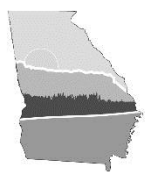


PERMIT NO. 2873-245-0002-V-04-0

ISSUANCE DATE:



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit

Facility Name: PCS Nitrogen Fertilizer L.P. – Augusta Plant

Facility Address: 1460 Columbia Nitrogen Road
Augusta, Georgia 30901, Richmond County

Mailing Address: P.O. Box 1483
Augusta, Georgia 30903

Parent/Holding Company: PotashCorp

Facility AIRS Number: 04-13-245-00002

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

The operation of a facility that produces anhydrous ammonia, nitric acid, ammonium nitrate, urea, urea and ammonium nitrate solutions, carbon dioxide, and urea pastilles.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the issuance date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application TV-40994 signed on March 3, 2017, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **97** pages.



DRAFT

Richard E. Dunn, Director
Environmental Protection Division

Table of Contents

PART 1.0	FACILITY DESCRIPTION	1
1.1	Site Determination	1
1.2	Previous and/or Other Names	1
1.3	Overall Facility Process Description.....	1
PART 2.0	REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY	3
2.1	Facility Wide Emission Caps and Operating Limits.....	3
2.2	Facility Wide Federal Rule Standards.....	3
2.3	Facility Wide SIP Rule Standards.....	3
2.4	Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit	3
PART 3.0	REQUIREMENTS FOR EMISSION UNITS	4
3.1	Emission Units	4
3.2	Equipment Emission Caps and Operating Limits	6
3.3	Equipment Federal Rule Standards	7
3.4	Equipment SIP Rule Standards	35
3.5	Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit	36
PART 4.0	REQUIREMENTS FOR TESTING.....	37
4.1	General Testing Requirements	37
4.2	Specific Testing Requirements	38
PART 5.0	REQUIREMENTS FOR MONITORING (Related to Data Collection)	43
5.1	General Monitoring Requirements.....	43
5.2	Specific Monitoring Requirements	43
PART 6.0	RECORD KEEPING AND REPORTING REQUIREMENTS	56
6.1	General Record Keeping and Reporting Requirements	56
6.2	Specific Record Keeping and Reporting Requirements.....	63
PART 7.0	OTHER SPECIFIC REQUIREMENTS.....	77
7.1	Operational Flexibility	77
7.2	Off-Permit Changes	77
7.3	Alternative Requirements.....	78
7.4	Insignificant Activities	78
7.5	Temporary Sources	78
7.6	Short-term Activities	78
7.7	Compliance Schedule/Progress Reports	78
7.8	Emissions Trading.....	79
7.9	Acid Rain Requirements	79
7.10	Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA).....	79
7.11	Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)	80
7.12	Revocation of Existing Permits and Amendments.....	81
7.13	Pollution Prevention.....	81
7.14	Specific Conditions	81
PART 8.0	GENERAL PROVISIONS	82
8.1	Terms and References	82
8.2	EPA Authorities	82
8.3	Duty to Comply.....	82
8.4	Fee Assessment and Payment	83

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

8.5	Permit Renewal and Expiration	83
8.6	Transfer of Ownership or Operation	83
8.7	Property Rights.....	83
8.8	Submissions.....	84
8.9	Duty to Provide Information	84
8.10	Modifications	85
8.11	Permit Revision, Revocation, Reopening and Termination.....	85
8.12	Severability	86
8.13	Excess Emissions Due to an Emergency	86
8.14	Compliance Requirements	87
8.15	Circumvention.....	89
8.16	Permit Shield.....	89
8.17	Operational Practices	90
8.18	Visible Emissions.....	90
8.19	Fuel-burning Equipment	90
8.20	Sulfur Dioxide.....	91
8.21	Particulate Emissions	91
8.22	Fugitive Dust.....	91
8.23	Solvent Metal Cleaning.....	92
8.24	Incinerators.....	93
8.25	Volatile Organic Liquid Handling and Storage	93
8.26	Use of Any Credible Evidence or Information	94
8.27	Internal Combustion Engines.....	94
8.28	Boilers and Process Heaters	95
Attachments		97
A. List of Standard Abbreviations and List of Permit Specific Abbreviations		
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups		
C. List of References		

PART 1.0 FACILITY DESCRIPTION**1.1 Site Determination**

PCS Nitrogen Fertilizer L.P. – Augusta Plant (PCS) includes emission points from one adjacent facility, Air Carbonics Industries (ACI), in this Title V Permit. Both the PCS and ACI facilities are located on the same property and have common ownership. PCS owns fifty percent of ACI. ACI is relatively small and most of the processes at the facility are insignificant and have low emissions. ACI purifies CO₂ provided by the PCS Ammonia Plant. Therefore, both of these facilities would be considered one Title V site under 40 CFR Part 70, because each source is contiguous and is under common control of one or more persons.

Grace Industries is also located on the common property with PCS and ACI. Grace Industries (AFS Number 245-00154) is a true minor source that is operating under Air Quality Permit No. 2819-121-12485, which was issued on July 7, 1995. This facility uses a concentrated NO_x gas stream from the PCS C002 Nitric Acid Plant to form calcium nitrite. However, because PCS does not have common ownership with this company, this facility would not be considered part of this Title V under 40 CFR Part 70.

1.2 Previous and/or Other Names

This facility was previously known as Columbia Nitrogen Fertilizer, Acadian Fertilizer L.P., Arcadian Corporation, and PCS Nitrogen Fertilizer Inc.

1.3 Overall Facility Process Description

PCS produces anhydrous ammonia, nitric acid, ammonium nitrate (AN), urea, urea and AN solutions, CO₂, and urea pastilles.

Anhydrous Ammonia: Natural gas is reformed and mixed with atmospheric air to form ammonium gas in a series of reaction steps.

Nitric Acid: Ammonia is combusted to form NO_x gas, which is absorbed in an absorption column to form nitric acid.

Ammonium Nitrate: Ammonia and nitric acid are reacted in the first stage and second stage neutralizers to form AN liquid. A portion of the AN liquid is used to make fertilizer solutions, a portion is used in the prill tower to make solid AN prills, and a portion is sold. The AN prills are further processed in the pre-dryer and the cooler.

Urea: CO₂, a by-product from the ammonia process, is combined with ammonia to form urea. The liquid urea is used to make fertilizer solutions, urea solutions, urea prills, and urea pastilles.

Solutions: AN, urea, and water are blended to form fertilizer solutions or are made into pure solutions of various percentages for direct sales.

CO₂: CO₂ from the ammonia plant solution regenerator exhaust is purified and compressed to form liquefied CO₂.

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

Urea Pastilles: Liquid urea is taken from the urea plant before formaldehyde is added. It is sent to a dryer and rotoformers, where urea pastilles are formed. The finished pastille is stored before being shipped offsite.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
AB01	Boiler H 6531	40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.3.2, 3.3.4 through 3.3.6, 3.4.1, 6.1.7, 6.2.24 through 6.2.28*	None	None
AB03	Boiler H 6532	40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.2 through 3.2.5, 3.3.1, 3.3.2, 3.3.4 through 3.3.6, 3.4.1, 6.1.7, 6.2.1 through 6.2.2, 6.2.24 through 6.2.26*	None	None
Ammonia Plant					
GT01	Ammonia Plant Gas Turbine	40 CFR 60 Subpart GG 40 CFR 64	3.2.6, 3.2.7, 3.2.8, 3.3.7 through 3.3.9, 3.5.1, 5.2.2, 5.2.6, 5.2.7, 6.1.7, 6.2.3 through 6.2.8, 6.2.27, 6.2.28*	ST1	Steam Injection System
AM01	Ammonia Plant Primary Reformer Furnace	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.6, 3.4.2, 3.4.3, 3.4.4, 6.1.7, 6.2.6 through 6.2.8, 6.2.27, 6.2.28*	None	None
AM04	Ammonia Plant Solution Regenerator Vent	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.6, 3.4.5, 3.4.6, 4.2.1, 4.2.2, 6.1.7, 6.2.7, 6.2.8, 6.2.27, 6.2.28*	None	None
ACI Plant					
ACI1	ACI Compressor Skid Vent	None	3.2.6, 4.2.1, 4.2.2, 6.1.7, 6.2.7, 6.2.8*	None	None
ACI3	ACI Water Separators	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.6, 3.4.5, 3.4.6, 4.2.1, 4.2.2, 6.1.7, 6.2.7, 6.2.8*	None	None
Urea Plant					
U201	C002 Urea Plant Prill Tower	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart FFFF ^{G2}	3.2.9, 3.2.10, 3.3.10, 3.3.11, 3.4.5, 3.4.6, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 5.2.2, 5.2.3, 6.1.7, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.15, 6.2.16*	None	None
U202	C002 Urea Plant Central Vent Stack (ST-6751)	40 CFR 63 Subpart FFFF ^{G2}	3.3.10, 3.3.11, 4.2.4, 6.2.15, 6.2.16*	None	None
U203	C002 Urea Plant 7103 Process Vent	40 CFR 63 Subpart FFFF ^{G2}	3.3.10, 3.3.11, 4.2.4, 4.2.11, 6.2.15, 6.2.16*	None	None
U209	C002 Urea Plant Medium Pressure Absorber	40 CFR 63 Subpart FFFF ^{G2}	3.3.10, 3.3.11, 4.2.4, 4.2.11, 6.2.15, 6.2.16*	None	None
FUG	C002 Urea Plant LDAR Valves, pumps, connectors, agitators, pressure relief devices, compressors, sampling connection systems, open-ended valves or lines, and closed vent systems and control devices	40 CFR 63 Subpart FFFF 40 CFR 65 Subpart F	3.3.10, 3.3.11, 3.3.13 through 3.3.28, 4.2.5, 4.2.6, 6.2.15 through 6.2.21*	None	None

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
FUG	C002 Urea Plant Wastewater Stream(s)	40 CFR 63 Subpart FFFF ^{G2}	3.3.10, 3.3.11, 3.3.12, 6.2.14, 6.2.15, 6.2.16*	None	None
U108	Formaldehyde Tank	40 CFR 63 Subpart FFFF ^{G2}	3.3.10, 3.3.11, 6.2.15, 6.2.16*	None	None
P01	Urea Pastille Plant Crystallization	None	None*	None	None
P02	Urea Pastille Plant Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 64	3.4.5, 3.4.6, 5.2.3, 5.2.6, 5.2.8, 6.1.7*	F1	Scrubber
P03	Urea Pastille Plant Rotoformers	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 64	3.4.5, 3.4.6, 5.2.3, 5.2.6, 5.2.8, 6.1.7, 6.2.13*	F1	Scrubber
P04	Urea Pastille Plant Dome Warehouse 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.5, 3.4.6, 5.2.3, 5.2.4, 6.1.7*	F2	Baghouse
Nitric Acid Plant					
N101	C001 Nitric Acid Plant	40 CFR 60 Subpart G 40 CFR 64	3.3.29, 3.3.30, 4.2.7, 4.2.8, 5.2.1, 5.2.2, 5.2.5, 5.2.6, 5.2.9, 6.1.7*	C101	SCR System
N201	C002 Nitric Acid Plant	40 CFR 52.21 40 CFR 60 Subpart G 40 CFR 64	3.2.11 through 3.2.13, 3.3.29, 3.3.30, 4.2.7, 4.2.8, 5.2.1, 5.2.2, 5.2.5, 5.2.6, 5.2.9, 6.1.7, 6.2.22, 6.2.23*	AP07	NSCR System
NST1 through NST8	Nitric Acid Tanks	391-3-1-.02(2)(a)1	3.2.14, 5.2.3, 6.1.7*	AVS1	Acid Vent Scrubber System
Ammonium Nitrate Plant					
AN01	C001 AN Plant – Neutralizer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [†] 40 CFR 64	3.4.5, 3.4.6, 5.2.3, 5.2.6, 5.2.10, 6.1.7*	VS01	Scrubber
A105	C001 AN Plant – Prill Tower	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [†]	3.4.5, 3.4.6, 5.2.2, 5.2.3, 6.1.7*	None	None
A103	C001 AN Plant – Prill Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [†] 40 CFR 64	3.4.5, 3.4.6, 5.2.6, 5.2.11*	AP08	Cyclone
A104	C001 AN Plant – Prill Cooler	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [†] 40 CFR 64	3.4.5, 3.4.6, 5.2.6, 5.2.11*	AP09	Cyclone
AN02	C002 AN Plant – Neutralizer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [‡] 40 CFR 64	3.4.5, 3.4.6, 5.2.3, 5.2.6, 5.2.12, 6.1.7*	VS02	Scrubber
A201	C002 AN Plant – Prill Tower	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [‡] 40 CFR 64	3.4.5, 3.4.6, 4.2.9, 4.2.10, 5.2.2, 5.2.3, 5.2.6, 5.2.13, 6.1.7*	AP02	Scrubber
A204	C002 AN Plant – Prill Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [‡] 40 CFR 64	3.4.5, 3.4.6, 4.2.9, 4.2.10, 5.2.3, 5.2.6, 5.2.14, 6.1.7*	AP05	Scrubber
A202	C002 AN Plant – Prill Cooler	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) [‡] 40 CFR 64	3.4.5, 3.4.6, 4.2.9, 4.2.10, 5.2.3, 5.2.6, 5.2.15, 6.1.7*	AP03	Scrubber
AB04	Synloop Startup Heater (H-6151)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.3.1, 3.3.3 through 3.3.6, 6.2.24, 6.2.25, 6.2.26*	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

[†] For determination of compliance with 391-3-1-.02(2)(e), the following source codes are to be grouped: AN01, A105, A103, and A104.

[‡] For determination of compliance with 391-3-1-.02(2)(e), the following source codes are to be grouped: AN02, A201, A204 (including bypass), and A202.

^{G2} Group 2 source under 40 CFR 63 Subpart FFFF.

3.2 Equipment Emission Caps and Operating Limits

- 3.2.1 The Permittee shall fire only natural gas in Boiler H 6531 (Source Code AB01).
[Avoidance of 40 CFR Part 52.21; 391-3-1-.02(2)(g) Subsumed]
- 3.2.2 The Permittee shall fire only natural gas in Boiler H 6532 (Source Code AB03).
[Avoidance of 40 CFR Part 52.21; 391-3-1-.02(2)(g) Subsumed]
- 3.2.3 The Permittee shall not combust natural gas in the Boiler H 6532 (Source Code AB03) in excess of 1,591 million cubic feet during any consecutive 12-month period.
[Avoidance of 40 CFR Part 52.21]
- 3.2.4 The Permittee shall not discharge or cause the discharge into the atmosphere emissions in excess of the following while firing natural gas in the Boiler H 6532 (Source Code AB03):
[Avoidance of 40 CFR Part 52.21]

Pollutant	Emission Limit
PM	0.007 lb/MMBtu
PM ₁₀	0.007 lb/MMBtu
NO _x	0.05 lb/MMBtu
CO	17.31 lb/hr

- 3.2.5 The Permittee shall not discharge or cause the discharge into the atmosphere from the Boiler H 6532 (Source Code AB03) NO_x emissions equal to or in excess of 40 tons during any consecutive 12-month period. For purposes of determining compliance with this condition, NO_x emissions shall be determined in accordance with Condition 6.2.2.
[Avoidance of 40 CFR Part 52.21]
- 3.2.6 The Permittee shall not discharge or cause the discharge into the atmosphere from the Ammonia Plant any gases which:
[Avoidance of 40 CFR Part 52.21]
 - a. Contain VOC in excess of 163 tons during any consecutive 12-month period.
 - b. Contain CO in excess of 166 tons during any consecutive 12-month period.
- 3.2.7 The Permittee shall maintain a minimum steam injection rate for the Ammonia Plant Gas Turbine (Source Code GT01) of 5,500 pounds per hour or the value established in the most recent performance test, whichever is greater, on a continuous basis except for periods of startup, shutdown or malfunction.
[Avoidance of 40 CFR Part 52.21]
- 3.2.8 The Permittee shall not discharge or cause the discharge into the atmosphere, from the Ammonia Plant Gas Turbine (Source Code GT01) NO_x emissions greater than 54 ppm at 15 percent oxygen.
[Avoidance of 40 CFR Part 52.21]

Title V Permit

- 3.2.9 The Permittee shall not produce more than 474,000 tons of urea prills in the C002 Urea Plant Prill Tower (Source Code U201) during any consecutive 12-month period.
[Avoidance of 40 CFR Part 52.21]
- 3.2.10 The Permittee shall not discharge, or cause the discharge into the atmosphere, from the C002 Urea Plant Prill Tower (Source Code U201), PM emissions in excess of 68.7 tons during any twelve consecutive months, as determined in accordance with Condition 6.2.12.
[Avoidance of 40 CFR Part 52.21]
- 3.2.11 The Permittee shall not discharge or cause the discharge into the atmosphere from the C002 Nitric Acid Plant (Source Code N201) any gases which:
[40 CFR 52.21 and 40 CFR 60.72(a)]
- a. Contain NO_x, expressed as NO₂, in excess of 3.0 pounds per ton of 100% nitric acid.
 - b. Exhibit 10 percent opacity, or greater.
- 3.2.12 The Permittee shall not discharge or cause the discharge into the atmosphere from the C002 Nitric Acid Plant (Source Code N201) any gases which contain NO_x in excess of 507 tons during any consecutive 12-month period.
[40 CFR 52.21]
- 3.2.13 The Permittee shall not discharge or cause the discharge into the atmosphere from the C002 Nitric Acid Plant (Source Code N201) any gases which contain CO in excess of 30.0 pounds per ton of 100% nitric acid on a 12-month rolling average.
[40 CFR 52.21]
- 3.2.14 The Permittee shall not discharge or cause the discharge into the atmosphere from the Nitric Acid Tanks (Source Codes NST1 - NST8) and the Acid Vent Scrubber System (Source Code AVS1) any gases which contain nitric acid in excess of 0.10 pounds per hour.
[Toxic Guideline - 391-3-1-.02(2)(a)1]

3.3 Equipment Federal Rule Standards

- 3.3.1 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart DDDDD - “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters”, for operation of Boiler H 6531 (Source Code AB01), Boiler H6532 (Source Code AB03) and the Synloop Process Heater (Source Code AB04).
[40 CFR 63.7480]
- 3.3.2 For the purposes of 40 CFR 63 Subpart DDDDD, Boiler H 6531 (Source Code AB01), and Boiler H6532 (Source Code AB03) are designated as existing industrial boilers in the “unit designed to burn gas 1” subcategory and are not subject to emission or operating limits under the subpart.
[40 CFR 63.7500(e)]

Title V Permit

- 3.3.3 The Permittee shall not combust natural gas in the Synloop Startup Heater (Source Code AB04) in excess of 43 million cubic feet (equivalent to an annual capacity factor of 10 percent or less) during any consecutive 12-month period.
[40 CFR 63.7575]
- 3.3.4 The Permittee must conduct a tune-up of the Synloop Startup Heater (Source Code AB04), Boiler H 6513 (Source Code AB01), and Boiler H 6532 (Source Code AB03) every 5 years as specified in paragraphs a. through f. of this condition to demonstrate continuous compliance. The Permittee may delay the burner inspection specified in paragraph a. of this condition until the next scheduled or unscheduled unit shutdown, but the Permittee must inspect each burner at least once every 72 months.
[40 CFR 63.7500(c) and 40 CFR 63.7540(a)(12)]
- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

Title V Permit

- f. Maintain on-site and submit, if requested by the Director, a report containing the following information:
- i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - ii. A description of any corrective actions taken as a part of the tune-up.
- 3.3.5 The Permittee must conduct each 5-year tune-up required by Condition 3.3.4 no more than 61 months after the previous tune-up.
[40 CFR 63.7515(d)]
- 3.3.6 If Boiler H 6513 (Source Code AB01), Boiler H 6532 (Source Code AB03), or the Synloop Startup Heater (Source Code AB04) is not operating on the required day for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
[40 CFR 63.7540(a)(13)]
- 3.3.7 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart GG - "Standards of Performance for Stationary Gas Turbines," for operation of the Ammonia Plant Gas Turbine (Source Code GT01).
[40 CFR 60.330]
- 3.3.8 The Permittee shall not cause to be discharged into the atmosphere from the Ammonia Plant Gas Turbine (Source Code GT01), any gases which contain NO_x in excess of:
[40 CFR 60.332(d) and 40 CFR 60.332(a)(2)]
- $$STD = 0.0150 \frac{(14.4)}{Y} + F$$
- where:
- STD = allowable NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),
- Y = heat rate as determined during the most recent performance test (kilojoules per watt hour), and
- F = zero for pipeline natural gas.
- 3.3.9 The Permittee shall not burn any fuel in the Ammonia Plant Gas Turbine (Source Code GT01) which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).
[40 CFR 60.333(b)]

Title V Permit

- 3.3.10 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A-"General Provisions" and 40 CFR 63 Subpart FFFF – "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing" for the operation of the C002 Urea Plant.
[40 CFR 63.2435]
- 3.3.11 The Permittee shall develop, implement, and maintain written startup, shutdown, and malfunction plans in accordance with 40 CFR 63.6(e)(3) for operations subject to 40 CFR 63 Subpart FFFF. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan in accordance with 40 CFR 63.6(e)(3).
[40 CFR 63.6(e)(1)(ii) and 40 CFR 63.6(e)(3)]
- 3.3.12 The Permittee shall comply with the record keeping and reporting requirements specified in Condition 6.2.14 for Group 2 process wastewater streams subject to 40 CFR 63 Subpart FFFF at the C002 Urea Plant.
[40 CFR 63.2485]
- 3.3.13 The Permittee shall comply with 40 CFR 63.2480 for any equipment leaks for equipment subject to 40 CFR 63 Subpart FFFF in the C002 Urea Plant that is in organic HAP service.
[40 CFR 63.2480, Table 6]
- 3.3.14 The Permittee shall comply with all applicable provisions of 40 CFR 65 Subpart F - "Consolidated Air Federal Rule - Equipment Leaks" for any equipment in the C002 Urea Plant that is in organic HAP service and is subject to 40 CFR 63 Subpart FFFF. This subpart applies to valves, pumps, connectors, agitators, pressure relief devices, compressors, sampling connection systems, open-ended valves or lines, and closed vent systems and control devices that are intended to operate in the HAP service in the C002 Urea Plant for 300 hours or more during the calendar year. Equipment that is in vacuum service is excluded from the requirements of this condition.
[40 CFR 65.100]
- 3.3.15 The Permittee shall identify all pieces of equipment (e.g. valves in gas/vapor and in light liquid service, pumps in light liquid service, connectors in gas/vapor and in light liquid service, agitators in gas/vapor and in light liquid service, pressure relief devices in gas/vapor service, compressors, sampling connection systems, open-ended valves or lines, and closed vent systems) that are subject to 40 CFR 65 Subpart F. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit boundaries, by some form of weatherproof identification, or by other appropriate methods.
[40 CFR 65.103(a)]

- 3.3.16 In addition to the general identification required in Condition 3.3.15, the Permittee shall identify the following equipment subject to any of the requirements in 40 CFR 65.106 through 40 CFR 65.115:
[40 CFR 65.103(b)]
- a. Except for inaccessible, ceramic, or ceramic-lined (for example, porcelain, glass, or glass-lined) connectors, the Permittee shall identify all connectors. Connectors need not be individually identified if all connectors in a designated area or length of pipe are identified as a group, and the number of connectors subject is indicated. An inaccessible connector is one that meets any of the following provisions:
[40 CFR 65.103(b)(1)]
 - i. Buried.
[40 CFR 65.108(e)(2)(A)]
 - ii. Insulated in a manner that prevents access to the connector by a monitor probe.
[40 CFR 65.108(e)(2)(B)]
 - iii. Obstructed by equipment or piping that prevents access to the connector by a monitor probe.
[40 CFR 65.108(e)(2)(C)]
 - iv. Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground.
[40 CFR 65.108(e)(2)(D)]
 - v. Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold.
[40 CFR 65.108(e)(2)(E)]
 - vi. Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines or would risk damage to equipment.
[40 CFR 65.108(e)(2)(F)]
 - b. The Permittee shall identify any equipment where emissions are routed to a process or fuel gas system or equip with a closed vent system and control device.
[40 CFR 65.103(b)(3)]
 - c. The Permittee shall identify any pressure relief devices equipped with rupture disks.
[40 CFR 65.103(b)(4)]
 - d. The Permittee shall identify instrumentation systems subject to 40 CFR 65 Subpart F. Individual components in an instrumentation system need not be identified.
[40 CFR 65.103(b)(5)]

Title V Permit

- e. The Permittee shall identify either by list, location (area or group), or other method, any equipment in regulated material service that operates less than 300 hours per calendar year within a process unit.
[40 CFR 65.103(b)(6)]
- 3.3.17 The Permittee shall comply with the special equipment designations requirements for equipment that is unsafe or difficult-to-monitor under 40 CFR 65 Subpart F:
[40 CFR 65.103(c)]
 - a. Valves meeting the provisions of Condition 3.3.23.d.i, pumps meeting the provisions of Condition 3.3.24.i and connectors meeting the provisions of Condition 3.3.25.f may be designated unsafe-to-monitor if the Permittee determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements.
[40 CFR 65.103(c)(1)]
 - b. Valves meeting the provisions of Condition 3.3.23.d.ii may be designated difficult-to-monitor if the provisions of paragraph b.i. of this condition apply. Agitators may be designated difficult-to-monitor if the provisions of paragraph b.ii. of this condition apply.
[40 CFR 65.103(c)(2)]
 - i. The Permittee:
[40 CFR 65.103(c)(2)(i)]
 - (A) Determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface, or it is not accessible in a safe manner when it is in regulated material service, and the process unit within which the valve is located is a regulated source for which the Permittee commenced construction, reconstruction, or modification prior to the compliance date of the referencing subpart; or
[40 CFR 65.103(c)(2)(i)(A)]
 - (B) Designates less than 3 percent of the total number of valves within the process unit as difficult-to-monitor.
[40 CFR 65.103(c)(2)(i)(B)]
 - ii. The Permittee determines that the agitator cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface, or it is not accessible in a safe manner when it is in regulated material service.
[40 CFR 65.103(c)(2)(ii)]

Title V Permit

- c. The Permittee shall record the identity of equipment designated as unsafe-to-monitor according to the provisions of paragraph a. of this condition and the planned schedule for monitoring this equipment. The Permittee shall record the identity of equipment designated as difficult-to-monitor according to the provisions of paragraph b. of this condition, the planned schedule for monitoring this equipment, and an explanation why the equipment is difficult-to-monitor.
[40 CFR 65.103(c)(3)]
 - d. Written Plan requirements are as follows:
[40 CFR 65.103(c)(4)]
 - i. The Permittee of equipment designated as unsafe-to-monitor according to the provisions of paragraph a. of this condition shall have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in Condition 3.3.22 if a leak is detected.
[40 CFR 65.103(c)(4)(i)]
 - ii. The Permittee of equipment designated as difficult-to-monitor according to the provisions of paragraph b. of this condition shall have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in Condition 3.3.22 if a leak is detected.
[40 CFR 65.103(c)(4)(ii)]
- 3.3.18 The Permittee shall use special equipment designations and identify all the connectors that are unsafe to repair under 40 CFR 65 Subpart F. The Permittee shall maintain a record of the identity of connectors designated as unsafe to repair and an explanation why the connector is unsafe to repair. The connectors may be designated as unsafe to repair if both the following conditions are met:
[40 CFR 65.103(d)]
- a. The Permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with the repair requirements.
 - b. The connector will be repaired before the end of the next process unit shutdown.
- 3.3.19 The Permittee shall use special equipment designations and identify all the compressors operating with an instrument reading of less than 500 parts per million that are subject to 40 CFR 65 Subpart F. The Permittee shall maintain a record of the identity of the compressors that the Permittee elects to designate as operating with an instrument reading of less than 500 parts per million.
[40 CFR 65.103(e)]

- 3.3.20 The Permittee shall comply with the following requirements for any equipment in heavy liquid service that is subject to 40 CFR 65 Subpart F:
[40 CFR 65.103(f)]
- a. Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.
[40 CFR 65.103(f)(1)]
 - b. Demonstrate that a piece of equipment or process is in heavy liquid service when requested by the Division.
[40 CFR 65.103(f)(2)]
 - c. A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of “in light liquid service.” Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.
[40 CFR 65.103(f)(3)]
- 3.3.21 The Permittee shall maintain leaking equipment identification records as follows for equipment subject to 40 CFR 65 Subpart F:
[40 CFR 65.104(e)]
- a. When each leak is detected, a weatherproof and readily visible identification shall be attached to the leaking equipment.
[40 CFR 65.104(e)(1)]
 - b. When each leak is detected, the information specified in paragraphs b.i. and b.ii. of this condition shall be recorded and kept pursuant to 40 CFR 65.4(a), except the information for valves complying with the 2-year monitoring period allowed under Condition 3.3.23.a.iii.E, and connectors complying with the 8-year monitoring period allowed under Condition 3.3.25.b.ii.C shall be kept 5 years beyond the date of the last use of the information to set a monitoring period.
[40 CFR 65.104(e)(2)]
 - i. The instrument, the equipment identification, and the instrument operator's name, initials, or identification number if a leak is detected or confirmed by instrument monitoring.
[40 CFR 65.104(e)(2)(i)]
 - ii. The date the leak was detected.
[40 CFR 65.104(e)(2)(ii)]

3.3.22 The Permittee shall comply with the following leak repair requirements in 40 CFR 65.105 for equipment subject to 40 CFR 65 Subpart F:
[40 CFR 65.105]

- a. *Leak repair schedule:* The Permittee shall repair each leak detected as soon as practical but not later than 15 calendar days after it is detected except as provided in paragraph c. or d. of this condition. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing.
[40 CFR 65.105(a)]
- b. *Leak identification removal:*
 - i. For valves, the Permittee shall remove the leak identification on a valve in gas/vapor or light liquid service after it has been re-monitored once within the first 3 months after repair and no leak has been detected during that monitoring.
[40 CFR 65.105(c)(1)]
 - ii. For connectors, the Permittee shall remove the leak identification on a connector in gas/vapor or light liquid service after it has been re-monitored once within the 90 days after repair and no leak has been detected during that monitoring.
[40 CFR 65.105(c)(1)]
 - iii. For any other equipment other than a valve or a connector, the Permittee shall remove the leak identification on the equipment after it is repaired.
[40 CFR 65.105(c)(2)]
- c. *Delay of repair:* The Permittee shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why repair within 15 days was technically infeasible without a process unit shutdown. Delay of repair is allowed for any of the following reasons:
[40 CFR 65.105(d)]
 - i. Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit shutdown, except as provided in paragraph c.v. of this condition.
[40 CFR 65.105(d)(1)]

Title V Permit

- ii. Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service.
[40 CFR 65.105(d)(2)]

- iii. Delay of repair for valves, connectors, and agitators is also allowed if the following provisions are met:
[40 CFR 65.105(d)(3)]
 - (A) The Permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair; and
 - (B) When repair procedures are effected, the purged material is collected and routed to a process or fuel gas system or is collected and destroyed or recovered in a control device.

- iv. Delay of repair for pumps is also allowed if the following provisions are met:
[40 CFR 65.105(d)(4)]
 - (A) Repair is completed as soon as practical but not later than 6 months after the leak was detected.
[40 CFR 65.105(d)(4)(ii)]
 - (B) Repair requires replacing the existing seal design with a new system that the Permittee has determined will provide better performance or one of the following specifications are met:
[40 CFR 65.105(d)(4)(i)]
 - (I) A dual mechanical seal system will be installed as specified in Condition 3.3.24.d.
[40 CFR 65.105(d)(4)(i)(A)]
 - (II) A pump that is designed with no externally actuated shaft penetrating the pump housing.
[40 CFR 65.105(d)(4)(i)(B)]
 - (III) Any pump that is routed to a process or fuel gas system or equipped with a closed vent system that captures and transports leakage from the pump to a control device.
[40 CFR 65.105(d)(4)(i)(C)]

Title V Permit

- v. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
[40 CFR 65.105(d)(5)]
- d. *Unsafe-to-repair: Connectors.* Any connector that is designated as an unsafe-to-repair connector in Condition 3.3.18 is exempt from the leak repair requirements in this condition.
[40 CFR 65.105(e)]
- e. *Leak repair records.* For each leak detected, the Permittee shall maintain a record of the following:
[40 CFR 65.105(f)]
 - i. The date of first attempt to repair the leak.
[40 CFR 65.105(f)(1)]
 - ii. The date of successful repair of the leak.
[40 CFR 65.105(f)(2)]
 - iii. Maximum instrument reading measured by Method 21 at the time the leak is successfully repaired or determined to be nonrepairable.
[40 CFR 65.105(f)(3)]
 - iv. “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak if the following conditions are met:
[40 CFR 65.105(f)(4)]
 - (A) The Permittee shall develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan required by Condition 3.3.11 or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
[40 CFR 65.105(f)(4)(i)]
 - (B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked onsite before depletion and the reason for depletion.
[40 CFR 65.105(f)(4)(ii)]
- v. Dates of process unit shutdowns that occur while the equipment is unrepaired.
[40 CFR 65.105(f)(5)]

- 3.3.23 The Permittee shall comply with the following for valves that are in gas/vapor service and in light liquid service and that are subject to the requirements of 40 CFR 65 Subpart F:
[40 CFR 65.106]
- a. The Permittee shall monitor all valves at the intervals specified in paragraph a.iii. of this condition and shall comply with all other provisions of this condition.
[40 CFR 65.106(b)]
 - i. The valves shall be monitored to detect leaks by the method specified in Conditions 4.2.5 and 4.2.6.
[40 CFR 65.106(b)(1)]
 - ii. The instrument reading that defines a leak is 500 parts per million or greater.
[40 CFR 65.106(b)(2)]
 - iii. The Permittee shall monitor valves for leaks at the intervals specified in paragraphs a.iii.A. through E. of this condition and shall keep the record specified in paragraph a.iii.F. of this condition.
[40 CFR 65.106(b)(3)]
 - (A) If at least the greater of two valves or 2 percent of the valves in a process unit leak, as calculated according to paragraph b. of this condition, the Permittee shall monitor each valve once per month.
[40 CFR 65.106(b)(3)(i)]
 - (B) At process units with less than the greater of two leaking valves or 2 percent leaking valves, the Permittee shall monitor each valve once each quarter except as provided in paragraphs a.iii.C. through E. of this condition.
[40 CFR 65.106(b)(3)(ii)]
 - (C) At process units with less than 1 percent leaking valves, the Permittee may elect to monitor each valve once every 2 quarters.
[40 CFR 65.106(b)(3)(iii)]
 - (D) At process units with less than 0.5 percent leaking valves, the Permittee may elect to monitor each valve once every 4 quarters.
[40 CFR 65.106(b)(3)(iv)]
 - (E) At process units with less than 0.25 percent leaking valves, the Permittee may elect to monitor each valve once every 2 years.
[40 CFR 65.106(b)(3)(v)]
 - (F) The Permittee shall keep a record of the monitoring schedule for each process unit.
[40 CFR 65.106(b)(3)(vi)]

Title V Permit

- b. The Permittee shall calculate the percent leaking valves at a process unit by using the equation under 40 CFR 65.106(c)(1) and the provisions listed below. When determining monitoring frequency for each process unit subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each process unit subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last three monitoring periods.
[40 CFR 65.106(c)(1), 40 CFR 65.106(c)(2)]
 - i. Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with paragraph b.ii. of this condition. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking valves calculation in a previous period) up to a maximum of 1 percent of the total number of valves in regulated material service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.
[40 CFR 65.106(c)(3)(i)]
 - ii. If the number of nonrepairable valves exceeds 1 percent of the total number of valves in regulated material service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in regulated material service shall be included in the calculation of percent leaking valves.
[40 CFR 65.106(c)(3)(ii)]
- c. If a leak is detected, the Permittee shall comply with the following:
[40 CFR 65.106(d)]
 - i. The Permittee shall repair each leak detected as soon as practical but not later than 15 calendar days after it is detected except as provided in Condition 3.3.22.c and d. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing.
 - ii. After a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. The monitoring required by paragraph c. of this condition is in addition to the monitoring required to satisfy the definition of repair.

- d. The Permittee shall comply with the following special provisions for valves:
 - i. Any valve that is designated as described in Condition 3.3.17.a as an unsafe-to-monitor valve is exempt from the requirements of paragraph a. and c. of this condition, and the Permittee shall monitor the valve according to the written plan specified in Condition 3.3.17.d.
[40 CFR 65.106(e)(1)]
 - ii. Any valve that is designated as described in Condition 3.3.17.b as a difficult-to-monitor valve is exempt from the requirements of paragraph a. of this condition, and the Permittee shall monitor the valve according to the written plan specified in Condition 3.3.17.d.
[40 CFR 65.106(e)(2)]
 - iii. Any equipment located at a plant site with fewer than 250 valves in regulated material service is exempt from the requirements for monthly monitoring specified in paragraph a.iii.A. of this condition. Instead, the Permittee shall monitor each valve in regulated material service for leaks once each quarter or comply with paragraph a.iii.C., D., or E. of this condition.
[40 CFR 65.106(e)(3)]
- e. *Valves Subgrouping:* For any valves in a process unit or group of process units subject to paragraph a. in this condition, the Permittee may choose to subdivide the valves in the applicable process unit or group of process units. In such a case, the following provisions shall apply:
[40 CFR 65.106(b)(4)]
 - i. The overall performance of total valves in the applicable process unit or group of process units to be subdivided shall be less than 2 percent leaking valves, as detected according to paragraphs a.i. and ii. of this condition and as calculated according to paragraph b. of this condition.
[40 CFR 65.106(b)(4)(i)]
 - ii. The initial assignment or subsequent reassignment of valves to subgroups shall be governed by the following provisions:
[40 CFR 65.106(b)(4)(ii)]
 - (A) The Permittee shall determine which valves are assigned to each subgroup. Valves with less than 1 year of monitoring data or valves not monitored within the last 12 months must be placed initially into the most frequently monitored subgroup until at least 1 year of monitoring data have been obtained.
[40 CFR 65.106(b)(4)(ii)(A)]

Title V Permit

- (B) Any valve or group of valves can be reassigned from a less frequently monitored subgroup to a more frequently monitored subgroup provided that the valves to be reassigned were monitored during the most recent monitoring period for the less frequently monitored subgroup. The monitoring results must be included with that less frequently monitored subgroup's associated percent leaking valves calculation for that monitoring event.
[40 CFR 65.106(b)(4)(ii)(B)]
 - (C) Any valve or group of valves can be reassigned from a more frequently monitored subgroup to a less frequently monitored subgroup provided that the valves to be reassigned have not leaked for the period of the less frequently monitored subgroup (for example, for the last 12 months, if the valve or group of valves is to be reassigned to a subgroup being monitored annually). Nonrepairable valves may not be reassigned to a less frequently monitored subgroup.
[40 CFR 65.106(b)(4)(ii)(C)]
- iii. The Permittee shall determine every 6 months if the overall performance of total valves in the applicable process unit or group of process units is less than 2 percent leaking valves and so indicate the performance in the next periodic report. If the overall performance of total valves in the applicable process unit or group of process units is 2 percent leaking valves or greater, the Permittee shall no longer subgroup and shall revert to the program required in paragraph a. of this condition for that applicable process unit or group of process units. The Permittee can again elect to comply with the valve subgrouping procedures of paragraph e. of this condition if future overall performance of total valves in the process unit or group of process units is again less than 2 percent. The overall performance of total valves in the applicable process unit or group of process units shall be calculated as a weighted average of the percent leaking valves of each subgroup according to the equation in 40 CFR 65.106(b)(4)(iii).
[40 CFR 65.106(b)(4)(iii)]
- iv. The Permittee shall maintain the following records:
[40 CFR 65.106(b)(4)(iv)]
 - (A) Which valves are assigned to each subgroup.
 - (B) Monitoring results and calculations made for each subgroup for each monitoring period.
 - (C) Which valves are reassigned, the last monitoring result prior to reassignment, and when they were reassigned.
 - (D) The results of the semiannual overall performance calculation required in paragraph e.iii. of this condition.

Title V Permit

- v. The Permittee shall notify the Division no later than 30 days prior to the beginning of the next monitoring period of the decision to begin or end subgrouping valves. The notification shall identify the participating process units and the number of valves assigned to each subgroup, if applicable. The notification may be included in a periodic report if the periodic report is submitted no later than 30 days prior to the beginning of the next monitoring period.
[40 CFR 65.106(b)(4)(v)]
 - vi. The Permittee shall submit in the periodic reports the following information:
[40 CFR 65.106(b)(4)(vi)]
 - (A) Total number of valves in each subgroup.
 - (B) Results of the semiannual overall performance calculation required by paragraph e.iii. of this condition.
 - vii. To determine the monitoring frequency for each subgroup, the calculation procedures of paragraph b. of this condition shall be used.
[40 CFR 65.106(b)(4)(vii)]
- 3.3.24 The Permittee shall comply with the following for all pumps that are in light liquid service and that are subject to the requirements of 40 CFR 65 Subpart F:
[40 CFR 65.107]
- a. The Permittee shall monitor each pump to detect leaks and shall comply with all other provisions of this condition.
[40 CFR 65.107(a), 40 CFR 65.107(b)]
 - i. The pumps shall be monitored monthly to detect leaks by the method specified in Conditions 4.2.5 and 4.2.6.
[40 CFR 65.107(b)(1)]
 - ii. The instrument reading that defines a leak is an instrument reading of:
[40 CFR 65.107(b)(2)]
 - (A) 5,000 parts per million or greater for pumps handling polymerizing monomers
[40 CFR 65.107(b)(2)(i)]
 - (B) 2,000 parts per million or greater for pumps in food/medical service
[40 CFR 65.107(b)(2)(ii)]
 - (C) 1,000 parts per million or greater for all other pumps
[40 CFR 65.107(b)(2)(iii)]

Title V Permit

- iii. For pumps to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.
[40 CFR 65.107(b)(3)]
- iv. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The Permittee shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the Permittee shall comply with either of the following procedures:
[40 CFR 65.107(b)(4)]
 - (A) The Permittee shall monitor the pump as specified in Conditions 4.2.5 and 4.2.6 unless the pump has already been monitored since the last routine monthly monitoring required by paragraph a.i. of this condition. If monitoring is performed and the instrument reading indicates a leak as specified in paragraph a.ii. of this condition, a leak is detected and the leak shall be repaired using the procedures in Condition 3.3.22, except as specified in paragraph a.iii. of this condition; or
[40 CFR 65.107(b)(4)(i)]
 - (B) The Permittee shall eliminate the visual indications of liquids dripping.
[40 CFR 65.107(b)(4)(ii)]
- b. The Permittee shall calculate the percent leaking pumps by using the equation specified in 40 CFR 65.106(c)(4) on a monthly basis, except as provided in paragraph b.ii. of this condition.
[40 CFR 65.107(c)]
 - i. If the greater of either 10 percent of the pumps, calculated on the 6-month rolling average, or three pumps in a process unit leak, the Permittee shall implement a quality improvement program for pumps that complies with the requirements of Condition 3.3.28.
[40 CFR 65.107(c)(2)]
 - ii. The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.
[40 CFR 65.107(c)(3)]

Title V Permit

- c. If a leak is detected, the Permittee shall repair each leak detected as soon as practical but not later than 15 calendar days after it is detected except as provided Condition 3.3.22.c and d. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature.
[40 CFR 65.107(d)]
- d. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph a. of this condition, provided the requirements specified in paragraphs d.i. through viii. of this condition are met.
[40 CFR 65.107(e)(1)]
 - i. The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. The Permittee shall keep records of the design criteria and an explanation of the design criteria, and any changes to these criteria and the reasons for the changes.
[40 CFR 65.107(e)(1)(i)]
 - ii. Each dual mechanical seal system shall meet the following three requirements:
[40 CFR 65.107(e)(1)(ii)]
 - (A) Operated with the barrier fluid at a pressure that is at all times (except periods of start-up, shutdown, or malfunction) greater than the pump stuffing box pressure; or
[40 CFR 65.107(e)(1)(ii)(A)]
 - (B) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device; or
[40 CFR 65.107(e)(1)(ii)(B)]
 - (C) Equipped with a closed-loop system that purges the barrier fluid into a process stream.
[40 CFR 65.107(e)(1)(ii)(C)]
 - iii. The barrier fluid is not in light liquid service.
[40 CFR 65.107(e)(1)(iii)]
 - iv. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
[40 CFR 65.107(e)(1)(iv)]

Title V Permit

- v. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The Permittee shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the Permittee shall follow either one of the following procedures prior to the next required inspection:
[40 CFR 65.107(e)(1)(v)]
 - (A) The Permittee shall monitor the pump as specified in Conditions 4.2.5 and 4.2.6 to determine if there is a leak of regulated material in the barrier fluid. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected and it shall be repaired using the procedures in Condition 3.3.22; or
[40 CFR 65.107(e)(1)(v)(A)]
 - (B) The Permittee shall eliminate the visual indications of liquids dripping.
[40 CFR 65.107(e)(1)(v)(B)]
- vi. If indications of liquids dripping from the pump seal exceed the criteria established in paragraph d.i. of this condition, or if based on the criteria established in paragraph d.i. of this condition the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
[40 CFR 65.107(e)(1)(vi)]
- vii. Each sensor as described in paragraph d.iv. of this condition is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.
[40 CFR 65.107(e)(1)(vii)]
- viii. When a leak is detected pursuant to paragraph d.vi. of this condition, it shall be repaired as specified in Condition 3.3.22.
[40 CFR 65.107(e)(1)(viii)]
- e. Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of paragraph a. of this condition.
[40 CFR 65.107(e)(2)]
- f. Any pump that is routed to a process or fuel gas system or equipped with a closed vent system that captures and transports leakage from the pump to a control device is exempt from the requirements of paragraph a. of this condition.
[40 CFR 65.107(e)(3)]
- g. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs a.iv. and d.v. of this condition and the daily requirements of paragraph d.vii. of this condition provided that each pump is visually inspected as often as practical and at least monthly.
[40 CFR 65.107(e)(4)]

Title V Permit

- h. If more than 90 percent of the pumps at a process unit meet the criteria in either paragraphs d. or e. of this condition, the process unit is exempt from the percent leaking calculation in paragraph b. of this condition.
[40 CFR 65.107(e)(5)]
 - i. Any pump that is designated as described in Condition 3.3.17.a as an unsafe-to-monitor pump is exempt from the requirements of paragraph a. of this condition, the monitoring and inspection requirements of paragraphs d.v. through viii. of this condition, and the Permittee shall monitor and repair the pump according to the written plan specified in Condition 3.3.17.d.
[40 CFR 65.107(e)(6)]
- 3.3.25 The Permittee shall comply with the following requirements for each connector in gas / vapor service or in light liquid service and that is subject to 40 CFR 65 Subpart F:
[40 CFR 65.108]
 - a. Monitor all connectors in each process unit initially for leaks by May 11, 2009. If all connectors in each process unit have been monitored for leaks prior to the compliance date specified in 40 CFR 63 Subpart FFFF, no initial monitoring is required provided either no process changes have been made since the monitoring or the Permittee can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the Permittee is required to monitor only those connectors involved in the process change.
[40 CFR 65.108(a)]
 - b. Conduct periodic monitoring of each connector for leaks as follows:
[40 CFR 65.108(b)]
 - i. The Permittee shall use the method and procedure specified in Conditions 4.2.5 and 4.2.6 to monitor for leaks.
[40 CFR 65.108(b)(1)]
 - ii. The Permittee shall conduct the periodic monitoring at the following frequencies, which are based on the percent leaking connectors that was determined during the last monitoring period.
[40 CFR 65.108(b)(3)]
 - (A) Percent leaking connectors was 0.5 percent or greater: Once per year.
[40 CFR 65.108(b)(3)(i)]
 - (B) Percent leaking connectors was greater than 0.25 percent but less than 0.5 percent: Once every 2 years.
[40 CFR 65.108(b)(3)(ii)]
 - (C) Percent leaking connectors was less than 0.25 percent, the Permittee shall monitor as follows:
[40 CFR 65.108(b)(3)(iii)]

Title V Permit

- (I) The Permittee shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.
[40 CFR 65.108(b)(3)(iii)(A)]
- (II) If the percent leaking connectors calculated from the monitoring results in paragraph b.ii.C.I. of this condition is greater than or equal to 0.35 percent of the monitored connectors, the Permittee shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period.
[40 CFR 65.108(b)(3)(iii)(B)]
- (III) If the percent leaking connectors calculated from the monitoring results in paragraph b.ii.C.I. of this section is less than 0.35 percent of the monitored connectors, the Permittee shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.
[40 CFR 65.108(b)(3)(iii)(C)]
- (D) If, during the monitoring conducted pursuant to paragraphs b.ii.A. through C. of this condition, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.
[40 CFR 65.108(b)(3)(iv)]
- (E) The Permittee shall keep a record of the start date and end date of each monitoring period under this condition for each process unit.
[40 CFR 65.108(b)(3)(v)]
- c. The Permittee shall calculate the percent leaking connectors by using the equation specified in 40 CFR 65.108(c) to determine the monitoring frequency for paragraph b.ii. of this condition.
[40 CFR 65.108(c)]
- d. A leak is detected if an instrument reading greater than or equal to 500 parts per million is measured.
[40 CFR 65.108(b)(2)]
- e. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. The Permittee shall follow all provision as specified in Condition 3.3.22 to repair leaks in connectors.
[40 CFR 65.108(d)]
- f. Any connector that is designated as an unsafe-to-monitor connector is exempt from the monitoring requirements of paragraphs a. and b. of this condition, and the Permittee shall monitor the connector according to the written plan specified in Condition 3.3.17.d.
[40 CFR 65.108(e)(1)]

Title V Permit

- g. Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs a. and b. of this condition and from the record keeping and reporting requirements of Conditions 6.2.17 through 6.2.19 and 6.2.21.
[40 CFR 65.108(e)(2)]

3.3.26 The Permittee shall comply with the following requirements for each pressure relief device in gas / vapor service and that is subject to 40 CFR 65 Subpart F:
[40 CFR 65.111]

- a. Except during pressure releases as provided for in paragraph b. of this condition, or as otherwise specified in paragraph c. of this condition, each pressure relief device in gas and vapor service shall be operated with an instrument reading of less than 500 parts per million as measured by the method specified in Condition 4.2.5 and, as applicable, Condition 4.2.6.
[40 CFR 65.111(b)]
- b. The Permittee shall comply with the following for after pressure releases occur:
[40 CFR 65.111(c)]
 - i. After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in Condition 3.3.22.c.
[40 CFR 65.111(c)(1)]
 - ii. The pressure relief device shall be monitored no later than five calendar days after the pressure to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition 4.2.5 and, as applicable, Condition 4.2.6.
[40 CFR 65.111(c)(2)]
 - iii. The Permittee shall record the dates and results of the monitoring required by paragraph b.ii. of this condition following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring.
[40 CFR 65.111(c)(3)]
- c. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs a. and b. of this condition provided the Permittee installs a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in Condition 3.3.22.c.
[40 CFR 65.111(e)]

- 3.3.27 The Permittee shall comply with the following requirements for each open-ended valve or line subject to 40 CFR 65 Subpart F:
[40 CFR 65.114]
- a. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraphs d. and e. of this condition. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. The operational provisions of paragraphs b. and c. of this condition also apply.
[40 CFR 65.114(b)(1)]
 - b. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
[40 CFR 65.114(b)(2)]
 - c. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph a. of this condition at all other times.
[40 CFR 65.114(b)(3)]
 - d. Open-ended valves or lines in an emergency shutdown system that are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs a. through c. of this condition.
[40 CFR 65.114(c)]
 - e. Open-ended valves or lines containing materials that would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs a. through c. of this condition are exempt from the requirements of paragraphs a. through c. of this condition.
[40 CFR 65.114(d)]
- 3.3.28 The Permittee shall comply with the following requirements to implement a Quality Improvement Program (QIP) for pumps subject to 40 CFR 65 if, on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak:
[40 CFR 65.116]
- a. In order to exit the QIP for pumps, the Permittee shall comply with the requirements of this condition until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps calculated as a 6-month rolling average in the process unit (or plant site). Once the performance level is achieved, the Permittee shall comply with the requirements in Condition 3.3.24.
[40 CFR 65.116(b)]

Title V Permit

- b. If in a subsequent monitoring period, the process unit (or plant site) has the greater of either 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the Permittee shall resume the quality improvement program starting at performance trials.
[40 CFR 65.116(c)]
- c. The quality improvement program shall meet the requirements specified in paragraphs c.i. through vii. of this condition.
[40 CFR 65.116(d)]
 - i. The Permittee shall collect the data specified in paragraphs c.i.A. through E. of this condition and maintain records for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis.
[40 CFR 65.116(d)(2)]
 - (A) Pump type (for example, piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (for example, external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.
[40 CFR 65.116(d)(2)(i)]
 - (B) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.
[40 CFR 65.116(d)(2)(ii)]
 - (C) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.
[40 CFR 65.116(d)(2)(iii)]
 - (D) If a leak is detected, the repair methods used and the instrument readings after repair.
[40 CFR 65.116(d)(2)(iv)]
 - (E) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.
[40 CFR 65.116(d)(2)(v)]
 - ii. The Permittee shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.
[40 CFR 65.116(d)(3)]

Title V Permit

- iii. The Permittee shall inspect all pumps or pump seals that exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.
[40 CFR 65.116(d)(4)]
- iv. The Permittee shall analyze the data collected to comply with the requirements of paragraph c.i. of this condition to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process-specific factors.
[40 CFR 65.116(d)(5)(i)]
 - (A) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance.
[40 CFR 65.116(d)(5)(ii)]
 - (B) The analysis shall include consideration of the following information:
[40 CFR 65.116(d)(5)(iii)]
 - (I) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks.
 - (II) Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services.
 - (III) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.
 - (C) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using data collected for a minimum of 6 months. An analysis of the data shall be done each year the process unit is in the quality improvement program.
[40 CFR 65.116(d)(5)(v)]

Title V Permit

- v. The Permittee shall implement a trial evaluation program and it shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance except as provided in paragraph c.v.E. of this condition. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.
[40 CFR 65.116(d)(6)]
- (A) The trial evaluation program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented.
[40 CFR 65.116(d)(6)(i)]
- (B) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units, and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.
[40 CFR 65.116(d)(6)(ii)]
- (C) The trial evaluation program shall specify and include documentation of the following information:
[40 CFR 65.116(d)(6)(iii)]
- (I) The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability.
[40 CFR 65.116(d)(6)(iii)(A)]
- (II) The frequency of monitoring or inspection of the equipment.
[40 CFR 65.116(d)(6)(iii)(B)]
- (III) The range of operating conditions over which the component will be evaluated.
[40 CFR 65.116(d)(6)(iii)(C)]

Title V Permit

- (IV) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.
[40 CFR 65.116(d)(6)(iii)(D)]
- (D) The performance trials shall initially be conducted at least for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the Permittee shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The Permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience are obtained.
[40 CFR 65.116(d)(6)(iv)]
- (E) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.
[40 CFR 65.116(d)(6)(v)]
- vi. The Permittee shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance, as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph c.iv. of this condition, if applicable; the findings of the trial evaluation required in paragraph c.v. of this condition; and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.
[40 CFR 65.116(d)(7)]
 - (A) The quality assurance program shall meet the following requirements:
[40 CFR 65.116(d)(7)(i)]
 - (I) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters.

Title V Permit

- (II) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal.
 - (III) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications.
 - (IV) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate so that emissions are minimized.
 - (B) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees, and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.
[40 CFR 65.116(d)(7)(ii)]
- vii. Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the Permittee shall replace the pumps or pump seals that are not superior emission performance technology with pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance that, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.
[40 CFR 65.116(d)(8)]
- (A) Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of Condition 3.3.24 are pumps determined to be superior performance technology.
[40 CFR 65.116(d)(8)(i)]
 - (B) The Permittee may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.
[40 CFR 65.116(d)(8)(ii)]

Title V Permit

- (C) The pumps shall be maintained as specified in the quality assurance program.
[40 CFR 65.116(d)(8)(iii)]

- 3.3.29 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart G - "Standards of Performance for Nitric Acid Plants," for operation of the C001 Nitric Acid Plant (Source Code N101) and the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 60.70]
- 3.3.30 The Permittee shall not discharge or cause the discharge into the atmosphere from the C001 Nitric Acid Plant (Source Code N101) or from the C002 Nitric Acid Plant (Source Code N201) any gases which:
[40 CFR 60.72(a)]
- a. Contain NO_x, expressed as NO₂, in excess of 3.0 pounds per ton of 100% nitric acid.
- b. Exhibit 10 percent opacity, or greater.

3.4 Equipment SIP Rule Standards

- 3.4.1 The Permittee shall not cause, let, suffer, permit, or allow any emissions from Boiler H 6531 (Source Code AB01) or Boiler H 6532 (Source Code AB03) which:
- a. Contain fly ash and/or other PM in amounts equal to or exceeding the rate derived from $P = 0.5(10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU.
[391-3-1-.02(2)(d)2.(ii)]
- b. Exhibit visible emissions, the opacity of which is equal to or greater than 20 percent except for one six minute period per hour of not more than 27 percent opacity.
[391-3-1-.02(2)(d)3.]
- 3.4.2 The Permittee shall not cause, let, suffer, permit, or allow any emissions from the Ammonia Plant Primary Reformer Furnace (Source Code AM01) which:
- a. Contain fly ash and/or other PM in amounts equal to or exceeding 0.10 pounds per million BTU heat input.
[391-3-1-.02(2)(d)2.(iii)]
- b. Exhibit visible emissions, the opacity of which is equal to or greater than 20 percent except for one six minute period per hour of not more than 27 percent opacity.
[391-3-1-.02(2)(d)3.]
- 3.4.3 The Permittee shall not cause, let, suffer, permit or allow the emission of NO_x from Ammonia Plant Primary Reformer Furnace (Source Code AM01) equal to or exceeding 0.2 pounds of NO_x per million BTU of heat input.
[391-3-1-.02(2)(d)4.(iii)]

Title V Permit

- 3.4.4 The Permittee shall only burn natural gas and/or process gas in the Ammonia Plant Primary Reformer Furnace (Source Code AM01).
[391-3-1-.02(2)(g)]
- 3.4.5 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from all process equipment, any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent, unless otherwise specified.
[391-3-1-.02(2)(b)1.]
- 3.4.6 The Permittee shall not cause, let, suffer, permit, or allow the emission from any source, particulate matter (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(e)1.]
- a. For equipment in operation or extensively altered **after** July 2, 1968:
- i. $E = 4.1P^{0.67}$, for process input weight rate up to and including 30 tons per hour;
- ii. $E = 55P^{0.11} - 40$, for process input weight rate in excess of 30 tons per hour.
- b. For equipment in operation or under construction contract **on or before** July 2, 1968:
- $E = 4.1P^{0.67}$

Where:

E = allowable emission rate in pounds per hour;
P = process input weight rate in tons per hour.

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

- 3.5.1 The Permittee shall only burn pipeline natural gas with no additional mercaptans added in the Ammonia Plant Gas Turbine (Source Code GT01).
[391-3-1-.03(2)(c)]

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**

- 4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]
- 4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]
- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
- a. Method 1 for sample point locations,
 - b. Method 2 for the determination of flow rate,
 - c. Method 3 for the determination of stack gas molecular weight,
 - d. Method 4 for the determination of stack moisture,
 - e. Method 5 for the determination of particulate matter emissions, and in conjunction with Method 202 as deemed appropriate by the Division,
 - f. Method 7 or 7E for the determination of NO_x emissions,
 - g. Method 9 and the procedures of Section 1.3 of the above referenced document for the determination of the opacity of emissions,
 - h. Method 10 for the determination of the concentration of CO,
 - i. Method 20 shall be used for the determination of NO_x concentration from combustion turbines for 40 CFR 60 Subpart GG purposes,
 - j. Method 21 for the determination of VOC leaks. Method 21 of 40 CFR 60 is used for instrument monitoring purposes of 40 CFR 63 Subpart FFFF; except as otherwise provided in 40 CFR 65 Subpart F,
 - k. Method 201 or 201A for the determination of PM₁₀ emissions,

Title V Permit

- l. Method 308 for the determination of the Gaseous Organic Concentration (methanol) from the CO₂ Regenerator and Urea Plants (Prilling and Synthesis),
- m. Method 320 for the determination of the Gaseous Inorganic Concentrations (Nitrous Oxide),
- n. Method 316 for the determination of the Gaseous Organic Concentration (Formaldehyde) from the Urea Prilling Plant,
- o. Method 316, NCASI 98.01, or Method 105 for the determination of the Gaseous Organic Concentration (Formaldehyde) of the Urea Synthesis Plant, and
- p. NCASI Method 94.03 for the determination of Organic Concentration (Methanol) in condensate.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

- 4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.
[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

4.2 Specific Testing Requirements

- 4.2.1 The Permittee shall conduct on the associated stack for the Ammonia Plant Solution Regenerator Vent (Source Code AM04), the ACI Plant (Source Codes ACI1 and ACI3), and the C002 Urea Plant performance tests for VOC emissions. Each test must be conducted approximately thirty-six (36) months after the previous test. Results from this testing shall be used to update VOC emissions factors used in Condition 6.2.7. The Permittee shall notify the Division in writing of such a change. The results from this test shall be used to determine compliance with the VOC emission limit in Condition 3.2.6.a.
[Avoidance of 40 CFR Part 52.21]
- 4.2.2 The Permittee shall conduct on the associated stack for the Ammonia Plant Solution Regenerator Vent (Source Code AM04) and the ACI Plant (Source Codes ACI1 and ACI3) performance tests for CO emissions. Each test must be conducted approximately thirty-six (36) months after the previous test. Results from this testing shall be used to update CO emissions factors used in Condition 6.2.8. The Permittee shall notify the Division in writing of such a change. The results from this test shall be used to determine compliance with the CO emission limit in Condition 3.2.6.b.
[Avoidance of 40 CFR Part 52.21]

Title V Permit

4.2.3 The Permittee shall conduct or cause to be conducted on the C002 Urea Plant Prill Tower (Source Code U201) a performance test for emissions of PM once every year. Each test must be conducted approximately twelve (12) months after the previous test. The performance test shall be conducted at the maximum production rate expected for the coming year and related emission points shall be done simultaneously. If production rate exceeds the rate at which the facility was tested by more than ten (10) percent, the Permittee shall retest the facility at the higher rate within 60 days of the rate increase.
[Avoidance of 40 CFR Part 52.21 and 391-3-1-.02(2)(e)]

4.2.4 Once every 5 years, the Permittee shall conduct performance tests for HAP (methanol and formaldehyde) on the following: C002 Urea Plant Prill Tower Exhaust Stack; Stack ST40, the medium pressure absorber vent (Source Code U209), comprised of the C002 Urea Plant 7103 Process Vent (Source Code U203) and the medium pressure condenser section vent; and the C002 Urea Plant Central Vent Stack (ST-6751) (Source Code U202) using Method 320 “Measurement Of Vapor Phase Organic And Inorganic Emissions By Extractive FTIR Spectroscopy” or alternative Division approved methods. The results from this test shall be used to determine the Total Resource Effectiveness (TRE) Index for each of these process vents. This testing is required to demonstrate that the vents are not classified as “Group 1 Continuous Process Vents” under 40 CFR 63 Subpart FFFF.

If TRE testing determines a vent is a “Group 1 Continuous Process Vent”, the Permittee shall notify the Division within 30 days and comply with all the applicable requirements for “Group 1 Continuous Process Vents” under 40 CFR 63 Subpart FFFF.
[40 CFR 63 Subpart FFFF]

4.2.5 The Permittee shall comply with the following requirements to comply with the monitoring requirements of 40 CFR 65 Subpart F.
[40 CFR 65.104(b)]

a. Monitoring shall comply with Method 21 of 40 CFR 60, Appendix A.
[40 CFR 65.104(b)(1)]

i. Except as provided for in paragraph a.ii. of this condition, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR 60, Appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, air, or other inerts which are not organic HAPs or VOC, the average stream response factor shall be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.
[40 CFR 65.104(b)(2)(i)]

ii. If no instrument is available at the plant site that will meet the performance criteria specified in paragraph a.i. of this condition, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph a.i. of this condition.
[40 CFR 65.104(b)(2)(ii)]

Title V Permit

- b. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR 60, Appendix A.
[40 CFR 65.104(b)(3)]
- c. Calibration gases shall be:
[40 CFR 65.104(b)(4)]
 - i. Zero air (less than 10 parts per million of hydrocarbon in air); and
 - ii. Mixtures of methane in air at the concentrations specified in paragraph c.iii. of this condition. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph a.i. of this condition. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
 - iii. Mixtures of methane in air at a concentration no more than 2,000 parts per million greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the Permittee need not calibrate the scales that will not be used during that day's monitoring.
- d. Monitoring shall be performed when the equipment is in regulated material service or is in use with any other detectable material.
[40 CFR 65.104(b)(5)]

4.2.6 The Permittee may elect to adjust or not to adjust the instrument readings for background. If the Permittee elects not to adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Condition 4.2.5. In such cases, all instrument readings shall be compared directly to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with Condition 3.3.26. If the Permittee elects to adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in paragraphs a. through d. of this condition.
[40 CFR 65.104(c)]

- a. The requirements of Condition 4.2.5 shall apply.
[40 CFR 65.104(c)(1)]
- b. The background level shall be determined, using the procedures in Method 21 of 40 CFR 60, Appendix A.
[40 CFR 65.104(c)(2)]

Title V Permit

- c. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR 60, Appendix A.
[40 CFR 65.104(c)(3)]
 - d. The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with Condition 3.3.24.
[40 CFR 65.104(c)(4)]
- 4.2.7 The Permittee shall conduct or cause to be conducted annual performance tests for emissions of NO_x and CO, during the month of July or August, as follows:
 - a. NO_x in the C001 Nitric Acid Plant (Source Code N101).
[40 CFR 60 Subpart G]
 - b. NO_x in the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 52.21 and 40 CFR 60 Subpart G]
 - c. CO in the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 52.21]
- 4.2.8 Each time a performance test for NO_x or CO is conducted for the C001 Nitric Acid Plant (Source Code N101) or the C002 Nitric Acid Plant (Source Code N201), the Permittee shall calculate a conversion factor to convert the ppm monitor output into units of the applicable standard (pounds NO_x or CO per ton 100% acid). The calculation and conversion factor shall be included in the test report.
[40 CFR 52.21 and 40 CFR 60.73(b)]
- 4.2.9 The Permittee shall conduct or cause to be conducted on the C002 AN Prill Plant a performance test for PM, while producing low-density product, once every two years. Each test series must be conducted approximately twenty-four (24) months after the previous series. For the purposes of this condition, the C002 AN Prill Plant consists of Source Codes A201, A202, and A204. The stacks that shall be tested are as follows:
[391-3-1-.02(2)(e)]
 - a. C002 AN Plant – Prill Tower (Source Code A201) outside stacks;
 - b. C002 AN Plant – Prill Tower Scrubber (Source Code AP02) stack;
 - c. C002 AN Plant – Prill Dryer Scrubber (Source Code AP05) stack; and
 - d. C002 AN – Plant – Prill Cooler Scrubber (Source Code AP03) stack.

The performance tests shall be conducted at the maximum production rate expected for the coming year and related emission points shall be done simultaneously. If production rate exceeds the rate at which the facility was tested by more than ten (10) percent, the Permittee shall retest the facility at the higher rate within 60 days of the rate increase.

Title V Permit

4.2.10 The Permittee shall conduct or cause to be conducted on the C002 AN Prill Plant a performance test for PM, while producing high-density product, on every two years. Each test series must be conducted approximately twenty-four (24) months after the previous series. For the purposes of this condition, the C002 AN Prill Plant consists of Source Codes A201, A202, and A204. The stacks that shall be tested are as follows:
[391-3-1-.02(2)(e)]

- a. C002 AN Plant – Prill Tower (Source Code A201) outside stacks;
- b. C002 AN Plant – Prill Tower Scrubber (Source Code AP02) stack;
- c. C002 AN Plant HD Cooler Bypass Stack; and
- d. C002 AN Plant – Prill Cooler Scrubber (Source Code AP03) stack.

The performance tests shall be conducted at the maximum production rate expected for the coming year and related emission points shall be done simultaneously. If production rate exceeds the rate at which the facility was tested by more than ten (10) percent, the Permittee shall retest the facility at the higher rate within 60 days of the rate increase. If the plant is tested without the use of the outside prill tower stacks, the plant may not be operated with the use of the outside stacks unless the plant is retested with the outside stacks included. This condition would not apply to the C002 AN Prill Plant if no high-density product were produced in the previous twelve (12) months.

4.2.11 The Permittee shall conduct performance tests for HAP (methanol and formaldehyde) on the medium and high pressure absorber (Source Code U209) using Method 320 “Measurement Of Vapor Phase Organic And Inorganic Emissions By Extractive FTIR Spectroscopy,” or alternative Division approved methods, within 150 days of startup of the Medium Pressure Section (Application 42201). The results from testing shall be used to determine the Total Resource Effectiveness (TRE) Index for the process vent. This testing is required to demonstrate that the vent is not classified as a “Group 1 Continuous Process Vent” under 40 CFR 63 Subpart FFFF.

If TRE testing determines a vent is a “Group 1 Continuous Process Vent”, the Permittee shall notify the Division within 30 days and comply with all the applicable requirements for “Group 1 Continuous Process Vents” under 40 CFR 63 Subpart FFFF.
[40 CFR 63 Subpart FFFF]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.1 General Monitoring Requirements**

- 5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. NO_x from the C001 Nitric Acid Plant (Source Code N101) and the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 52.21 and 40 CFR 60.73(a)]
 - b. CO from the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 52.21]
- 5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Steam injection rate being supplied to the Ammonia Plant Gas Turbine (Source Code GT01). Data shall be recorded on an hourly basis.
[Avoidance of 40 CFR Part 52.21 and 40 CFR 60 Subpart GG]
 - b. C002 Urea Plant Prill Tower (Source Code U201) prill production rate.
[Avoidance of 40 CFR Part 52.21, 391-3-1-.02(2)(b), and 391-3-1-.02(2)(e)]
 - c. Nitric acid production rate for the C001 Nitric Acid Plant (Source Code N101) and the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 52.21 and 40 CFR 60.73(c)]
 - d. AN melt volumetric flow rate to the inlet of the C001 AN Plant – Prill Tower (Source Code A105) while producing low-density ammonium nitrate.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]

Title V Permit

- e. AN melt volumetric flow rate to the inlet of the C002 AN Plant – Prill Tower (Source Code A201) while producing low-density ammonium nitrate.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - f. AN melt volumetric flow rate to the inlet of the C002 AN Plant – Prill Tower (Source Code A201) while producing high-density ammonium nitrate.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- 5.2.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Final product moisture for the C002 Urea Plant Prill Tower (Source Code U201). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - b. Pressure drop and scrubbant volumetric flow rate for the Urea Pastille Plant Scrubber (Source Code F1). Data shall be recorded in the process log once per shift or approximately once every twelve hours.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - c. Pressure drop across the Urea Pastille Plant Dome Warehouse 1 Baghouse (Source Code F2). Data shall be recorded in the process log once per shift or approximately once every twelve hours.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - d. Pressure drop, liquid recirculation rate, and scrubber liquor acid concentration for the Acid Vent Scrubber System (Source Code AVS1). Data shall be recorded once every two hours in the process log.
[Toxic Guideline - 391-3-1-.02(2)(a)1]
 - e. Pump pressure, pump pressure at the venturi, and scrubbant volumetric flow rate for the C001 AN Plant – Neutralizer Scrubber (Source Code VS01). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - f. AN melt concentration to the inlet of the C001 AN Plant – Prill Tower (Source Code A105). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - g. Internal additive concentration at the C001 AN Plant – Prill Tower (Source Code A105). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]

Title V Permit

- h. Pump pressure, scrubbant volumetric flow rate, sump AN concentration, and sump pH for the C002 AN Plant – Neutralizer Scrubber (Source Code VS02). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- i. AN melt concentration to the inlet of the C002 AN Plant – Prill Tower (Source Code A201). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- j. Internal additive concentration at the C002 AN Plant – Prill Tower (Source Code A201). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- k. Differential pressure across the upper and lower vessel, scrubber water recirculation pressure, and exhaust blower motor amperage for the C002 AN Plant – Prill Tower Scrubber (Source Code AP02). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- l. Stack gas exhaust temperature and pump discharge pressure for the C002 AN Plant – Prill Dryer Scrubber (Source Code AP05). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- m. Scrubber water discharge pressure, blower motor amperage, scrubber exhaust temperature, and sump AN concentration for the C002 AN Plant – Prill Cooler Scrubber (Source Code AP03). Data shall be recorded once every two hours in the process log.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]

5.2.4 The Permittee shall maintain a Preventive Maintenance Program for the baghouses specified in Section 3.1 of the permit to assure that the provisions of Conditions 3.4.5, 3.4.6, and 8.17.1 are met. The program shall be subject to review and, if necessary to assure compliance, modification by the Division and shall include the pressure drop ranges that indicate proper operation for each baghouse. At a minimum, the following operation and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.
- b. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.

Title V Permit

- c. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mounting; proper operation of outlet/isolation valves; proper lubrication.
 - d. Check dust collector hoppers and conveying systems for proper operation.
- 5.2.5 The Permittee shall provide and maintain a spare parts inventory for any emission monitoring system installed. The list of such part shall be available, upon request, for submittal to the Division.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 5.2.6 The following pollutant specific emission unit(s) (PSEU) is/are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Pollutant
Ammonia Plant Gas Turbine (Source Code GT01)	NO _x
Urea Pastille Plant Dryer (Source Code P02)	PM
Urea Pastille Plant Rotoformers (Source Code P03)	PM
C001 Nitric Acid Plant (Source Code N101)	NO _x
C002 Nitric Acid Plant (Source Code N201)	NO _x
C001 AN Plant – Neutralizer (Source Code AN01)	PM
C001 AN Plant – Prill Dryer (Source Code A103)	PM
C001 AN Plant – Prill Cooler (Source Code A104)	PM
C002 AN Plant – Neutralizer (Source Code AN02)	PM
C002 AN Plant – Prill Tower (Source Code A201)	PM
C002 AN Plant – Prill Dryer (Source Code A204)	PM
C002 AN Plant – Prill Cooler (Source Code A202)	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9.
[40 CFR 64]

Title V Permit

- 5.2.7 The Permittee shall comply with the performance criteria listed in the table below for the NO_x emissions from the Ammonia Plant Gas Turbine (Source Code GT01).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Steam Injection Rate
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Continuous.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.
F. Averaging Period [64.3(b)(4)]	Hourly – Minimum 5,500 lbs/hr.

Title V Permit

- 5.2.8 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from Urea Pastille Plant Dryer (Source Code P02) and the Urea Pastille Plant Rotoformers (Source Code P03).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber F1 Flow Rate	Indicator No. 2 Scrubber F1 Pressure Drop
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain and operate gauge per equipment manufacturer.	Calibrate, maintain and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once per shift or approximately once every twelve hours.	Once per shift or approximately once every twelve hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	Not applicable.	Not applicable.

Title V Permit

- 5.2.9 The Permittee shall comply with the performance criteria listed in the table below for the NO_x emissions from the C001 Nitric Acid Plant (Source Code N101) and the C002 Nitric Acid Plant (Source Code N201).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 NO _x Concentration
A. Data Representativeness [64.3(b)(1)]	NO _x CEMS. The CEMS are located in each Nitric Acid Plant stack.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain and operate a CEMS per 40 CFR 60 Subpart G.
D. Monitoring Frequency [64.3(b)(4)]	Continuous.
E. Data Collection Procedures [64.3(b)(4)]	NO _x concentration (ppm) will be converted to lb NO _x per ton 100% nitric acid using the conversion factor calculated from the most recent NO _x stack test. NO _x emissions will be calculated hourly by multiplying the actual production rate by the lb NO _x per ton 100% nitric acid emission rate. Hourly emissions will be added to determine compliance with the 507 tpy limit for the C002 Nitric Acid Plant.
F. Averaging Period [64.3(b)(4)]	3.0 lb NO _x per ton 100% nitric acid – 3 hour average (both Nitric Acid Plants) 507 tpy NO _x – 12 month rolling total (C002 Nitric Acid Plant only).

Title V Permit

- 5.2.10 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C001 AN Plant – Neutralizer (Source Code AN01).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber VS01 Pump Pressure	Indicator No. 2 Scrubber VS01 Pump Pressure at the Venturi	Indicator No. 3 Scrubber VS01 Scrubbing Flow Rate
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	8 hours.	8 hours.	8 hours.

Title V Permit

- 5.2.11 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C001 AN Plant – Prill Dryer (Source Code A103) and the C001 AN Plant – Prill Cooler (Source Code A104).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Cyclone AP08 and AP09 Structure
A. Data Representativeness [64.3(b)(1)]	Visual inspection of each cyclone.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	The Permittee shall provide training to the plant personnel as necessary.
D. Monitoring Frequency [64.3(b)(4)]	Once per shift.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.
F. Averaging Period [64.3(b)(4)]	Not applicable.

Title V Permit

- 5.2.12 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C002 AN Plant – Neutralizer (Source Code AN02).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber VS02 Pump Pressure	Indicator No. 2 Scrubber VS02 Scrubbant Flow Rate	Indicator No. 3 Scrubber VS02 Sump AN Conc.	Indicator No. 4 Scrubber VS02 Sump pH
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	8 hours.	8 hours.	8 hours.	8 hours.

Title V Permit

- 5.2.13 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C002 AN Plant – Prill Tower (Source Code A201).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber AP02 Differential Pressure Across Upper and Lower Vessel	Indicator No. 2 Scrubber AP02 Water Recirculation Pressure	Indicator No. 3 Scrubber AP02 Exhaust Blower Motor Amperage
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Not Applicable.	Not Applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	8 hours.	8 hours.	8 hours.

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

- 5.2.14 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C002 AN Plant – Prill Dryer (Source Code A204).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber AP05 Stack Gas Exhaust Temperature	Indicator No. 2 Scrubber AP05 Pump Discharge Pressure
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Not Applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once every 2 hours.	Once every 2 hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	8 hours	8 hours

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

- 5.2.15 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the C002 AN Plant – Prill Cooler (Source Code A202).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Scrubber AP03 Water Discharge Pressure	Indicator No. 2 Scrubber AP03 Blower Motor Amperage	Indicator No. 3 Scrubber AP03 Exhaust Temperature	Indicator No. 4 Scrubber AP03 Sump AN Concentration
A. Data Representativeness [64.3(b)(1)]	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.	The gauge is calibrated per equipment manufacturer.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.	Calibrate, maintain, and operate gauge per equipment manufacturer.
D. Monitoring Frequency [64.3(b)(4)]	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.	Once every 2 hours.
E. Data Collection Procedures [64.3(b)(4)]	Record in log.	Record in log.	Record in log.	Record in log.
F. Averaging Period [64.3(b)(4)]	8 hours	8 hours	8 hours	8 hours

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**

- 6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.

[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

- 6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.

[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.

[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each quarterly period (for NO_x monitors) ending March 31, June 30, September 30, and December 31 or semiannual period (for non-NO_x monitors) ending June 30 and December 31 of each year. All reports shall be postmarked by May 30, August 29, November 29, and February 28, respectively or August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

- a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

- b. Total process operating time during each reporting period.
 - c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
 - d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- 6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]
- a. The date, place, and time of sampling or measurement;
 - b. The date(s) 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.
- 6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

Title V Permit

- 6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]
- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined or stated to be, excess emissions by an applicable requirement)
 - i. For the C001 Nitric Acid Plant (Source Code N101), any 3-hour period during which the average emissions of NO_x (arithmetic average of three contiguous 1-hour periods), measured and recorded in accordance with Condition 5.2.1.a and expressed as NO₂, is in excess of 3.0 pounds per ton of 100% nitric acid produced.
[40 CFR 60.73(e)]
 - ii. For the C002 Nitric Acid Plant (Source Code N201), any 3-hour period during which the average emissions of NO_x (arithmetic average of three contiguous 1-hour periods), measured and recorded in accordance with Condition 5.2.1.a and expressed as NO₂, is in excess of 3.0 pounds per ton of 100% nitric acid produced.
[40 CFR 52.21 and 40 CFR 60.73(e)]
 - iii. For the C002 Nitric Acid Plant (Source Code N201), any consecutive 12-month period during which the total emissions of NO_x, measured and recorded in accordance with Condition 5.2.1.a and calculated in accordance with Condition 6.2.22, is in excess of 507 tons.
[40 CFR 52.21]
 - iv. For the C002 Nitric Acid Plant (Source Code N201), any consecutive 12-month period during which the average emissions of CO, measured and recorded in accordance with Condition 5.2.1.b and calculated in accordance with Condition 6.2.23, is in excess of 30.0 pounds CO per ton 100% nitric acid produced.
[40 CFR 52.21]
 - b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. Any period of process operation during which an unapproved fuel is burned in Boiler H 6531 (Source Code AB01) or Boiler H 6532 (Source Code AB03).
[Avoidance of 40 CFR Part 52.21]
 - ii. Any 12-month period during which the amount of natural gas burned in Boiler H 6532 (Source Code AB03) exceeds 1,591 million cubic feet.
[Avoidance of 40 CFR Part 52.21]

Title V Permit

- iii. Any 12-month period during which total NO_x emissions from the Boiler H 6532 (Source Code AB03), calculated in accordance with Condition 6.2.2, is equal to or in excess of 40 tons.
[Avoidance of 40 CFR Part 52.21]
- iv. Any period of process operation during which the sulfur content of fired in the Ammonia Plant Gas Turbine (Source Code GT01) exceeds 0.8 percent by weight.
[40 CFR 60 Subpart GG]
- v. For the Ammonia Plant, any consecutive 12-month period during which VOC emissions, as calculated in accordance with Condition 6.2.7, exceed 163 tons.
[Avoidance of 40 CFR Part 52.21]
- vi. For the Ammonia Plant, any consecutive 12-month period during which CO emissions, as calculated in accordance with Condition 6.2.8, exceed 166 tons.
[Avoidance of 40 CFR Part 52.21]
- vii. Any consecutive 12-month period during which production of urea prills in the C002 Urea Plant Prill Tower (Source Code U201) exceeds 474,000 tons.
[Avoidance of 40 CFR Part 52.21]
- viii. For the C002 Urea Plant Prill Tower (Source Code U201), any consecutive 12-month period during which PM emissions, as calculated in accordance with Condition No. 6.2.12, exceed 68.7 tons.
[Avoidance of 40 CFR Part 52.21]
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
 - i. Any determination in which the hourly average steam injection rate supplied to the Ammonia Plant Gas Turbine (Source Code GT01), measured and recorded in accordance with Condition 5.2.2.a, is less than 5,500 pounds per hour or the value determined during the most recent performance test, whichever is greater.
[Avoidance of 40 CFR Part 52.21; 40 CFR 60 Subpart GG]
 - ii. Any day or portion of a day in which the average prill production rate for the Urea Plant Prill Tower (Source Code U201), measured and recorded in accordance with Condition 5.2.2.b, is outside the rate of 400 to 1,500 tpd.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - iii. Any day or portion of a day in which the average final product moisture for the Urea Plant Prill Tower (Source Code U201), measured and recorded in accordance with Condition 5.2.3.a, is greater than 1%.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]

Title V Permit

- iv. Any two consecutive readings during which a parameter for a control device at the Urea Pastille Plant, measured and recorded in accordance with Condition 5.2.3.b and 5.2.3.c, is outside the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Urea Pastille Plant Scrubber (Source Code F1) pressure drop: 10 to 16 inches of water.
 - (B) Urea Pastille Plant Scrubber (Source Code F1) scrubbant flow rate: 360 to 440 gpm.
 - (C) Urea Pastille Plant Dome Warehouse 1 Baghouse (Source Code F2) pressure drop: 1.0 to 5.0 inches of water.
- v. Any two consecutive readings during which the average of a parameter for the Acid Vent Scrubber System (Source Code AVS1), measured and recorded in accordance with Condition 5.2.3.d, is outside of the following ranges during hours of process operation:
[Toxic Guideline - 391-3-1-.02(2)(a)1]
 - (A) Pressure drop: 0.2 to 0.5 psig.
 - (B) Liquid recirculation rate: 2 to 6 gpm.
 - (C) Scrubbing liquor acid concentration: 0 to 12%.
- vi. Any 8-hour period during which the average of a parameter for the C001 AN Plant – Neutralizer Scrubber (Source Code VS01), measured and recorded in accordance with Condition 5.2.3.e, is outside of the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Pump pressure: 75 to 125 psig.
 - (B) Pump pressure at the venturi: 15 to 45 psig.
 - (C) Scrubbant volumetric flow rate: 85 to 200 gpm.
- vii. Any day or portion of a day in which the average AN melt volumetric flow rate to the inlet of the C001 AN Plant – Prill Tower (Source Code A105), measured and recorded in accordance with Condition 5.2.2.d, is outside the range of 25 to 80 gpm during hours of process operation.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]

Title V Permit

- viii. Any day or portion of a day in which the average AN melt concentration to the inlet of the C001 AN Plant – Prill Tower (Source Code A105), measured and recorded in accordance with Condition 5.2.3.f, is less than 95 percent for more than 8 hours.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- ix. Any 8-hour period during which the average internal additive concentration at the C001 AN Plant – Prill Tower (Source Code A105), measured and recorded in accordance with Condition 5.2.3.g, is outside the range of 400 to 800 ppm.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- x. Any 8-hour period during which the average of a parameter for the C002 AN Plant – Neutralizer Scrubber (Source Code VS02), measured and recorded in accordance with Condition 5.2.3.h, is outside of the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Pump pressure: 35 to 60 psig.
 - (B) Scrubbant volumetric flow rate: 138 to 168 gpm.
 - (C) Sump AN concentration: 0 to 45%.
 - (D) Sump pH: 4 to 7.
- xi. Any day or portion of a day in which the average AN melt volumetric flow rate to the inlet of the C002 AN Plant – Prill Tower (Source Code A201), measured and recorded in accordance with Condition 5.2.2.e and 5.2.2.f, is outside the range of 80 to 225 gpm during hours of process operation.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- xii. Any day or portion of a day in which the average AN melt concentration to the inlet of the C002 AN Plant – Prill Tower (Source Code A201), measured and recorded in accordance with Condition 5.2.3.i, is less than 95 percent for more than 8 hours.
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
- xiii. Any 8-hour period during which the average internal additive concentration at the C002 AN Plant – Prill Tower (Source Code A201), measured and recorded in accordance with Condition 5.2.3.j, is outside the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Low-density AN: 400 to 800 ppm.
 - (B) High-density AN (clay): 1 to 4%.

Title V Permit

- xiv. Any 8-hour period during which the average of a parameter for the C002 AN Plant – Prill Tower Scrubber (Source Code AP02), measured and recorded in accordance with Condition 5.2.3.k, is outside of the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Differential pressure across the upper vessel: less than 15.0 inches of water.
 - (B) Differential pressure across the lower vessel: less than 3.0 inches of water.
 - (C) Scrubber water recirculation pressure: 35 to 50 psig.
 - (D) Exhaust blower motor amperage: 30 to 45 amps.
- xv. Any 8-hour period during which the average of a parameter for the C002 AN Plant – Prill Dryer Scrubber (Source Code AP05), measured and recorded in accordance with Condition 5.2.3.l, is outside of the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Stack gas exhaust temperature: 65 to 105 degrees Fahrenheit.
 - (B) Pump discharge A pressure: 25 to 50 psig.
 - (C) Pump discharge B pressure: 25 to 50 psig.
- xvi. Any 8-hour period during which the average of a parameter for the C002 AN Plant – Prill Cooler Scrubber (Source Code AP03), measured and recorded in accordance with Condition 5.2.3.m, is outside of the following ranges during hours of process operation:
[391-3-1-.02(2)(b) and 391-3-1-.02(2)(e)]
 - (A) Water discharge pressure: 40 to 60 psig.
 - (B) Blower motor amperage A: 95 to 115 amps.
 - (C) Blower motor amperage B: 95 to 110 amps.
 - (D) Exhaust gas temperature: 60 to 120 degrees Fahrenheit.
 - (E) Sump AN concentration: 0 to 50%.

6.2 Specific Record Keeping and Reporting Requirements

6.2.1 The Permittee shall record and maintain records of the amount of each fuel combusted in Boiler H 6532 (Source Code AB03) during each calendar month. The Permittee shall use the data to calculate the quantity of each fuel burned in the boiler on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the semiannual report required by Condition 6.1.4.
[Avoidance of 40 CFR Part 52.21]

6.2.2 The Permittee shall use the records required in Condition 6.2.1 to calculate monthly NO_x emissions from Boiler H 6532 (Source Code AB03). The monthly emissions shall be determined by the following equation:
[Avoidance of 40 CFR Part 52.21]

$$E = \frac{50 \text{ NG}}{2000}$$

Where:

E = NO_x emissions from the Boiler H 6532 (in tons) for the month.

NG = The amount of natural gas (in million cubic feet) burned in the Boiler H 6532 for the month.

The Permittee shall use the monthly data to calculate the total NO_x emissions from Boiler H 6532 (Source Code AB03) on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the semiannual report required by Condition 6.1.4. The Permittee shall notify the Division in writing if the NO_x emissions from Boiler H 6532 (Source Code AB03) equals or exceeds 40 tons during any consecutive 12-month period. This notification shall be postmarked by the thirtieth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit specified in Condition 3.2.5.

6.2.3 The sulfur content of the natural gas burned in the Ammonia Plant Gas Turbine (Source Code GT01) shall be monitored by the submittal of a semiannual analysis of natural gas by a semiannual test of the sulfur content of the natural gas.
[Alternate fuel sampling frequency for gas turbines subject to Subpart GG Approved by U.S. EPA Region 4; March 31, 1988]

6.2.4 No determination of the nitrogen content of the natural gas burned in the Ammonia Plant Gas Turbine (Source Code GT01) shall be required.
[Delegation of Authority to Regions for Custom Fuel Monitoring Under NSPS GG, Approved by U.S. EPA August 14, 1987]

6.2.5 The Permittee shall maintain monthly records of natural gas usage (standard cubic feet) in the Ammonia Plant Gas Turbine (Source Code GT01). The records shall be available for inspection or submittal to the Division upon request for five years.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

Title V Permit

- 6.2.6 The Permittee shall maintain the following records for each calendar month:
[Avoidance of 40 CFR Part 52.21]
- a. Amount of ammonia produced (in tons) at the Ammonia Plant.
 - b. Total quantity of natural gas and reformer gas (standard cubic feet) used in the Ammonia Plant Primary Reformer Furnace (Source Code AM01).
- 6.2.7 The Permittee shall use the records required in Conditions 6.2.5 and 6.2.6 and the emissions factors in Table 1 of this condition to determine the monthly total VOC emissions from the Ammonia Plant. The monthly emissions shall be determined by the following equation:
[Avoidance of 40 CFR Part 52.21]

Total VOC Emissions (Ammonia Plant) = (1) Ammonia Plant Gas Turbine Emissions + (2) Ammonia Plant Primary Reformer Furnace Burner Emissions + (3) Ammonia Plant Solution Regenerator Vent Emissions + (4) ACI Plant Skid Emissions + (5) Steam Stripper Condensate Emissions + (6) Urea Plant Condensate Emissions + (7) Urea Plant Compressor Emissions + (8) 6136 Process Condenser

Table 1: VOC Emissions Factors

Equipment	VOC Emissions Factor
1. Ammonia Plant Gas Turbine (Source Code GT01)	0.00210 lbs / million Btu (AP-42)
2. Ammonia Plant Primary Reformer Furnace Burners (Source Code AM01)	0.00539 lbs / million Btu (AP-42)
3. Ammonia Plant CO2 Solution Regenerator Vent (Source Code AM04)	Value from most recent test required by Condition 4.2.1.
4. ACI Plant Skids (Source Codes ACI1, ACI3, Combined old and new skids)	
5. S-6136 CO2 Vent	
6. Steam Stripper Condensate	
7. Urea Plant CO2 Compressor Condensate	
8. Urea Plant CO2 Compressor	

The Permittee shall use the monthly data to calculate the total VOC emissions from the Ammonia Plant on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the semiannual report required by Condition 6.1.4. The Permittee shall notify the Division in writing if the VOC emissions from the Ammonia Plant exceed 163 tons during any consecutive 12-month period. This notification shall be postmarked by the thirtieth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit specified in Condition 3.2.6.a.

Title V Permit

- 6.2.8 The Permittee shall use the records required in Conditions 6.2.5 and 6.2.6 and the emissions factors in Table 1 of this condition to determine the monthly total CO emissions from the Ammonia Plant. The monthly emissions shall be determined by the following equation:
[Avoidance of 40 CFR Part 52.21]

Total CO Emissions (Ammonia Plant) = (1) Ammonia Plant Gas Turbine Emissions + (2) Ammonia Plant Primary Reformer Furnace Burner Emissions + (3) Ammonia Plant Solution Regenerator Vent Emissions and ACI Plant Skid Emissions + (4) 6136 Process Condenser

Table 1: CO Emissions Factors

Equipment	CO Emissions Factor
1. Ammonia Plant Gas Turbine (Source Code GT01)	0.0300 lbs / million Btu (AP-42)
2. Ammonia Plant Primary Reformer Furnace Burners (Source Code AM01)	0.0052 lbs / million Btu (Vendor)
3. Ammonia Plant Solution Regenerator Vent (Source Code AM04), S-6136 Vent, the ACI Plant Skids (Source Codes ACI1 and ACI3), and the Urea CO2 Compressor	Value from most recent test required by Condition 4.2.2.

The Permittee shall use the monthly data to calculate the total CO emissions from the Ammonia Plant on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the semiannual report required by Condition 6.1.4. The Permittee shall notify the Division in writing if the CO emissions from the Ammonia Plant exceed 166 tons during any consecutive 12-month period. This notification shall be postmarked by the thirtieth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit specified in Condition 3.2.6.b.

- 6.2.9 The Permittee shall use the data collected in accordance with Condition 5.2.2.b to calculate the amount of urea prills produced in the C002 Urea Plant Prill Tower (Source Code U201) during each calendar month. The Permittee shall use the data to calculate the quantity of urea prills produced on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the semiannual report required by Condition 6.1.4.
[Avoidance of 40 CFR Part 52.21]
- 6.2.10 The Permittee shall maintain daily records of the tons of urea prill produced through operation of the C002 Urea Plant Prill Tower (Source Code U201).
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

Title V Permit

- 6.2.11 The Permittee shall use the records required by Condition 6.2.10, and the results of the most recent Division-approved performance tests, to calculate and record the monthly PM emissions from the C002 Urea Plant Prill Tower (Source Code U201) for each calendar month, using the following equation:
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

$$E = EF \times P$$

Where:

- E = PM emissions from the C002 Urea Plant Prill Tower (Source Code U201), in pounds per month
- EF = the average short-term PM emissions from the C002 Urea Plant Prill Tower (Source Code U201) as established during the most recent performance test, in pounds per ton urea prill produced (which shall be the average of the emission rate during that test, unless otherwise specified by the Division)
- P = the total tons of urea prill produced through the C002 Urea Plant Prill Tower (Source Code U201) determined in accordance with Condition 6.2.10, during each calendar month

- 6.2.12 The Permittee shall use the monthly PM emission rates, calculated as per Condition 6.2.11, to calculate the rolling 12-month total PM emissions from the C002 Urea Plant Prill Tower (Source Code U201) for each calendar month. The Permittee shall notify the Division, in writing, if PM emissions from the C002 Urea Plant Prill Tower (Source Code U201) exceed 5.7 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the facility intends to maintain compliance with the emission limitations specified in Condition 3.2.10. [PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]
- 6.2.13 The Urea Pastille Plant Rotoformer (Source Code P03) may consist of any combination of standard rotoformers and rotoformers with high-speed heads, however the plant shall not consist of, at any one time, more than the equivalent of 10 standard rotoformers. For the purposes of this condition one high-speed rotoformer is equivalent to two standard rotoformers. The Permittee shall provide written notification to the Division, within 7 days, of any change to the type or number of rotoformers installed at the plant. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.14 For Group 2 wastewater streams complying with the provisions of 40 CFR 63.146 and 63.147 for the C002 Urea Plant, the Permittee shall keep the records below in a readily accessible location.
[40 CFR 63.146(b)(1) and 147(b)(8)]
- a. Process unit identification and description of the process unit.
 - b. Stream identification code.

Title V Permit

- c. Concentration of Table 8 and 9 (40 CFR 63 Subpart FFFF) compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration.
 - d. Flow rate in liters per minute.
- 6.2.15 The Permittee shall keep any applicable records listed in 40 CFR 63.2525 for the operation of the C002 Urea Plant.
[40 CFR 63.2525]
- 6.2.16 The Permittee shall submit semiannual compliance reports as specified in 40 CFR 63.2450(m) and 40 CFR 63.2520(b) and (e) for the C002 Urea Plant. The compliance reports shall be submitted by August 31 of each year for the semiannual reporting period of January 1 through June 30 of each year or by February 28 of each year for the semiannual reporting period of July 1 through December 31 of each year.
[40 CFR 63.2520(b) and (e)]
- 6.2.17 The Permittee shall comply with the recordkeeping requirements of 40 CFR 65 Subpart F for the regulated sources in the C002 Urea Plant in one recordkeeping system. The recordkeeping system shall identify each record by regulated source and the type of program being implemented (for example, monthly monitoring, quality improvement) for each type of equipment. The records required are summarized in Conditions 6.2.18 and 6.2.19.
[40 CFR 65.119(a)]
- 6.2.18 For general equipment leak records for equipment at the C002 Urea Plant subject to 40 CFR 65 Subpart F, the Permittee shall maintain the following records:
[40 CFR 65.119(b)]
 - a. The Permittee shall keep general and specific equipment identification if the equipment is not physically tagged and the Permittee is electing to identify the equipment subject to 40 CFR Subpart F through written documentation such as a log or other designation.
[40 CFR 65.119(b)(1)]
 - b. The Permittee shall keep a written plan as specified in Condition 3.3.17.d for any equipment that is designated as unsafe- or difficult-to-monitor.
[40 CFR 65.119(b)(2)]
 - c. The Permittee shall maintain a record of the identity and an explanation as specified in Condition 3.3.18 for any equipment that is designated as unsafe to repair.
[40 CFR 65.119(b)(3)]
 - d. The Permittee shall maintain a record of the identity of compressors operating with an instrument reading of less than 500 parts per million as specified in Condition 3.3.19.
[40 CFR 65.119(b)(4)]

Title V Permit

- e. The Permittee shall keep records associated with the determination that equipment is in heavy liquid service as specified in Condition 3.3.20.
[40 CFR 65.119(b)(5)]
 - f. The Permittee shall keep records for leaking equipment as specified in Condition 3.3.21.
[40 CFR 65.119(b)(6)]
 - g. The Permittee shall keep records for leak repair as specified in Condition 3.3.22.e and records for delay of repair as specified in Condition 3.3.22.c.
[40 CFR 65.119(b)(7)]
 - h. For instrument response factor criteria determinations performed as specified in Condition 4.2.5, the Permittee shall maintain a record of an engineering assessment that identifies the representative composition of the process fluid. The assessment shall be based on knowledge of the compounds present in the process, similarity of response factors for the materials present, the range of compositions encountered during monitoring, or other information available to the owner or operator.
[40 CFR 65.119(b)(8)]
 - i. The Permittee shall keep records of the detection limit calibration as specified in Condition 4.2.5.
[40 CFR 65.119(b)(9)]
- 6.2.19 For specific equipment leak records for equipment at the C002 Urea Plant subject to 40 CFR 65 Subpart F, the Permittee shall maintain the following records:
[40 CFR 65.119(c)]
- a. For valves, the Permittee shall maintain the following records:
[40 CFR 65.119(c)(1)]
 - i. The monitoring schedule for each process unit as specified in Condition 3.3.23.a.iii.E.
[40 CFR 65.119(c)(1)(i)]
 - ii. (If applicable) The valve subgrouping records as specified in Condition 3.3.23.e.iv.
[40 CFR 65.119(c)(1)(ii), 40 CFR 65.106(b)(4)(iv)]
 - b. For pumps, the Permittee shall maintain the following records:
[40 CFR 65.119(c)(2)]
 - i. Documentation of pump visual inspections as specified in Condition 3.3.24.a.iv.
[40 CFR 65.119(c)(2)(i)]
 - ii. Documentation of dual mechanical seal pump visual inspections as specified in Condition 3.3.24.d.v.
[40 CFR 65.119(c)(2)(ii)]

Title V Permit

- iii. For the criteria as to the presence and frequency of drips for dual mechanical seal pumps, records of the design criteria and explanations and any changes and the reason for the changes, as specified in Condition 3.3.24.d.i.
[40 CFR 65.119(c)(2)(iii)]
 - c. For connectors, the Permittee shall maintain the records specified in Condition 3.3.25.b.ii.E, which identify a monitoring schedule for each process unit.
[40 CFR 65.119(c)(3)]
 - d. For pressure relief devices in gas/vapor or light liquid service (if applicable), the Permittee shall keep records of the dates and results of monitoring following a pressure release, or the date the rupture disk is replaced as specified in Condition 3.3.26.
[40 CFR 65.119(c)(5)]
 - e. For a pump QIP program, the Permittee shall maintain the following records:
[40 CFR 65.119(c)(7)]
 - i. Individual pump records as specified in Condition 3.3.28.c.i.
[40 CFR 65.119(c)(7)(i)]
 - ii. Trial evaluation program documentation as specified in Condition 3.3.28.c.v.
[40 CFR 65.119(c)(7)(ii)]
 - iii. Engineering evaluation documenting the basis for judgment that superior emission performance technology is not applicable as specified in Condition 3.3.28.c.v.
[40 CFR 65.119(c)(7)(iii), 40 CFR 65.116(d)(6)(vi)]
 - iv. Quality assurance program documentation as specified in Condition 3.3.28.c.vi.
[40 CFR 65.119(c)(7)(iv)]
 - v. QIP records as specified in Condition 6.2.20.
[40 CFR 65.119(c)(7)(v)]
- 6.2.20 In addition to records required by Condition 3.3.28.c.i, the Permittee shall maintain the following records for the period of the Quality Improvement Program (QIP) for C002 Urea Plant equipment subject to 40 CFR 65 Subpart F as follows:
[40 CFR 65.116(e)]
- a. When using a pump quality improvement program, record the following information:
[40 CFR 65.116(e)(1)]
 - i. The rolling average percent leaking pumps.
 - ii. Documentation of all inspections conducted and any recommendations for design or specification changes to reduce leak frequency.

Title V Permit

- iii. The beginning and ending dates while meeting the requirements of Condition 3.3.28.c.
- b. If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.
[40 CFR 65.116(e)(2)]
- c. Records of all analyses required in Condition 3.3.28.c. The records will include the following information:
[40 CFR 65.116(e)(3)]
 - i. A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions, and the maintenance practices.
 - ii. The reasons for rejecting specific candidate superior emission performing pump technology from performance trials.
 - iii. The list of candidate superior emission performing valve or pump technologies and documentation of the performance trial program items.
 - iv. The beginning date and duration of performance trials of each candidate superior emission performing technology.
- d. All records documenting the quality assurance program for pumps including records indicating that all pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance.
[40 CFR 65.116(e)(4)]
- e. Records documenting compliance with the 20 percent or greater annual replacement rate for pumps.
[40 CFR 65.116(e)(5)]
- f. Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.
[40 CFR 65.116(e)(6)]

- 6.2.21 The Permittee shall submit semiannual reports as specified in 40 CFR 65.5. The reports shall be submitted by August 31 of each year for the semiannual reporting period of January 1 through June 30 of each year or by February 28 of each year for the semiannual reporting period of July 1 through December 31 of each year. The report shall include the following information:
[40 CFR 65.120(b)]
- a. For the equipment specified in paragraphs a.i. through a.v. of this condition, report in a summary format by equipment type the number of components for which leaks were detected, and for valves, pumps, and connectors show the percent leakers and the total number of components monitored. Also include the number of leaking components that were not repaired as required by Condition 3.3.22.a, and for valves identify the number of components that are determined to be nonreparable.
[40 CFR 65.120(b)(1)]
 - i. Valves in gas/vapor service and in light liquid service as specified in Condition 3.3.23.
[40 CFR 65.120(b)(1)(i)]
 - ii. Pumps in light liquid service as specified in Condition 3.3.24.
[40 CFR 65.120(b)(1)(ii)]
 - iii. Connectors in gas/vapor service and in light liquid service as specified in Condition 3.3.25.
[40 CFR 65.120(b)(1)(iii)]
 - iv. (If applicable) Agitators in gas/vapor service and in light liquid service.
[40 CFR 65.120(b)(1)(iv)]
 - v. (If applicable) Compressors.
[40 CFR 65.120(b)(1)(v)]
 - b. Where any delay of repair is utilized as specified in Condition 3.3.22, report that delay of repair has occurred and report the number of instances of delay of repair.
[40 CFR 65.120(b)(2)]
 - c. (If applicable) Report the valve subgrouping information as specified in Condition 3.3.23.e.iv.
[40 CFR 65.120(b)(3)]
 - d. For pressure relief devices in gas/vapor service as specified in Condition 3.3.26 and for compressors that are to be operated at a leak detection instrument reading of less than 500 parts per million, report the results of all monitoring to show compliance conducted within the semiannual reporting period.
[40 CFR 65.120(b)(4)]

Title V Permit

- e. (If applicable) Report the initiation of a monthly monitoring program for valves as specified in Condition 3.3.23.a.iii.
[40 CFR 65.120(b)(5)]
 - f. (If applicable) Report the initiation of a quality improvement program for pumps as specified in Condition 3.3.28.
[40 CFR 65.120(b)(6)]
 - g. Where the alternative means of emissions limitation for batch processes is utilized, report all the applicable information.
[40 CFR 65.120(b)(8)]
 - h. Report any revisions to items reported in the Initial Compliance Status Report if the method of compliance has changed since the last report.
[40 CFR 65.120(b)(9)]
- 6.2.22 The Permittee shall maintain records of NO_x emissions from the operation of the C002 Nitric Acid Plant (Source Code N201). The Permittee shall calculate emissions using the CEMS data that is collected in accordance with Condition 5.2.1.a, the conversion factor determined in accordance with Condition 4.2.8, and the production data collected in accordance with Condition 5.2.2.c. The Permittee shall calculate monthly NO_x emission totals by summing the hourly NO_x emission totals.

The Permittee shall use the monthly data to calculate the total NO_x emissions from the C002 Nitric Acid Plant (Source Code N201) on a 12-month basis. A new 12-month total shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month totals calculated during each reporting period with the quarterly report required by Condition 6.1.4. The Permittee shall notify the Division in writing if the NO_x emissions from the C002 Nitric Acid Plant exceed 507 tons during any consecutive 12-month period. This notification shall be postmarked by the thirtieth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit specified in Condition 3.2.12.
[40 CFR 52.21]

Title V Permit

- 6.2.23 The Permittee shall maintain records of CO emissions from the operation of the C002 Nitric Acid Plant (Source Code N201). The Permittee shall calculate the emissions rate (lbs/tons) by multiplying the CEMS data that is collected for each hour in accordance with Condition 5.2.1.b and the conversion factor determined in accordance with Condition 4.2.8. The Permittee shall calculate the CO emission rate for each hour by averaging the hourly CO emission rates for each hour that the C002 Nitric Acid Plant was operated that month. The monthly emission rate shall be determined by summing the hourly CO emission rates.

The Permittee shall use the monthly average CO emission rate to calculate the rate on a 12-month basis. A new 12-month average shall be calculated at the end of each calendar month. The Permittee shall submit the monthly and 12-month emission rates calculated during each reporting period with the semiannual report required by Condition 6.1.4. The Permittee shall notify the Division in writing if the average CO emission rate from the C002 Nitric Acid Plant exceeds 30.0 pounds per ton of 100% nitric acid produced during any consecutive 12-month period. This notification shall be postmarked by the thirtieth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit specified in Condition 3.2.13.

[40 CFR 52.21]

- 6.2.24 For the Synloop Startup Heater (Source Code AB04), Boiler H 6513 (Source Code AB01), and Boiler H 6532 (Source Code AB03) as subject to 40 CFR 63 Subpart DDDDD, the Permittee may submit a 5-year compliance report, as applicable, as specified in paragraphs a. through d. of this condition instead of a semiannual compliance report.

[40 CFR 63.7550(b)]

- a. The first compliance report must cover the period beginning on January 31, 2016 and ending on December 31, 2021.
- b. The first 5-year compliance report must be postmarked or submitted no later than January 31, 2022.
- c. 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31.
- d. 5-year compliance reports must be postmarked or submitted no later than January 31.

- 6.2.25 For the Synloop Startup Heater (Source Code AB04), Boiler H 6513 (Source Code AB01), and Boiler H 6532 (Source Code AB03) as subject to 40 CFR 63 Subpart DDDDD, the Permittee must submit a compliance report with the information in paragraphs a. through f. of this condition.

[40 CFR 63.7550(c)]

- a. Company and Facility name and address.
- b. Process unit information, emissions limitations, and operating parameter limitations.
- c. Date of report and beginning and ending dates of the reporting period.

Title V Permit

- d. The total operating time during the reporting period.
 - e. Include the date of the most recent tune-up for the Synloop Startup Heater (Source Code AB04) subject to only the requirement to conduct a 5-year tune-up according to Condition 3.3.4. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
 - f. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- 6.2.26 For the Synloop Startup Heater (Source Code AB04), Boiler H 6513 (Source Code AB01), and Boiler H 6532 (Source Code AB03) as subject to 40 CFR 63 Subpart DDDDD, the Permittee must keep records according to paragraphs a., b., and c. of this condition.
[40 CFR 63.7555(a)]
- a. A copy of each notification and report that the Permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the Permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
 - c. A copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the Synloop Startup Heater (Source Code AB04) was operating.
- 6.2.27 The Permittee shall monitor the emissions increase of NO_x, VOC, PM, PM₁₀, PM_{2.5}, CO, and SO₂ associated with the turnaround project (Application TV-40593) and calculate and maintain a record of the annual emissions increase from the ammonia plant turbine reformer/regenerator (Stacks 12, 15, 16, and 17) and Boiler H 6531 (Stack 21), in tons per year on a calendar year basis for a period of ten years following resumption of regular operations after the turnaround project. These records shall be retained for a period of five years past the end of each calendar year.
[391-3-1-.02(7)(b)15(i)(III)]

Title V Permit

- 6.2.28 The Permittee shall submit a report to the Division within 60 days after the end of each calendar year during which records must be generated under 391-3-1-.02(7)(b)15(i)(III), and (IV) setting out the ammonia plant turbine reformer/regenerator (Stacks 12, 15, 16, and 17) and Boiler 6531 (Stack 21) annual emissions of NO_x, VOC, PM, PM₁₀, PM_{2.5}, CO, and SO₂ and, if applicable, the ammonia plant turbine reformer/regenerator (Stacks 12, 15, 16, and 17) and Boiler H 6531 (Stack 21) actual increase in emissions due to demand growth during the calendar year that preceded submission of the report for the project specified in Condition No. 6.2.27. The Permittee shall inform the Division in writing if the actual emission increase of NO_x, VOC, PM, PM₁₀, PM_{2.5}, CO, and SO₂ from the ammonia plant turbine reformer/regenerator (Stacks 12, 15, 16, and 17) and Boiler H 6531 (Stack 21) exceed the notification levels listed below:
[391-3-1-.02(7)(b)15(i)(V)]

Pollutant	Actual Emission Increase/Decrease (ton/yr)
CO	0.6
NO _x	(14.3)
VOC	(11.2)
SO ₂	0.01
PM ₁₀	0.1
PM _{2.5}	0.1

- 6.2.29 Before beginning the actual modification (addition of a medium pressure section to the Urea Plant) as described in Application 42201, the Permittee shall document and maintain a record of the following information:
[391-3-1-.02(7)(b)15.(i)(I)]
- Description of project;
 - Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emission, the projected actual emissions, the amount of emissions excluded under 40 CFR 52.21(b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
 - The records required by this Condition shall be retained for a period of 10 years following resumption of regular operations after the change, or for a period of 15 years following resumption of regular operations after the change if the project increased the design capacity of or potential to emit of a regulated NSR pollutant at such emissions unit.

- 6.2.30 For the modification described in Condition 6.2.29, the Permittee shall monitor the emissions of any regulated pollutant from the facility that could increase as a result of the modification and calculate and maintain a record of the annual emissions, in tons-per-year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of ten years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit. These records shall be retained for a period of five years past the end of each calendar year. If the Permittee is required to or elects to exclude emissions associated with startups, shutdowns, and/or malfunctions from estimations of projected actual emissions for PSD applicability purposes as allowed by Georgia Rule 391-3-1-.02(7)(a)2.(ii)(II)II, the Permittee may exclude such emissions from the calculation of annual emissions.
[391-3-1-.02(7)(b)15.(i)(III)]
- 6.2.31 For the modification described in Condition 6.2.29, if the Permittee excluded demand growth emissions from the projected actual emissions for a project and that project is subject to the requirements of Georgia Rule 391-3-1-.02(7)(a)2.(ii)(II)III.A.(B), the Permittee shall calculate the actual increase in emissions due to demand growth, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. These records shall be retained for a period of 5 years past the end of each calendar year.
[391-3-1-.02(7)(b)15.(i)(IV)]
- 6.2.32 For the modification described in Condition 6.2.29, the Permittee shall submit a report to the Division within 60 days after the end of each calendar year during which records must be generated under Conditions 6.2.30 and 6.2.31 detailing the annual emissions, and if applicable, the actual increase in emissions due to demand growth during the calendar year that preceded submission of the report.
[391-3-1-.02(7)(b)15.(i)(V)]
- 6.2.41 The Permittee shall provide written notification to the Division of the date on which the project described in Condition 6.2.29 commences and the date on which the project is completed. Such notifications shall be submitted in writing within 30 days of the dates of record.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

PART 7.0 OTHER SPECIFIC REQUIREMENTS**7.1 Operational Flexibility**

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and 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). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

- a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.
- b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

- a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.
- b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the Permit shield in Condition 8.16.1.
- d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

Title V Permit

- 7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act.
[Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements

[White Paper #2]

Not Applicable.

7.4 Insignificant Activities

(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

7.5 Temporary Sources

[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable.

7.6 Short-term Activities

(see Form D5 “Short Term Activities” of the Permit application and White Paper #1)

- 7.6.1 The Permittee shall maintain records of the duration and frequency of the following Short-term Activities:
[391-3-1-.02(2)(a)1]

Short Term Activity Description	Duration (each occurrence)	Frequency (annually)	Applicable Standards
AM02 - Low Temperature Shift Converter (PV-1207)	10 hours	5	None
AM03 - CO2 Absorber Overhead Separator (CO2 Absorber Overhead Separator, PV-1401)	10 hours	5	None
Ammonia - PV-1501 (Suction to Syngas Vent)	10 hours	5	None
Ammonia - PV-1610 (Aqua Stripper Startup Vent)	10 hours	5	None
C001 Nitric Acid Plant, 2FEV903 (Anti-surge stack)	3 hours	3	391-3-1-.02(2)i
C001 Nitric Acid Plant, D201 (Startup vent)	3 hours	3	391-3-1-.02(2)i
C002 Nitric Acid Plant ASCV-123, 124 (Antisurge during startup)	3 hours	6	NSPS - Subpart G
C002 Nitric Acid Plant, PV-234 (Shutdown Vent)	3 hours	6	NSPS - Subpart G
Urea Plant Manual Vent	0.5 hours	5	None

7.7 Compliance Schedule/Progress Reports

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None Applicable.

7.8 Emissions Trading

[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable.

7.9 Acid Rain Requirements

Not Applicable.

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)

[391-3-1-.02(10)]

- 7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.
- a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.
 - b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:
 - i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
 - ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
 - iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
 - iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)
 - c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

Title V Permit

- d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175
- e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*Submit (information for establishing an account can be found at www.epa.gov/rmp/rmpsubmit). Electronic Signature Agreements should be mailed to:

MAIL

**Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038**

COURIER & FEDEX

**Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033**

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

- 7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

Title V Permit

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: “MVAC-like appliance” is defined in 40 CFR 82.152.]
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 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 40 CFR 82.166.
- 7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the 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 air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
2873-245-0002-V-03-0	09/11/2012
2873-245-0002-V-03-1	06/13/2013
2873-245-0002-V-03-2	11/17/2013
2873-245-0002-V-03-3	11/26/2014
2873-245-0002-V-03-4	02/11/2016
2873-245-0002-V-03-5	05/5/2016
2873-245-0002-V-03-6	02/13/2018
2873-245-0002-V-03-7	TBD

7.13 Pollution Prevention

None applicable.

7.14 Specific Conditions

None applicable.

PART 8.0 GENERAL PROVISIONS**8.1 Terms and References**

- 8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.
- 8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence.
[391-3-1-.02(2)(a)2]

8.2 EPA Authorities

- 8.2.1 Except as identified as “State-only enforceable” requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]
- 8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, “Inspections, Monitoring, and Entry.”
[40 CFR 70.6(f)(3)(iv)]
- 8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, “Emergency Powers.”
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

- 8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]
- 8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]
- 8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

- 8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

- 8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the “Procedures for Calculating Air Permit Fees.”
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

- 8.5.1 This Permit shall remain in effect for five (5) years from the issuance date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]
- 8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]
- 8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

- 8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and 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 Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

- 8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

- 8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

**Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908**

- 8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

**Air and EPCRA Enforcement Branch – U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104**

- 8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

- 8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

- 8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division.
[391-3-1-.03(10)(c)5]
- 8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request 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 shall also furnish to the Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

- 8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

- 8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]
- a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be 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 has been extended under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]
 - b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)
 - c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]
 - d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]
- 8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]

- 8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (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.
[391-3-1-.03(10)(e)6(iii)]
- 8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]
- 8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.
- 8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

- 8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

- 8.13.1 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 noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]
- 8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:
- [391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]
- a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. The Permitted facility was at the time of the emergency 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 in the Permit; and
 - d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]
- 8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

- a. The identification of each term or condition of the Permit that is the basis of the certification;
- b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c. below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;
- c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and

- e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

- a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]
 - i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
 - iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.
- b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties.
[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

- a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]
- b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]
- c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

- a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]
 - i. The best operational practices to minimize emissions are adhered to;
 - ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and
 - iii. The duration of excess emissions is minimized.
- b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[391-3-1-.02(2)(a)7(ii)]
- c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

8.15 Circumvention

State Only Enforceable Condition.

- 8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.16 Permit Shield

- 8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]
- 8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

- 8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition.

- 8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia's Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

- 8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

- 8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]
- 8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

- 8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

- 8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

- 8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

- a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$$E = 4.1P^{0.67}; \text{ for process input weight rate up to and including 30 tons per hour.}$$

$$E = 55P^{0.11} - 40; \text{ for process input weight rate above 30 tons per hour.}$$

- b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$$E = 4.1P^{0.67}$$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

8.22 Fugitive Dust

[391-3-1-.02(2)(n)]

- 8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;
- d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and
- e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied:
[391-3-1-.02(2)(ff)1]

- a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,
- b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,
- c. If the solvent volatility is 0.60 psi or greater measured at 100 °F, or if the solvent is heated above 120 °F, then one of the following control devices must be used:
 - i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or
 - ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or
 - iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.
- d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and
- e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

- 8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators”, in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]
- a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.
 - b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.
- 8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators”, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
- 8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators” which are individually large enough to be visible to the unaided eye.
- 8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators” unless:
- a. It is a multiple chamber incinerator;
 - b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800°F; and
 - c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500°F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

- 8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) “Volatile Organic Liquid Handling and Storage” is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

- 8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

- 8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “General Provisions” and 40 CFR 60 Subpart IIII – “Standard of Performance for Stationary Compression Ignition Internal Combustion Engines.” Such requirements include but are not limited to:
[40 CFR 60.4200]
- a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart IIII.
 - b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart IIII.
 - c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart IIII.
 - d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart IIII. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
 - e. Maintain any records in accordance with Subpart IIII
 - f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture. [391-3-1-.02(6)(b)]
- 8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “General Provisions” and 40 CFR 60 Subpart JJJJ - “Standard of Performance for Stationary Spark Ignition Internal Combustion Engines,” for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230]

- 8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart ZZZZ - “National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”

For diesel-fired emergency generator engines defined as “existing” in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for ≤500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements (if applicable) include but are not limited to:
[40 CFR 63.6580]

- a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.
- b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.
- c. Conduct the following in accordance with Subpart ZZZZ.
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first
 - ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.
- d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
- e. Maintain any records in accordance with Subpart ZZZZ
- f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

8.28 Boilers and Process Heaters

- 8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart JJJJJ - “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.”
[40 CFR 63.11193]

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

- 8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart DDDDD - “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.”
[40 CFR 63.7480]

Attachments

- A. List of Standard Abbreviations and List of Permit Specific Abbreviations
- B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
- C. List of References

PCS Nitrogen Fertilizer L.P. – Augusta Plant

PCS Nitrogen Fertilizer L.P. – Augusta Plant

PCS Nitrogen Fertilizer L.P. – Augusta Plant

ATTACHMENT A

List Of Standard Abbreviations

AIRS	Aerometric Information Retrieval System
APCD	Air Pollution Control Device
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BTU	British Thermal Unit
CAAA	Clean Air Act Amendments
CEMS	Continuous Emission Monitoring System
CERMS	Continuous Emission Rate Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
dscf/dscm	Dry Standard Cubic Foot / Dry Standard Cubic Meter
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
gr	Grain(s)
GPM (gpm)	Gallons per minute
H ₂ O (H ₂ O)	Water
HAP	Hazardous Air Pollutant
HCFC	Hydro-chloro-fluorocarbon
MACT	Maximum Achievable Control Technology
MMBtu	Million British Thermal Units
MMBtu/hr	Million British Thermal Units per hour
MVAC	Motor Vehicle Air Conditioner
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x (NO _x)	Nitrogen Oxides
NSPS	New Source Performance Standards
OCGA	Official Code of Georgia Annotated

[illegible]

List of Permit Specific Abbreviations

AN	Ammonium Nitrate
CO2	Carbon Dioxide
NSCR	Non-Selective Catalytic Reduction

SCR	Selective Catalytic Reduction

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	1
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	1
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a “designated facility” as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:	
	i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	
	4. Stationary engines burning:	6
	i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	1
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	2
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	8
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	1
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour:	
	i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that:	5
	i) Activity is performed indoors; &	
	ii) No significant fugitive particulate emissions enter the environment; &	
	iii) No visible emissions enter the outdoor atmosphere.	
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	1
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	46
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	120
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	101

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Ammonia Plant Fugitive	1
Ammonia Plant - Emergency Flare	1
C001 Acid Plant - Acid Absorption Coolers	1
C001 Acid Plant - Converter Fugitive Leaks	1
C001 AN Plant Noncondensable Vent	1
C002 Acid Plant - Converter Fugitive Leaks	1
C002 Acid Plant - Drip Pan Fugitives	1
Nitric Acid Shipping Storage Tanks, TK-6627, TK-6628	2
C002 AN Plant Noncondensable Vent	1
C002 Urea Plant - High Pressure Scrubber Vent (HV 7103 Vent)	1
C002 Urea Plant - Relief Valve Vent Stack - C-6722 (LP Scrubber)	2
C002 Urea Plant Fugitives	1
Firewater Pump Engines	2
Emergency Stormwater Pump Engine	1
Emergency Generator Engines (Security and Administration Buildings)	2
Fugitives from Truck/Rail Loading and Unloading	1
River Water Pump Engine	1
Urea and Other Miscellaneous Urea Blends Storage Tanks	7
Urea Cooler and Product Conveyor	1
Urea Pastille Ventilation	2

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

ATTACHMENT B (continued)

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
C001 AN Plant ATH Day Tank, TK-311 (Source Code 1AN1)	1	Yes	Yes	No
C001 ATH Storage Tank, TK-6317 (Source Code 1AN2)	1	Yes	Yes	No
C001 AN Plant Fines Conveyor CV-411-MXD-403 (Source Code 1AN3)	1	No	No	Yes
C001 AN Plant Product Conveyor to Warehouse (Source Code 1AN4)	1	No	No	Yes
C001 AN Conveyor, CV-633 (Source Code 1ANL1)	1	No	No	Yes
C001 AN Warehouse (Source Code 1ANL2)	1	No	No	Yes
C002 AN Plant ATH Day Tanks, TK-6341, TK-6344 (Source Code 2AN1)	2	Yes	Yes	No
C002 AN Plant AT 725 Tanks, TK-6632, TK-6634 (Source Code 2AN2)	2	No	No	Yes
C002 AN Plant Conveyors to C001 Warehouse (Source Code 2AN3)	1	No	No	Yes
ACI Water Separators (Source Code ACI3)	2	Yes	Yes	No
C002 AN Warehouse (Source Code 2ANL1)	1	No	No	Yes
C002 AN Conveyor to Rail Loading, CV-6388 (Source Code 2ANL2)	1	No	No	Yes
C002 AN Conveyor to Rail Loading, CV-6393 (Source Code 2ANL3)	1	No	No	Yes
C002 AN Conveyor to Truck Loading, CV-6389 (Source Code 2ANL4)	1	No	No	Yes
Truck Loading (Source Code ANL1)	1	No	No	Yes
AN Prill Rail Loading, 3 Stations (Source Code ANL2)	3	No	No	Yes
Sump for Rail Loading, P-6647 (Source Code ANL3)	1	No	No	Yes
Cooling Towers (Source Code CT01)	7	No	No	Yes
Dissolve Tank Bin (1 Unit) (Source Code DT01)	1	No	No	Yes
Grace Construction Products Lime Handling (Source Code GRCE)	3	Yes	Yes	No
Dome Storage Unit Urea Pastille Plant (Source Code P04)	1	Yes	Yes	No
Urea Bag Warehouse (Source Code UL01)	1	No	No	Yes
Urea Truck Loading (Source Code UL02)	1	No	No	Yes
Maxpack Loading (Source Code UL03)	1	No	No	Yes
Urea Prill Rail Loading, 1 Station (Source Code UL04)	1	No	No	Yes
Urea Rail Conveyor, CV-6783 (Source Code UL05)	1	No	No	Yes
Urea Transfer Conveyor, CV-6796 (Source Code UL06)	1	No	No	Yes
Urea Truck Belt, CV-6795 (Source Code UL07)	1	No	No	Yes
Urea 50# Bag Tanks, BN-6781, 6782 (Source Code UL08)	2	No	No	Yes
Urea Rail Loading, BN-6421 (Source Code UL09)	1	No	No	Yes
Urea Truck Loading Bin, BN-6411 (Source Code UL10)	1	No	No	Yes
Urea Bag Conveyor, CV-6791 (Source Code UL11)	1	No	No	Yes
Urea Reclaim Conveyor, CV-6782 (Source Code UL12)	1	No	No	Yes
Urea Fines Rail-loading Screw Conveyor, CV-6792 (Source Code UL13)	1	No	No	Yes

Title V Permit

PCS Nitrogen Fertilizer L.P. – Augusta Plant

Permit No.: 2873-245-0002-V-04-0

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
Urea Elevator Structure (Source Code UL14)	1	No	No	Yes
Urea Solutions Rail Loading (3 Load Stations) (Source Code UL15)	1	No	No	Yes
Urea Prill Storage Tension Structure, X-6780 (Source Code UP01)	1	No	No	Yes
Urea Dust Washer, CY-6742 (Source Code UP02)	1	Yes	Yes	No
Urea Crystal Conveyors CV-6746, CV-6747 (Source Code UP03)	2	No	No	Yes
Urea Truck Loading Station (Source Code UP04)	1	No	No	Yes
Urea Prill Conveyor, CV-6698 (Source Code UP05)	1	No	No	Yes
Solutions (NH3, HNO3, Uran, AN) Rail Loading (8 Stations) (Source Code SL01)	1	No	No	Yes
Recovered Ammonia Rail Loading (1 Station) (Source Code SL02)	1	No	No	Yes

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d). Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	

ATTACHMENT C

LIST OF REFERENCES

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.
2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.
3. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.*
4. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees.*
5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/ap42/index.html.
6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/software/tanks/index.html.
7. The Clean Air Act (42 U.S.C. 7401 et seq).
8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).
9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).