissions, the material may be considered completely used on the day the materials are delivered to the facility or to the production line.
2. The permittee (or owner or operator) shall maintain the following records for each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources.
   A. Calculate and record the HAP emitted in weight percent for each Part I, Part II, and Part III Binder, or similar material, used in the Mold and Core making Operations. The amount of HAP should be determined by the MSDS or vendor technical data sheet. The HAP emissions from formaldehyde, furan, polyether polyol, and phenol can be assumed to be 95% reacted with the remaining 5% emitted. HAP emissions from diisocyanates can be assumed to be 99% reacted with the remaining 1% emitted. For these compounds, the permittee shall use the maximum content specified by the manufacturer on the MSDS

or product specification sheet. For all other compounds, the permittee shall assume that 100% of the HAP is emitted.

B. Calculate and record the VOC emitted in weight percent for each Part I, Part II, and Part III Binder or similar material used in the Mold and Core making Operations. The amount of VOC emitted shall be calculated by using the equation given below. If the equation does not apply the permittee shall assume that 100% of the VOC in the material is emitted:

$$E_{VOC} = VOC_{TOTAL} - (VOC_{PHENOL} + VOC_{FORMALDEHYDE} + VOC_{POLYETHER\ POLYOL} + VOC_{FURAN} + VOC_{ISOCYANATES})$$

Where,

E_{VOC} = Amount of VOC and HAP emitted in weight percent from the Part I, Part II, or Part III Binder, or similar material

VOC_{TOTAL} = Total VOC content of the Part I, Part II, or Part III Binder, or similar material, in weight percent using the maximum content specified by the manufacturer on the MSDS or product specification sheet

VOC_{PHENOL} = Percent by weight of Phenol and/or Phenolic Resin x 0.95
(When calculating VOC_{PHENOL}, the permittee shall use the minimum content on any range specified on the MSDS or product specification sheet)
Based on U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries – Background Information for Proposed Standards (EPA 453/R-02-013), December 2002

$VOC_{FORMALDEHYDE}$ = Maximum percent by weight of Formaldehyde x 0.95
(When calculating $VOC_{FORMALDEHYDE}$, the permittee shall use the minimum content on any range specified on the MSDS or product specification sheet)
Based on U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries – Background Information for Proposed Standards (EPA 453/R-02-013), December 2002

$VOC_{POLYETHER\ POLYOL}$ = Percent by weight of Polyether Polyol x 0.95
(When calculating $VOC_{POLYETHER\ POLYOL}$, the permittee shall use the minimum content on any range specified on the MSDS or product specification sheet)
Based on binder manufacturer's data

VOC_{FURAN} = Maximum percent by weight of Furan Resin x 0.95
(When calculating VOC_{FURAN}, the permittee shall use the minimum content on any range specified on the MSDS or product specification sheet)
Based on U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries – Background Information for Proposed Standards (EPA 453/R-02-013), December 2002

$VOC_{ISOCYANATES}$ = Maximum percent by weight of Isocyanates x 0.99
(When calculating $VOC_{ISOCYANATES}$, the permittee shall use the minimum content on any range specified on the MSDS or product specification sheet)

Based on U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries – Background Information for Proposed Standards (EPA 453/R-02-013), December 2002

C. The facility may not take credit for any other reductions of VOC or HAP emissions from Mold and Core making Operations at the facility without further evaluation by the department.
D. Record the VOC and HAP content in weight percent for all other VOC-containing and HAP-containing materials used at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources. The facility shall assume that 100% of the VOC and HAP in these materials are emitted.

3. The facility may apply a control efficiency of 98% for Amine emissions that are controlled by the scrubbers CE-82 and CE-11. The facility shall assume all of the Amine is emitted when it is emitted through EP-2.
4. The facility shall calculate the VOC and HAP emissions that occur during the pouring, cooling, and shakeout operations. The facility shall calculate the emissions using the most recent and relevant emissions factors available.
5. The owner or operator shall maintain the following monthly records:
   A. The identification of each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources.
   B. The amount of each VOC-containing or HAP-containing material used in all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources. For the purposes of calculating emissions, all VOC or HAP may be considered emitted on the day the materials are delivered to the facility or to the production line.
6. The permittee shall maintain the Safety Data Sheets (SDS) for each VOC-containing or HAP-containing material used at the facility.

<u>VOCs:</u> 230.0 tons per 12-month rolling period

7. Total VOC emissions from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, shall not exceed 230.0 tons in any 12-month rolling period. All VOC-containing materials used in these sources at the facility shall be included in the emissions calculations.
   A. The owner or operator shall record the total amount, in tons, of VOC emitted from all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.
   B. The owner or operator shall calculate and record the 12-month rolling total amount, in tons, of VOC emitted from all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.
8. If the 12-month rolling total of the VOC emissions from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, exceeds 184 tons, the permittee shall immediately begin keeping the following daily records:
   A. The amount of VOC emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
   B. The 365-day rolling total of the amount of VOC emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
   C. Daily calculations for VOC emissions shall continue until the 365-day rolling total of the

amount of VOC emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources drops below 184 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per Condition 8 listed above. If the emissions once again exceed 184 tons, daily recordkeeping will be required per Condition 8 listed above.

9. The permittee may take credit for any waste VOC shipped off-site. The permittee shall record the amount of the waste shipped off-site each day, and analyze the VOC content of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be used as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site.

Single HAP: 9.0 tons per 12-month rolling period

10. The total amount for each Single HAP (SHAP) emitted from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, shall not exceed 9.0 tons in any 12-month rolling period. All HAP-containing materials used in these sources at the facility shall be included in the emissions calculations.
    A. The owner or operator shall record the total amount, in tons, of each individual HAP emitted from all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.
    B. The owner or operator shall calculate and record the 12-month rolling total amount, in tons, of each individual HAP emitted from all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.
11. If the 12-month rolling total amount of any single HAP emitted from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, exceeds 7.2 tons, the permittee shall immediately begin keeping the following daily records:
    A. The amount of emissions of each individual HAP from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
    B. The 365-day rolling total of the amount of emissions of each individual HAP from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
    C. Daily calculations for individual HAP emissions shall continue until the 365-day rolling total of the amount of individual HAP emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources drops below 7.2 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of individual HAP emissions will cease per Condition 11 listed above. If the emissions once again exceed 7.2 tons, daily recordkeeping will be required per Condition 11 listed above.

Total HAPs: 22.0 tons per 12-month rolling period

12. The total amount all cumulative HAP (THAP) emitted from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, shall not exceed 22.0 tons in any 12-month rolling period. All HAP-containing materials used in these sources at the facility shall be included in the emissions calculations.
    A. The owner or operator shall record the total amount, in tons, of total HAP emitted from

all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.

B. The owner or operator shall calculate and record the 12-month rolling total amount, in tons, of total HAP emitted from all sources at this facility; excluding combustion, welding, heat treat furnaces, and melting sources, on a monthly basis.

13. If the 12-month rolling total amount of total HAP emitted from all sources at this facility (88-01-002); excluding combustion, welding, heat treat furnaces, and melting sources, exceeds 17.6 tons, the permittee shall immediately begin keeping the following daily records:
    A. The amount of all cumulative HAP emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
    B. The 365-day rolling total amount of cumulative HAP emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources, in tons.
    C. Daily calculations for total HAP emissions shall continue until the 365-day rolling total of the amount of total HAP emissions from all sources at this facility, excluding combustion, welding, the heat treat furnaces, and melting sources drops below 17.6 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of total HAP emissions will cease per Condition 13 listed above. If the emissions once again exceed 7.2 tons, daily recordkeeping will be required per Condition 13 listed above.
14. The permittee may take credit for any waste HAP shipped off-site. The permittee shall record the amount of the waste shipped off-site each day, and analyze the HAP (Single and/or Total) content of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be used as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the HAP (Single and/or Total) rolling totals as of the date the waste is shipped off-site.

Authority for Requirement: See associated DNR Construction Permits listed within the Title V Permit.

NESHAP

This facility is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZZZ – Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries (40 CFR §63.11544 through 40 CFR §63. 11558) as this facility meets the definition of an area source aluminum foundry.

Per 40 CFR Part 63.11550(a)(1) through (3) the facility must cover or enclose melting furnaces during the melting process, purchase scrap that has been depleted of hazardous metals to the extent possible, and prepare and operate according to a written management practices plan. The facility must also keep the records specified in paragraphs 40 CFR Part 63.11553(c), (d), and (e).

Authority for Requirement: 40 CFR 63 Subpart ZZZZZZ
567 IAC 23.1(4)"ez"

III. Emission Point-Specific Conditions

Facility Name: WDC Acquisition LLC
Permit Number: **99-TV-018R4**

Emission Point ID Number: 1 & 1a

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-1	1-1	OMCO Mixer	CE-1-1: Baghouse	New Sand	0.166 tons/hr	85-A-055-S8
	6-1	450 Mixer		Sand/Binder	30.4 tons/hr	
	15-1	Palmer Mixer		Sand/Binder	20.8 tons/hr	
	16-1	250 Mixer		Sand/Binder	16.9 tons/hr	
	28-1	Wheelabrator Shot Blast Cabinet		Grit Blast	0.002 ton/hr	
EP-1a	15-1	Palmer Mixer	CE-1A: Baghouse	Sand/Binder	20.8 ton/hr	07-A-735-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.

EP-1 and EP-1a:
Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 85-A-055-S8 and 07-A-735-S4
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf
Authority for Requirement: DNR Construction Permit 85-A-055-S8 and 07-A-735-S4
567 IAC 23.4(6)

See Plant-Wide Conditions for VOC and HAP Emission Limits.

EP-01 only:
Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.79 lb/hr
Authority for Requirement: DNR Construction Permit 85-A-055-S8

Pollutant: PM_{10}
Emission Limit(s): 0.79 lb/hr
Authority for Requirement: DNR Construction Permit 85-A-055-S8

EP-01a only:
Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-735-S4

Pollutant: PM_{10}
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-735-S4

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The owner or operator shall be limited to a combined input maximum capacity of 23 tons/hour of sand for OMCO Mixer (EU1-1), 450 Mixer (EU6-1), Palmer Mixer (EU15-1), and 250 Mixer (EU16-1). The owner or operator shall daily:
   A. Record the amount of sand, in tons, used by each mixer;
   B. Record the number of hours each mixer operated; and,
   C. Calculate and record the maximum capacity in tons/hour for each mixer and sum the capacities to ensure the maximum capacity is not exceeded.
2. The facility shall maintain a differential pressure drop across the baghouse (CE-1-1) between 2.0 and 6.0 inches of water column (WC).
   A. The owner or operator shall properly install, operate, and maintain equipment to continuously monitor the pressure drop of the baghouse (CE-1-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
      I. The owner or operator shall collect and record the differential pressure across the baghouse, at a minimum, once per day when the emission unit the baghouse controls is in operation.
      II. If the differential pressure across the baghouse falls outside the permitted range allowed (2.0" – 6.0" WC), then the facility shall record the time, date and actions taken to correct the situation and when the differential pressure across the baghouse is back with the permitted range allowed.
3. The facility shall conduct visible emissions observation (opacity) on bin vent (CE1-1a) once per calendar day.

A. The owner or operator shall collect and record the visible emissions observations.
B. If visible emissions are observed, the owner or operator shall investigate bin vent (CE1-1a) and make corrections to bin vent (CE1-1a). The owner or operator shall maintain a record of all corrective actions taken on each baghouse.
C. This requirement shall not apply on the days bin vent (CE1-1a) is not in operation.

4. The owner or operator shall inspect and maintain the baghouse (CE-1-1) and bin vent (CE-1-1a) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities.
5. See Plant-Wide Conditions listed for additional applicable requirements.

Authority for Requirement: DNR Construction Permit 85-A-055-S8 and 07-A-735-S4

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Emission Point	EP-1	EP-1a
Stack Height, (ft, from the ground)	30	33
Stack Opening, (inches)	16 x 20	8
Exhaust Flow Rate (scfm)	8000	1500
Exhaust Temperature (°F)	70	70
Discharge Style	Vertical Unobstructed	Downward
Construction Permit	85-A-055-S8	07-A-735-S4

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

Monitoring Requirements

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

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

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

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

EP-1a qualifies for CAM. However, the conditions listed in the Operating Requirements of the construction permit meet the requirements of CAM.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
2-1	South Bench Core Stations	NA	Sand/Binders	0.145 tons/hr sand	99-A-576-S5
2-2	SANBLO Core Station		Sand/Binders	0.0141 ton/hr sand	
82-1	Gaylord Core Blower		Sand/Binders	4.2 tons/hr	
90-1	Redford Core Blower		Sand/Binders	4.2 tons/hr	
91-1	CB-10 Core Machine		Sand/Binders	0.17 tons/hr	
92-1	CB-5 Core Machine		Sand/Binders	0.17 tons/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 99-A-576-S5
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.51 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-576-S5
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.51 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-576-S5

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. The facility shall account for all uncontrolled emissions that are emitted via EP-2.
2. Refer to Plant-Wide Conditions for additional applicable requirements.

Authority for Requirement: DNR Construction Permit 99-A-576-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35
Stack Opening, (inches, dia.): 28 x 24
Exhaust Flow Rate (scfm): 8,150
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 99-A-576-S5

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
71-1	Sand Silo A	CE-4-1: Bag Filters	New Sand	129 tons & 3.6 tons/hr	99-A-144-S4
72-1	Sand Silo B		New Sand	120 tons & 10.0 tons/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 99-A-144-S4
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.13 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-144-S4
567 IAC 23.3(2)”a”

Pollutant: PM_{10}
Emission Limit(s): 0.13 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-144-S4

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The facility shall weekly observe the emission point during material handling operations (i.e., the unit is in operation) to ensure no visible emissions are present. If visible emissions are observed, the facility shall initiate corrective action as soon as possible (i.e., operations are safely shutdown).

2. The owner or operator shall inspect and maintain the dust collector (CE-4-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 99-A-144-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 16
Stack Opening, (inches.): 8 x 6
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): 70
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 99-A-144-S4

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 5

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
18-1	Chill Spray Booth	CE5-1: Fabric Filter	Solvent	245 lb/hr	99-A-784-S5

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 99-A-784-S5
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 gr/scf, 0.30 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-784-S5
567 IAC 23.4(13)

Pollutant: PM_{10}
Emission Limit(s): 0.30 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-784-S5

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. Refer to Plant-Wide Conditions for applicable requirements.
Authority for Requirement: DNR Construction Permit 99-A-784-S5

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33
Stack Opening, (inches): 11 x 16
Exhaust Flow Rate (scfm): 3500
Exhaust Temperature (°F): 70
Discharge Style: Unobstructed vertical
Authority for Requirement: DNR Construction Permit 99-A-784-S5

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

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

Limit on Hours of Operation

This emission unit shall be limited to 2,000 hours of operation per 12-month rolling period. If this emission unit operates more than 2,000 hours per 12-month rolling period it will be required to stack test for PM and PM_{10} with 90 day of exceeding the hour restriction.

This emission unit is required to record the hours of operation monthly and calculate a 12-month rolling total each month.

This condition was requested by the applicant.
Authority for Requirement: 567 IAC 22.108(14)

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
See Appendix A.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 10

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment		Raw Material	Rated Capacity	Construction Permit
31-1	Shakeout/Lump Reduction	CE 2-1: Baghouse	CE 16-1: Cyclone	Sand	10 tons/hr	88-A-040-S3
32-1	Calciner			Natural Gas Sand	0.2 MMBtu/hr 2 tons/hr	
33-1	Cooler/Classifier			Sand	2 tons/hr	
68-1	EDC Silo G			Sand	2 tons/hr	
69-1	EDC Silo H			Sand	2 tons/hr	
29	EDC Mixer		N/A	Sand	7.4 tons/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 88-A-040-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.16 lb/hr
Authority for Requirement: DNR Construction Permit 88-A-040-S3
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.16 lb/hr
Authority for Requirement: DNR Construction Permit 88-A-040-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 88-A-040-S3
567 IAC 23.3(3)"e"

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The owner or operator shall only combust natural gas in the calciner (EU32-1).
3. Refer to Plant-Wide Conditions for additional applicable requirements.
Authority for Requirement: DNR Construction Permit 88-A-040-S3

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 13.5
Stack Opening, (inches): 18
Exhaust Flow Rate (scfm): 2,400
Exhaust Temperature (°F): 210
Discharge Style: Unobstructed vertical
Authority for Requirement: DNR Construction Permit 88-A-040-S3

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

Monitoring Requirements

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

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

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

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

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: 11

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
34-1	Laempe Core Blower	Packed Bed Gas Scrubber CE 11-1	Sand/Binder	1,350 lb/hr	99-A-145-S6
35-1	Laempe Core Blower		Sand/Binder	1,350 lb/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 99-A-145-S6
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-145-S6
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-145-S6

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The owner or operator shall install, operate, and maintain the scrubber (CE 11) according to manufacturer's specifications and maintenance schedule.
   A. The permittee shall maintain a record of all inspections and maintenance and any action

resulting from the inspection and maintenance of the control equipment and the monitoring devices.

2. The owner or operator shall install, operate, and maintain a monitor (post- scrubber) to detect amine emissions according to the manufacturer's specifications and maintenance schedule.
3. The permittee shall properly operate and maintain equipment to monitor the scrubbant pH. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The scrubbant pH shall be maintained in the pH range specified by the manufacturer.
   A. The permittee shall record the pH of the scrubbant, in standard units, once per day. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
5. Refer to Plant-Wide Conditions for additional applicable requirements.

Authority for Requirement: DNR Construction Permit 99-A-145-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Inside Building
Stack Opening, (inches, dia.): Vents Inside Building
Exhaust Flow Rate (acfm): Vents Inside Building
Exhaust Temperature (°F): Vents Inside Building
Discharge Style: Vents Inside Building
Authority for Requirement: DNR Construction Permit 99-A-145-S6

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 12 & 13

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
12	36-1	West Pattern Room Wood Working	CE14-1: Cyclone	Wood	200 lb/hr	99-A-577
13	37-1	Outer Pattern Room Wood Working	CE15-1: Baghouse	Wood	200 lb/hr	99-A-578

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%(1)
Authority for Requirement: DNR Construction Permits 99-A-577 & 99-A-578
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 99-A-577 & 99-A-578
567 IAC 23.3(2)"a"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.
Control equipment parameters:
1. Maintain cyclone, 14-1 according to manufacturer's specifications and maintenance schedule.
2. Maintain baghouse, 15-1 and filter media according to manufacturer's specifications and maintenance schedule.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Record on a monthly basis, all maintenance of cyclone, 14-1.
2. Record on a monthly basis, all maintenance of filter media and of baghouse, 15-1.

Authority for Requirement: DNR Construction Permits 99-A-577 & 99-A-578

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (acfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
12	20	8	2250	70	Vertical, obstructed	99-A-577
13	20	8	1200	70	Vertical, obstructed	99-A-578

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 14

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
39-1	Wheelabrator Blast Cabinet	CE8-1: Baghouse	Sand/Steelshot	10 tons/hr	85-A-054-S4

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 85-A-054-S4
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 85-A-054-S4
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 85-A-054-S4

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The owner or operator shall conduct daily visible emissions to ensure no visible emissions are emitted from Baghouse (CE8-1).
   A. The owner or operator shall maintain a record of the daily visible emission observations from Baghouse (CE8-1) and any actions resulting from visible emission observations.

2. The owner or operator shall operate, inspect and maintain all the equipment associated with the process and the Baghouse (CE8-1) in accordance with manufacturer's specifications and maintenance schedule.
   A. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection or maintenance of the Baghouse (CE8-1).

Authority for Requirement: DNR Construction Permit 85-A-054-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35
Stack Opening, (inches): 21 x 16
Exhaust Flow Rate (scfm): 7,500
Exhaust Temperature (°F): 110
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 85-A-054-S4

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

Monitoring Requirements

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
See Appendix A.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 15

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
41-1	Saw Room Sand Blast	CE10-1: Baghouse	Sand	0.1 ton/hr	83-A-067-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 83-A-067-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.69 lb/hr
Authority for Requirement: DNR Construction Permit 83-A-067-S3
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.69 lb/hr
Authority for Requirement: DNR Construction Permit 83-A-067-S3

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. The facility shall maintain a differential pressure drop across the dust collector (CE-10-1) between 2.0 and 6.0 inches of water column (WC).
   A. The owner or operator shall properly install, operate, and maintain equipment to continuously monitor the pressure drop of the dust collector (CE-10-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
      I. The owner or operator shall collect and record the differential pressure across the

baghouse, at a minimum, once per day when the emission unit the dust collector controls is in operation.

II. If the differential pressure across the dust collector falls outside the permitted range allowed (2.0" – 6.0" WC), then the facility shall record the time, date and actions taken to correct the situation and when the differential pressure across the dust collector is back with the permitted range allowed.

2. The owner or operator shall inspect and maintain the dust collector (CE-10-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 83-A-067-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33
Stack Opening, (inches): 24 x 30
Exhaust Flow Rate (scfm): 15,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical Obstructed
Authority for Requirement: DNR Construction Permit 83-A-067-S3

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

Monitoring Requirements

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

Stack Testing

Pollutant – Particulate Matter

Stack Test to be completed by – 10/19/2024

Test Method – 40 CFR Part 60 Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM_{10}

Stack Test to be Completed by – 10/19/2024

Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]

[(1)] or an approved alternative

Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or his 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 tests 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** ☐

See Appendix A.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 18

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
45-2	Wheelabrator Blast Cabinet	CE3-1: Baghouse	Sand	0.875 tons/hr	01-A-771-S3
55-1	Pangborn Mini Cabinet		Sand/Castings	0.0002 tons/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 01-A-771-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.70 lb/hr
Authority for Requirement: DNR Construction Permit 01-A-771-S3
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.70 lb/hr
Authority for Requirement: DNR Construction Permit 01-A-771-S3

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for these permits shall be:

1. The owner or operator shall inspect and maintain the baghouse (CE-3-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 01-A-771-S3

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30
Stack Opening, (inches): 30
Exhaust Flow Rate (scfm): 18,500
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 01-A-771-S3

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
See Appendix A.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Acid Dip Tanks

Table: Acid Dip Tanks

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Maximum Capacity (gal.)	Construction Permit Number
19A* 19B*	57-1a	Tank 1	5% Nitric Acid	859	07-A-738-S2 07-A-739-S2
	57-1b	Tank 2	Water	859	
	57-1c	Tank 3	20% Hydrofluoric Acid	859	
	57-1d	Tank 4	Water	859	
	57-1f	Tank 6	Water	859	
	57-1g	Tank 7	5% Nitric Acid & 5% Acetic Acid	859	
	57-1h	Tank 8	Water	982	
	57-1i	Tank 9	20% Hydrofluoric Acid	982	

* Note: The above 8 tanks emit to both stacks (19A & 19B).

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%(1)
Authority for Requirement: DNR Construction Permits 07-A-738-S2 & 07-A-739-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.20 lb/hr
Authority for Requirement: DNR Construction Permits 07-A-738-S2 & 07-A-739-S2
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr
Authority for Requirement: DNR Construction Permits 07-A-738-S2 & 07-A-739-S2

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

1. Refer to Plant-Wide Conditions for applicable requirements.

Authority for Requirement: DNR Construction Permits 07-A-738-S2 & 07-A-739-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (acfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
19A	41	24	7500	70	Vertical, obstructed	07-A-738-S2
19B	41	24	7500	70	Vertical, obstructed	07-A-739-S2

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 23

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
74-1	Silo E*	CE18-1: Baghouse	Sand	174 tons & 10 tons/hour (sand)	99-A-146-S3
75-1	Silo F		Sand	65 tons & 10 tons/hour (sand)	

*Silo E also exhausts through Emission Point 23A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 99-A-146-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf, 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-146-S3
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 99-A-146-S3

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. The facility shall weekly observe the emission point during material handling operations (i.e., the unit is in operation) to ensure no visible emissions are present. If visible emissions are observed, the facility shall initiate corrective action as soon as possible (i.e., operations are safely shutdown).
2. The owner or operator shall inspect and maintain the baghouse (CE-18-1) according to the

facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.

A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
   I. The date any inspection and/or maintenance was performed on the control equipment;
   II. Any issues identified during the inspection; and,
   III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 99-A-146-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 23.5
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 99-A-146-S3

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 23A

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
74-1	Silo E*	CE18A: Dust Collector	Sand	174 tons & 10.0 tons/hour (sand)	04-A-039-S2

*****Silo E also exhausts through Emission Point 23

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 04-A-039-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-039-S2
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-039-S2

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

1. The facility shall weekly observe the emission point during material handling operations (i.e., the unit is in operation) to ensure no visible emissions are present. If visible emissions are observed, the facility shall initiate corrective action as soon as possible (i.e., operations are safely shutdown).
2. The owner or operator shall inspect and maintain the baghouse (CE-18A) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's

specifications.

A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
   I. The date any inspection and/or maintenance was performed on the control equipment;
   II. Any issues identified during the inspection; and,
   III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 04-A-039-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 58
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 04-A-039-S2

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 59

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
59-1	Welding Stations	NA	Magnesium/Aluminum Alloys	200 lbs/hr	99-A-147

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 99-A-147
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 99-A-147
567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35
Stack Opening, (inches, dia.): 14
Exhaust Flow Rate (scfm): 1500
Exhaust Temperature (°F): Ambient
Authority for Requirement: DNR Construction Permit 99-A-147

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 81

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
81-1	Inhibitor Tumbler	CE81-1: Baghouse	Sand/Inhibitor	0.3 tons/hr	07-A-740-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 07-A-740-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 0.05 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-740-S2
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 0.05 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-740-S2

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. Refer to Plant-Wide Conditions for applicable requirements.
Authority for Requirement: DNR Construction Permits 07-A-740-S2

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 2,200
Exhaust Temperature (°F): 70
Discharge Style: Vertical, obstructed
Authority for Requirement: DNR Construction Permits 07-A-740-S2

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

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

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

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

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

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: 82

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
2-1	South Bench Core Stations	CE 82 Amine Scrubber	Sand	0.145 tons/hr	12-A-039-S3
2-2	SANBLO Core Station			0.0141 tons/hr	
82-1	Gaylord Core Blower			4.2 tons/hr	
90-1	Redford Core Blower			4.2 tons/hr	
91-1	CB-10			0.17 tons/hr	
92-1	CB-5			0.17 tons/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 12-A-039-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 1.94 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-039-S3
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 1.94 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-039-S3

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

1. The owner or operator shall install, operate, and maintain the scrubber (CE 82) according to manufacturer's specifications and maintenance schedule.
   A. The permittee shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the control equipment and the monitoring devices.
2. The owner or operator shall install, operate, and maintain a monitor (post- scrubber) to detect amine emissions according to the manufacturer's specifications and maintenance schedule.
3. The permittee shall properly operate and maintain equipment to monitor the scrubbant pH. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The scrubbant pH shall be maintained in the pH range specified by the manufacturer.
   A. The permittee shall record the pH of the scrubbant, in standard units, once per day. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
5. Refer to Plant-Wide Conditions for additional applicable requirements.

Authority for Requirement: DNR Construction Permit 12-A-039-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): NA
Stack Opening, (inches, dia.): NA
Exhaust Flow Rate (scfm): 6,000
Exhaust Temperature (°F): NA
Discharge Style: Vents Inside Building
Authority for Requirement: DNR Construction Permit 12-A-039-S3

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

Monitoring Requirements

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
See Appendix A

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 94 & 97

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP94	94-1	Sand Silo C	CE-94-1: Bin Vent Filters	Sand	48 tons & 15 tons/hour	21-A-130
	95-1	Sand Silo D		Sand	48 tons & 15 tons/hour	
EP97	97-1	Sand Silo J	CE-97-1: Cartridge Filters	Sand	18 tons & 10 tons/hour	21-A-132-S1
	98-1	Sand Silo K		Sand	18 tons & 10 tons/hour	

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%(1)
Authority for Requirement: DNR Construction Permits 21-A-130 & 21-A-132-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.26 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-130 & 21-A-132-S1
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-130 & 21-A-132-S1

Pollutant: $PM_{2.5}$
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-130 & 21-A-132-S1

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

1. The owner or operator shall inspect and maintain the dust collectors (CE-94-1 & CE-97-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities
      IV. Identification of the staff member performing the maintenance or inspection*

*Requirement of DNR construction permit 21-A-132-S1 only

Authority for Requirement: DNR Construction Permits 21-A-130 & 21-A-132-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	Stack Height	Stack Opening	Exhaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
EP94	Vents Inside	Vents Inside	1,500	70	Vents Inside	21-A-130
EP97	Vents Inside	Vents Inside	112	Building Ambient	Vents Inside	21-A-132-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

See Appendix A

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: 96

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
96	Simpson Sand Reclaim	CE-96-1: Baghouse	Sand	10 tons/hr	21-A-131-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 21-A-131-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-131-S1
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 1.3 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-131-S1

Pollutant: $PM_{2.5}$
Emission Limit(s): 1.3 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-131-S1

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. The facility shall maintain a differential pressure drop across the baghouse (CE-96-1)

between 2.0 and 6.0 inches of water column (WC).

A. The owner or operator shall properly install, operate, and maintain equipment to continuously monitor the pressure drop of the baghouse (CE-96-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
    I. The owner or operator shall collect and record the differential pressure across the baghouse, at a minimum, once per day when the emission unit the baghouse controls is in operation.
    II. If the differential pressure across the baghouse falls outside the permitted range allowed (2.0" – 6.0" WC), then the facility shall record the time, date and actions taken to correct the situation and when the differential pressure across the baghouse is back with the permitted range allowed.

2. The owner or operator shall inspect and maintain the baghouse (CE-96-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
    A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
        I. The date any inspection and/or maintenance was performed on the control equipment;
        II. Any issues identified during the inspection; and,
        III. Any issues addressed during the maintenance activities

Authority for Requirement: DNR Construction Permit 21-A-131-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Inside
Stack Opening, (inches, dia.): Vents Inside
Exhaust Flow Rate (scfm): 7,600
Exhaust Temperature (°F): 70
Discharge Style: Vents Inside
Authority for Requirement: DNR Construction Permit 21-A-131-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
See Appendix A.

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Metal Pouring and Mold Cooling-Associated Equipment

Table: Metal Pouring and Mold Cooling-Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EF-1	84-1 85-1	Metal Pouring Mold Cooling	NA	Magnesium and Aluminum	1.25 tons/hr	07-A-741-S2
EF-2						07-A-742-S2
EF-3						07-A-743-S2
EF-4						07-A-744-S2
EF-5						07-A-745-S2
EF-6						07-A-746-S2
EF-7						07-A-747-S2
EF-8						07-A-748-S2
EF-9						12-A-040-S1
EF-10						07-A-749-S2
EF-11						07-A-750-S2
EF-12						12-A-041-S1
EF-35						12-A-042-S1
EF-36						12-A-043-S1

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permits listed in Table: Metal Pouring and Mold Cooling-Associated Equipment
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.15 lb/hr
Authority for Requirement: DNR Construction Permits listed in Table: Metal Pouring and Mold Cooling-Associated Equipment
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.15 lb/hr
Authority for Requirement: DNR Construction Permits listed in Table: Metal Pouring and Mold Cooling-Associated Equipment

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
1. Refer to Plant-Wide Conditions for applicable requirements.

Authority for Requirement: DNR Construction Permits listed in Table: Metal Pouring and Mold Cooling-Associated Equipment

NESHAP
These units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZZZ – Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries (40 CFR §63.11544 through 40 CFR §63. 11558).

Per 40 CFR Part 63.11550(a)(1) through (3) the facility must cover or enclose melting furnaces during the melting process, purchase scrap that has been depleted of hazardous metals to the extent possible, and prepare and operate according to a written management practices plan. The facility must also keep the records specified in paragraphs 40 CFR Part 63.11553(c), (d), and (e).

Authority for Requirement: 40 CFR 63 Subpart ZZZZZZ
567 IAC 23.1(4)"ez"

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 38
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 17,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permits listed in Table: Metal Pouring and Mold Cooling-Associated Equipment

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Aluminum Metal Equipment

Table: Metal Pouring and Mold Cooling-Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EF-13	86-1	Aluminum Melting Exhaust	N/A	Aluminum Alloy	0.5 tons/hr	N/A
EF-14			N/A			N/A
EF-15			N/A			N/A

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

Operating Requirements with Associated Monitoring and Recordkeeping
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:
NESHAP
This unit is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZZZ – Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries (40 CFR §63.11544 through 40 CFR §63. 11558).

Per 40 CFR Part 63.11550(a)(1) through (3) the facility must cover or enclose melting furnaces during the melting process, purchase scrap that has been depleted of hazardous metals to the extent possible, and prepare and operate according to a written management practices plan. The facility must also keep the records specified in paragraphs 40 CFR Part 63.11553(c), (d), and (e).

Authority for Requirement: 40 CFR 63 Subpart ZZZZZZ
567 IAC 23.1(4)"ez"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EF-18, 19, 20, 21 and EF-32

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity*	Construction Permit
EF-18	24-1	Natural Gas Fired Magnesium Tilter Furnaces (7) Natural Gas Fired Magnesium Pot Furnaces (12)	NA	Magnesium	0.75 tons/hr Mg 32.2 MMBtu/hr	07-A-751-S3
EF-19						07-A-752-S3
EF-20						07-A-753-S3
EF-21						07-A-754-S3
EF-32						07-A-755-S3

*Rates represent the total of all of the furnaces.

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%(1)
Authority for Requirement: DNR Construction Permits listed in Associated Equipment
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/scf, 0.65 lb/hr
Authority for Requirement: DNR Construction Permits listed in Associated Equipment
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.65 lb/hr
Authority for Requirement: DNR Construction Permits listed in Associated Equipment

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500ppm
Authority for Requirement: DNR Construction Permits listed in Associated Equipment
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

1. The magnesium tilter and pot furnaces shall not produce more than 0.75 tons per hour of magnesium (or magnesium alloys) for any pouring or casting operation.
   A. The owner or operator shall record the hourly amount of magnesium (or magnesium alloys) poured at the facility. The hourly amount may be calculated by the facility by dividing the total amount of magnesium used each day by the hours of operation of the pouring area.
2. The magnesium tilter and pot furnaces shall be fired with propane or natural gas fuel only.
   A. The owner or operator shall record the type of fuel used in the magnesium tilter and pot furnaces.
3. The furnaces located in the Magnesium Melt Room may only melt clean charge materials including: molten magnesium; T-bar; sow; ingot; billet; pig; alloying elements; magnesium scrap that is known by the owner or operator to be entirely free of paints, coatings and lubricants; and runaround scrap. Clean charge material may contain markings made at this foundry for identification purposes in paint, ink or grease pen.
   A. The owner or operator shall record the type of charge used in the furnaces in the Magnesium Melt Room.

Authority for Requirement: DNR Construction Permits listed in Associated Equipment

NESHAP

This unit is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZZZ – Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries (40 CFR §63.11544 through 40 CFR §63. 11558).

Per 40 CFR Part 63.11550(a)(1) through (3) the facility must cover or enclose melting furnaces during the melting process, purchase scrap that has been depleted of hazardous metals to the extent possible, and prepare and operate according to a written management practices plan. The facility must also keep the records specified in paragraphs 40 CFR Part 63.11553(c), (d), and (e).

Authority for Requirement: 40 CFR 63 Subpart ZZZZZZ
567 IAC 23.1(4)"ez"

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	Stack Height, (ft, from the ground)	Stack Opening, (inches, dia.)	Exhaust Flow Rate (acfm)	Exhaust Temperature (°F)	Discharge Style	Authority for Requirement
EF-18	32	40	17,000	100	Vertical unobstructed	07-A-751-S3
EF-19	32	40	17,000	100	Vertical unobstructed	07-A-752-S3
EF-20	36	40	17,000	100	Vertical unobstructed	07-A-753-S3
EF-21	32	40	17,000	100	Vertical unobstructed	07-A-754-S3
EF-32	36	40	17,000	100	Vertical unobstructed	07-A-755-S3

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EF-24, EF-26, EF-27

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EF-24	EF-24	Heat Treat 1	NA	Quenchant	6.92 lb/hr	07-A-756
	EF-26	Heat Treat 2	NA	Quenchant	6.92 lb/hr	
EF-26	EF-27	Heat Treat 3	NA	Quenchant	6.92 lb/hr	07-A-757
EF-27			NA			07-A-758

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.

Emission Point	Opacity	Particulate Matter	PM_{10}	Volatile Organic Compounds (VOC)	Authority for Requirement
EF-24	40%(1)	0.1 gr/dscf, 0.70 lb/hr	0.70 lb/hr	6.11 tons/yr	07-A-756, 23.3(2)"d", 23.3(2)"a"
EF-26	40%(1)	0.1 gr/dscf, 0.35 lb/hr	0.35 lb/hr		07-A-757, 23.3(2)"d", 23.3(2)"a"
EF-27	40%(1)	0.1 gr/dscf, 0.35 lb/hr	0.35 lb/hr		07-A-758, 23.3(2)"d", 23.3(2)"a"

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

Operating Requirements with Associated Monitoring and Recordkeeping

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

Operating Limits:

1. The combined amount of oil quenchant used in Heat Treat Furnace 1 and Quench (EF-24), Heat Treat Furnace 2 and Quench (EF-26) and Heat Treat Furnace 3 (EF-27) combined shall not exceed 22,230 pounds in any rolling 12-month period.
2. The VOC content of the oil quenching used in Heat Treat Furnace 1 and Quench (EF-24), Heat Treat Furnace 2 and Quench (EF-26) and Heat Treat Furnace 3 (EF-27) combined shall not exceed 55 percent by weight.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

1. Record monthly the amount of oil quenchant used in Heat Treat Furnace 1 and Quench (EF-24), Heat Treat Furnace 2 and Quench (EF-26) and Heat Treat Furnace 3 (EF-27) combined in pounds. Calculate and record rolling 12-month totals.
2. Retain Material Safety Data Sheets (MSDS) for all quench materials used in Heat Treat Furnace 1 and Quench (EF-24), Heat Treat Furnace 2 and Quench (EF-26) and Heat Treat Furnace 3 (EF-27)

Authority for Requirement: DNR Construction Permits listed in Associated Equipment

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 37,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permits listed in Associated Equipment

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: BLDG F (Vent Internally)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
4-1	East Cell Mixer	CE20-1: Baghouse	Sand /Binder	4.2 tons/hr	07-A-759-S4
47-1	West Cell Mixer		Sand/Binder	4.2 tons/hr	
93-1	300 Mixer		Sand/Binder	9.4 tons/hr	
38-1	Old Knock Out	NA	Sand/Castings	1 ton/hr	
50-1	Cleaning and Grinding Room	NA	Castings Scrape Off	0.57 tons/hr	
88-1	Tinker Omega Mixer	NA	Sand/Binder	0.06 ton/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 07-A-759-S4
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.05 gr/scf, 12.33 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-759-S4
567 IAC 23.4(6)

Pollutant: PM_{10}
Emission Limit(s): 5.1 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-759-S4

See Plant-Wide Conditions for VOC and HAP Emission Limits.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

General Requirements

1. The facility shall maintain a differential pressure drop across the baghouse (CE-20-1) between 2.0 and 6.0 inches of water column (WC).
   A. The owner or operator shall properly install, operate, and maintain equipment to continuously monitor the pressure drop of the baghouse (CE-20-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual or per a written facility-specific operation and maintenance plan.
      I. The owner or operator shall collect and record the differential pressure across the baghouse, at a minimum, once per day when the emission unit the baghouse controls is in operation.
      II. If the differential pressure across the baghouse falls outside the permitted range allowed (2.0" – 6.0" WC), then the facility shall record the time, date and actions taken to correct the situation and when the differential pressure across the baghouse is back with the permitted range allowed.
2. The owner or operator shall inspect and maintain the baghouse (CE-20-1) according to the facility's (Plant No. 88-01-002) operation and maintenance plan or manufacturer's specifications.
   A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
      I. The date any inspection and/or maintenance was performed on the control equipment;
      II. Any issues identified during the inspection; and,
      III. Any issues addressed during the maintenance activities.
3. The permittee shall maintain the Safety Data Sheets (SDS) for each VOC-containing or HAP-containing material used at the facility.
4. Refer to Plant-Wide Conditions for additional applicable requirements.

Authority for Requirement: DNR Construction Permit 07-A-759-S4

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents Inside Building
Stack Opening, (inches, dia.): Vents Inside Building
Exhaust Flow Rate (acfm): Vents Inside Building
Exhaust Temperature (°F): Vents Inside Building
Discharge Style: Vents Inside Building
Authority for Requirement: DNR Construction Permit 07-A-759-S4

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

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
See Appendix A.

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

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

G3. Certification Requirement for Title V Related Documents

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

G4. Annual Compliance Certification

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

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

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

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

G10. Recordkeeping Requirements for Compliance Monitoring

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

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

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

a. Any monitoring or testing methods provided in these rules; or

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

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

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

G13. Hazardous Release

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

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to

determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

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

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

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

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

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

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

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

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

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission

limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

G15. Permit Deviation Reporting Requirements

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

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

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

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

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

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B)).

e. The changes comply with all applicable requirements.

f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

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

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

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

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

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

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility,

coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

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

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

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

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

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

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

G19. Duty to Obtain Construction Permits
Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos
The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a");* training fires and controlled burning of a demolished building *(567 IAC 23.2).*

G21. Open Burning
The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances
The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

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

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

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

G24. Permit Reopenings

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

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

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

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original

permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

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

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

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

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

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

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

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

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

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

G25. Permit Shield

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

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

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

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

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

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

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

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

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

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

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

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

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

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

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

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

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

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

Field Office 1
1101 Commercial Court, Suite 10
Manchester, IA 52057
(563) 927-2640

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

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

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

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

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

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

Linn County Public Health
Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

V. Appendix A: Agency O&M and CAM Plans

1746 Commerce Road, Creston, Iowa 50801

EP 5 – Chill Spray Booth (CE 5-1)
Compliance Assurance Monitoring (CAM) Plan

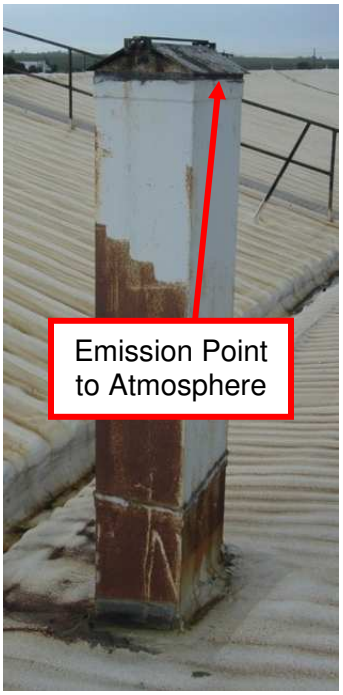
1.0 Purpose

The Wellman Dynamics Emission Control Equipment Compliance Assurance Monitoring (CAM) Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The CAM plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-5** **Permit No. 99-A-784-S5**
Chill Spray Booth Exhaust

Emission Units: **Chill Spray Booth (EU 18-1)**

Control Equipment Information:



MAINTENANCE INFORMATION:
(Asset Number: S14224)

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Weekly

The weekly inspection will be completed by the Environmental and Safety Department/Foundry Support and detail a visual inspection for emission or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. Visible emission would be an out of range indicator and if visible emissions are observed action will be taken as soon as possible.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may be an indictor that maintenance may be required.
- Check and change air filter as needed.

Monthly

The monthly inspection will be completed by the Maintenance Department/Foundry Support and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check hoses for leaks and operation
- Check and change air filter as needed
- Check and clean blower wheel for cabinet

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 14 – Torit Donaldson Dust Collector (CE 8-1)
Compliance Assurance Monitoring (CAM) Plan

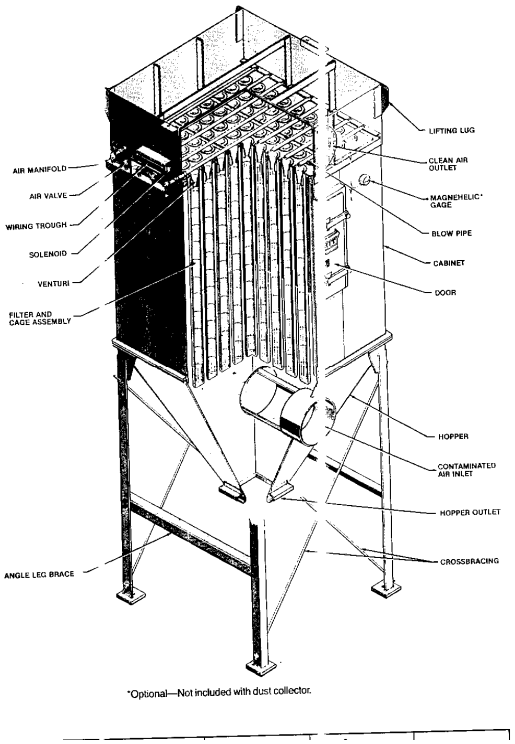
1.0 Purpose

The Wellman Dynamics Emission Control Equipment Compliance Assurance Monitoring (CAM) Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The CAM plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-14 Permit No. 85-A-054-S4**
Torit Exhaust - Casting Knockout

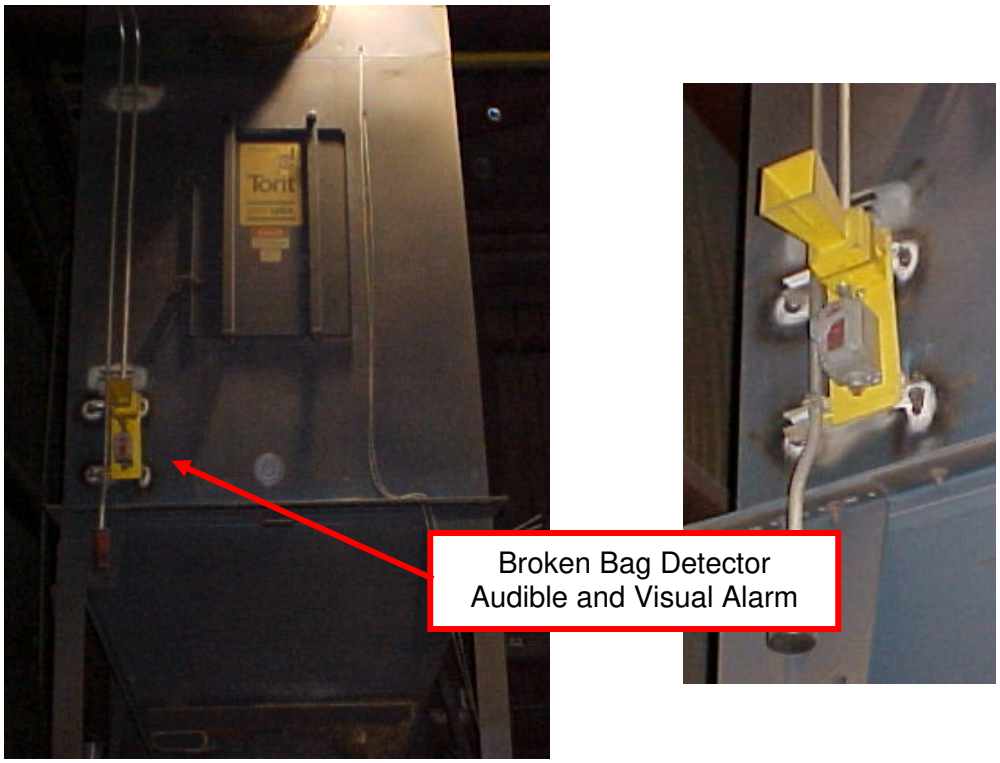
Emission Units: **Wheelabrator Blast Cabinet (EU 39-1)**

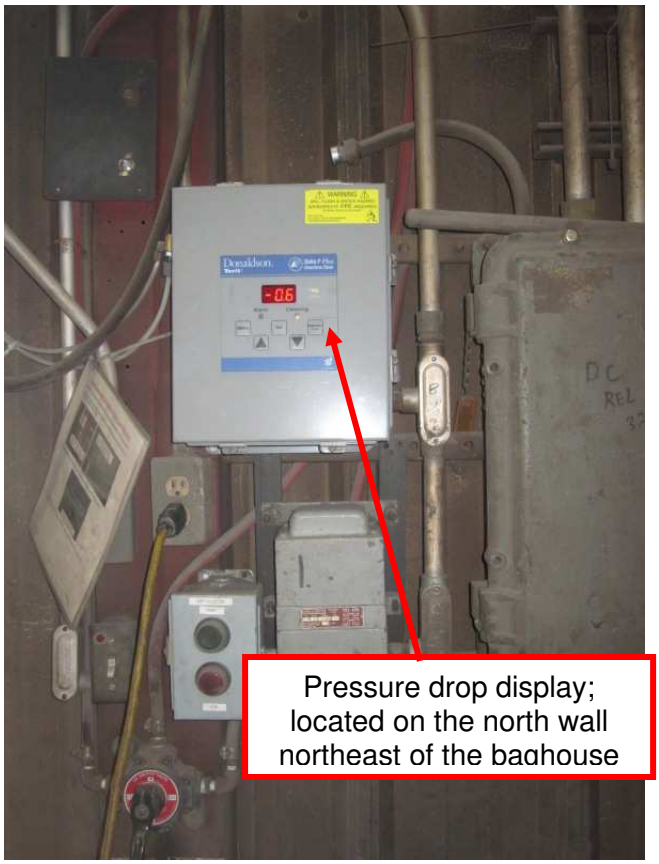
Control Equipment Information:



Maintenance Asset Number: D31111
Torit Donaldson - Bottom Loader Dust Collector
Model# TJ1080-255
Serial# 195154

117; Filter bags 4.625” x 100”
Total filter area = 1180 ft^2
13 Blow Pipes
Valve - Goyen Model# RCA 6
Diaphragm - Goyen 5 bolt - Model# unknown


Broken Bag Detector
Audible and Visual Alarm


Pressure drop display;
located on the north wall
northeast of the baghouse

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily

The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and excursions from the normal operating range.

- Inspect manometer to ensure pressure drop is within normal operating range, if pressure drop is out of range notify maintenance and write work order to correct deviation immediately. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Visible emissions shall be observed for on a daily basis to ensure no visible emissions are present. If visible emissions are observed notify maintenance and write a work order to correct deviation immediately.
- Ensure broken bag detector is not alarmed; if there is an alarm notify maintenance and write work order to correct immediately. Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- The pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Monthly/Weekly

The monthly inspection will be completed by the Maintenance Department and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check seals going to dust hopper
- Check blower drive belts for tension, alignment, and wear
- Grease blower bearings
- Check blower wheel for wear
- Check for holes in exhaust stack
- Check intake ductwork for holes
- Check manometer for operation and tubing
- Check exhaust stack for emissions
- Blow dust out of all electric motors
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Annually – As Required

The annual inspection (or as required) of the control equipment will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove bags from unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace bags and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 15 – Torit Down-Flow Cartridge Dust Collector (CE 10-1)
Compliance Assurance Monitoring (CAM) Plan

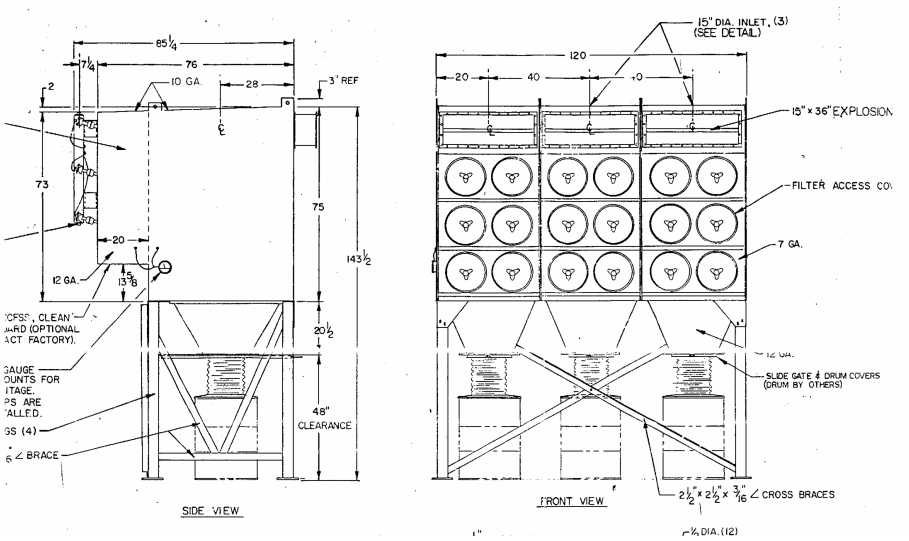
1.0 Purpose

The Wellman Dynamics Emission Control Equipment Compliance Assurance Monitoring (CAM) Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The CAM plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-15** **Permit No. 83-A-067-S3**
Torit Down-Flow Cartridge Dust Collector

Emission Units: **Saw Room Sand Blast (EU 41-1)**

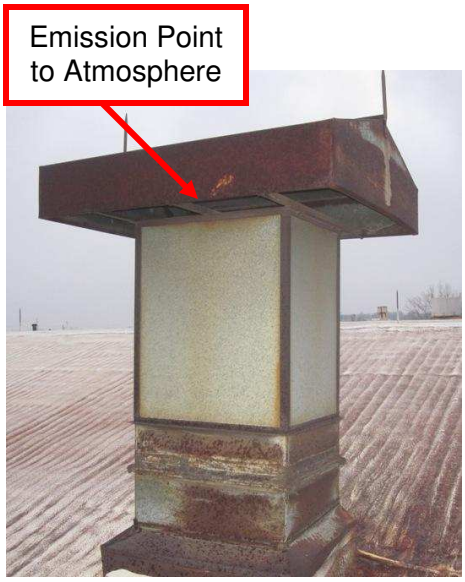
Control Equipment Information:



Maintenance Asset Number: D30109

36; Canister Filters each
12 ¾" Dia x 26" Long
Total filter canister area = 8136 ft^2

18 blow pipes
Valve - ASCO RCA 5-6 V6000-630
Diaphragm - Goyen 2513



2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily

The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a daily basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- If the control equipment has a manometer, the pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- If the control equipment has a manometer, the pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Monthly

The monthly inspection will be completed by the Maintenance Department and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check blower drive belts for tension, alignment, and wear
- Grease blower bearings
- Check rubber seals on top of dust hopper
- Check belt pulleys for wear
- Check blower wheel for wear
- Check for holes in exhaust stack
- Check intake ductwork for holes
- Check manometer for operation and tubing
- Check exhaust stack for emissions
- Blow dust out of all electric motors
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Annually – As Required

The annual inspection (or as required) of the control equipment will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove cartridges from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filter cartridges and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 18 – Torit Down-Flow Cartridge Dust Collector (CE 3-1)
Compliance Assurance Monitoring (CAM) Plan

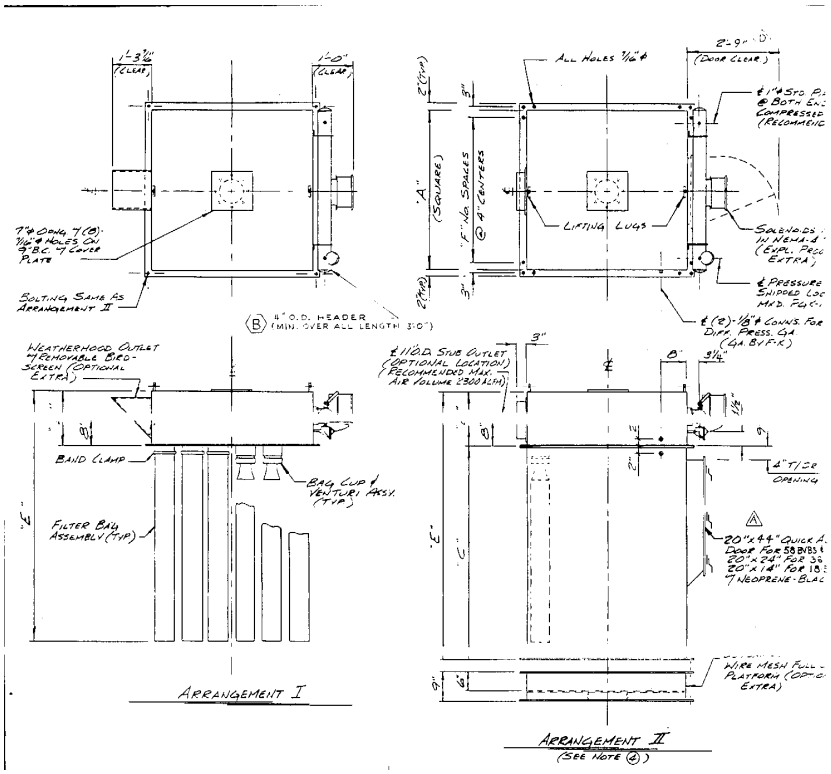
1.0 Purpose

The Wellman Dynamics Emission Control Equipment Compliance Assurance Monitoring (CAM) Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The CAM plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-18 Permit No. 01-A-771-S3**
Zyglo Torit Exhaust (Sand Blast Cabinets)

Emission Units: **Wheelabrator Blast Cabinet (EU 45-2), Pangborn Mini Cabinet (EU 55-1)**

Control Equipment Information:



Maintenance Asset Number: D42115
Design "M", Model# "2" AAF Fabri-Pulse

420; Filter bags 3 ½" x 73"; 10 cassette units
Total filter canister area = 2340 ft^2

15 Blow Pipes
Valve - Goyen Model# RCA 6
Diaphragm - Goyen 6 bolt - 1 piece - Model# 4061

2.0 <u>Monitoring Guidelines</u>

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

<u>Daily</u>
The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and excursions from the normal operating range.

- Inspect manometer to ensure pressure drop is within normal operating range, if pressure drop is out of range notify maintenance and write work order to correct deviation immediately.
- Visible emissions shall be observed for on a daily basis to ensure no visible emissions are present. If visible emissions are observed notify maintenance and write a work order to correct deviation immediately.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- If the control equipment has a manometer, the pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Monthly

The monthly inspection will be completed by the Maintenance Department and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check blower drive belts for tension, alignment, and wear
- Grease blower bearings
- Check rubber seals on top of dust hopper
- Check belt pulleys for wear
- Check blower wheel for wear
- Check for holes in exhaust stack
- Check intake ductwork for holes
- Check manometer for operation and tubing
- Check exhaust stack for emissions
- Blow dust out of all electric motors
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Annually – As Required

The annual inspection (or as required) of the control equipment will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove bags from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filters and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 82 – Gaylord Packed Tower Scrubber (CE 82)
Compliance Assurance Monitoring (CAM) Plan

1.0 Purpose

The Wellman Dynamics Emission Control Equipment Compliance Assurance Monitoring (CAM) Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The CAM plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

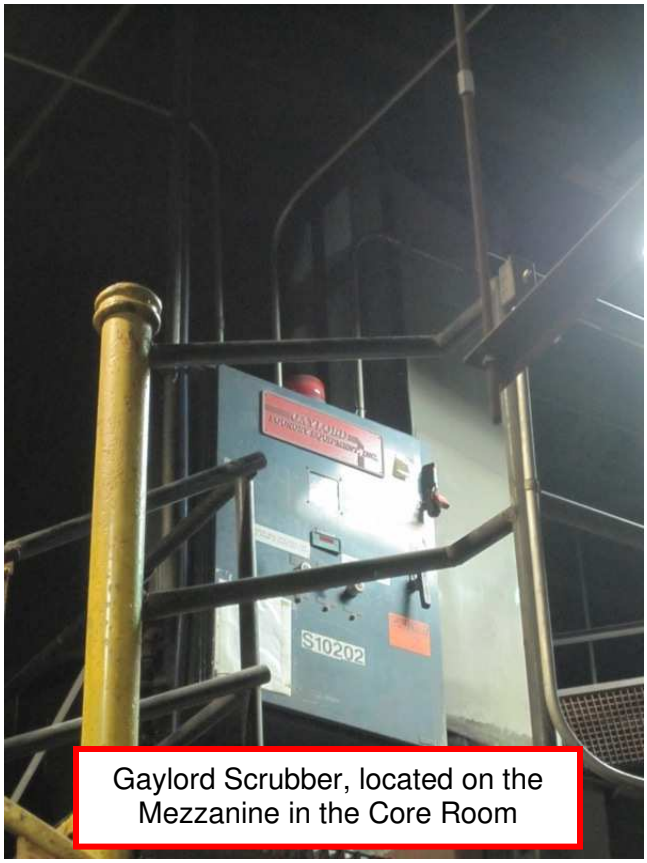
Description: **EP-82** **Permit No. 12-A-039-S3**
Gaylord 8000 A-3 Scrubber

Emission Units: **South Bench Core Stations (EU 2-1), SANBLO Core Station (EU 2-2), Gaylord Core Blower (EU 82-1), Redford Core Blower (EU 90-1), CB-10 (EU 91-1), CB-5 (EU 92-1)**

Control Equipment Information:

Maintenance Asset Number: S10202

Circulation Pump……220 GPM, 7.5 HP
Blower……..8000 CFM
Sump Capacity……400 gal
Packing Media……..55 cu ft
Transfer Pump……8 GPM, ¼ HP
Inlet Intake from core machines…….24.5” O.D.
Tower Section……60” I.D.



Gaylord Scrubber, located on the Mezzanine in the Core Room

Scrubbant pH display

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily – As Required

The daily inspections (or as required) will be completed and/or supervised by the Environmental or Maintenance Departments and include:

- Inspect and record the scrubbant pH. If the pH falls out of the normal operating range corrective action will be taken as soon as possible. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Inspect the Amine monitor to ensure it is not alarmed. If Amine monitor is showing an alarm, report problem and write work order to correct.

Monthly

The monthly inspection will be completed and/or supervised by the Maintenance Department. When applicable the unit will be inspected for:

- Calibrate the pH probe with lab test equipment
- Check blower belts for problems and tightness; if problem replace as needed
- Grease bearings
- Check for any mechanical problems
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Semi-Annual – As Required

The semi-annual inspection will be completed and/or supervised by the Maintenance Department. When applicable the unit will be inspected for:

- Remove top inspection cover and examine the mist eliminator for accumulation of crystals and other debris; clean as necessary
- Check shower head nozzle for vertical alignment, internal obstructions, and excessive corrosion
- Check packing media; clean and replace as necessary
- Check for any electrical problems and write work order to correct as necessary

Annually – As Required

The annual inspection (or as required) of the control equipment will be completed by the Maintenance Department. This inspection will include cleaning the scrubber and inspecting the unit as follows:

- Drain, rinse, and regenerate entire scrubber
- Remove any sludge and accumulated debris as necessary
- Check packing media for build-up and replace as necessary
- Open the tower cap access port and inspect the mist eliminator for accumulation of crystal build-up; clean as necessary.
- Check for any electrical problems with the equipment
- Repair or report any problems and write work order to correct

3.0 Recordkeeping

All inspection and maintenance records required to be kept by this plan shall be kept in the Environmental Department for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP-94 –Atmospheric Bin Vent (CE 94-1)
Operation and Maintenance Plan - Agency Approved

1.0 Purpose

The Wellman Dynamics Emission Control Equipment Operation and Maintenance Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The O&M plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-94 Permit No. 21-A-130**
Atmospheric Bin Vent

Emission Units: **Sand Silo C (EU 94-1), Sand Silo D (EU 95-1)**

Control Equipment Information:

Maintenance Asset Number: S10119

Modu-Kleen Bin Vent Filters
Series 669

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any

torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Tri-Annually – As Required

The tri-annual inspection (or as required) of the control equipment will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove filters from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filter and seal unit
- Start unit and confirm operation of pulsers

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 97 – Torit Down-Flow Cartridge Dust Collector (CE 97-1)
Operation and Maintenance Plan - Agency Approved

1.0 Purpose

The Wellman Dynamics Emission Control Equipment Operation and Maintenance Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The O&M plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-97 Permit No. 21-A-132-S1**
Modu-Kleen Downdraft Dust Collector Series 694

Emission Units: **Sand Silo J (EU 97-1), Sand Silo K (EU 98-1)**

Control Equipment Information:

MAINTENANCE INFORMATION:
(Asset Number: S10119)

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily

The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a daily basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Annually – As Required

The annual inspection (or as required) will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove cartridges from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filter cartridges and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP 96 – Ultra Industries, Inc. Dust Collector (CE 96-1)
Operation and Maintenance Plan - Agency Approved

1.0 Purpose

The Wellman Dynamics Emission Control Equipment Operation and Maintenance Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The O&M plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-96** **Permit No. 21-A-131-S1**

Emission Units: **Simpson Sand Reclaim (EU 96)**

Control Equipment Information:

Maintenance Asset Number: D10113
Ultra Industries, Inc Dust Collector
Model # BB-121-100-IIIG
Serial # BB-5799

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily

The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and excursions from the normal operating range.

- Inspect manometer to ensure pressure drop is within normal operating range, if pressure drop is out of range notify maintenance and write work order to correct deviation immediately. Normal operating range is defined by the manufacturer or according to maintenance specification
- Visible emissions shall be observed for on a daily basis to ensure no visible emissions are present. If visible emissions are observed notify maintenance and write a work order to correct deviation immediately.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Weekly

The weekly inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a weekly basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- If the control equipment has a manometer, the pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Monthly

The monthly inspection will be completed by the Maintenance Department and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check blower drive belts for tension, alignment, and wear
- Grease blower bearings
- Check rubber seals on top of dust hopper
- Check belt pulleys for wear
- Check blower wheel for wear
- Check for holes in exhaust stack
- Check intake ductwork for holes
- Check manometer for operation and tubing
- Check exhaust stack for emissions
- Blow dust out of all electric motors
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Annually – As Required

The annual inspection (or as required) of the control equipment will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove bags from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filters and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Safety and Environmental Office for a period not less than 5 years.

1746 Commerce Road, Creston, Iowa 50801

EP BLDG F – Torit Down-Flow Cartridge Dust Collector (CE 20-1)
Operation and Maintenance Plan - Agency Approved

1.0 Purpose

The Wellman Dynamics Emission Control Equipment Operation and Maintenance Plan has been developed to maintain the operating requirements detailed in the facilities Title V Permit and Air Quality Construction Permits. The O&M plan takes a predictive and preventive approach through various inspections to resolve any maintenance issues arising with the control equipment. It is designed to quickly ascertain any possible dilemma or issue and resolve the matter as soon as possible.

Description: **EP-BLDG-F** **Permit No. 07-A-759-S4**
Torit Cell Exhaust (300, East Cell, and West Cell Mixers)

Emission Units: **300 Mixer (EU 93-1), East Cell Mixer (EU 4-1), West Cell Mixer (EU 47-1)**

Control Equipment Information:

MAINTENANCE INFORMATION:
(Asset Number: D10111)

2.0 Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the control equipment is not operating or functioning to design. A corrective action may include; an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return to normal operation. An inventory of spare filter media will be maintained to ensure expedient replacement of any torn or broken filter devices. An excursion does not necessarily indicate a violation of an applicable requirement. Periodic monitoring is not required during periods of time greater than one day in which the source does not operate. The preventative maintenance (daily, weekly, monthly, and annually) tasks will be performed according to the Maintenance Required Schedule, Work Instruction (MTDWI 027 Revision F). The scheduled tasks are not set dates to allow flexibility with production demands, staffing, and equipment.

Daily

The daily inspection will be completed and/or supervised by the Environmental or Maintenance Departments and consist of a visual inspection for emission and/or excursions from the normal operating range.

- Visible emission shall be observed on a daily basis to ensure no visible emissions during material handling operations of the unit. If visible emissions are observed corrective action will be taken as soon as possible.
- If the control equipment has a manometer, the pressure drop will be observed and recorded. If the pressure drop falls out of the normal operating range corrective action will be taken as soon as possible. Normal operating range is defined by the manufacturer or according to maintenance specification.
- Visually and audibly inspect the control equipment for any abnormal operating conditions that may indicate maintenance may be required.

Monthly

The monthly inspection will be completed by the Maintenance Department and consist of an external evaluation of the control equipment. When applicable each unit will be inspected for:

- Check blower drive belts for tension, alignment, and wear
- Grease blower bearings
- Check blower wheel for wear
- Check for holes in exhaust stack
- Check intake ductwork for holes
- Check manometer for operation and tubing
- Check exhaust stack for emissions
- Blow dust out of all electric motors
- Check for any electrical problems with equipment
- Repair or report any problems and write work order to correct

Annually – As Required

The annual inspection (or as required) will be completed by the Maintenance Department and/or an outside vendor. This inspection will include changing the filter media and inspecting the unit as follows:

- Remove cartridges from the unit
- Blow out unit for inspection
- Inspect upper section for any holes to the lower section
- Inspect pulser pipes for holes and misalignment
- Inspect all air lines for leaks
- Repair all items found
- Replace filter cartridges and seal unit
- Start unit and confirm operation of pulsers
- Check for any electrical problems with the equipment
- Repair or report and problems and write work order to correct

3.0 Recordkeeping

All records required to be kept by this plan shall be kept in the Environmental Office for a period not less than 5 years.

Appendix B: NESHAP

1. 40 CFR 63 Subpart ZZZZZZ —National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZZZ