0570029
Jim McDonald
Recd Reg: 2/18/03
Day 60 = 4/19/03
Issued/Tampa 11/19/03

D.E.P.
FEB 18 2003
SOUTHWEST DISTRICT
TAMPA

TITLE V RENEWAL AND REVISION APPLICATION NITRAM, INC. TAMPA, FLORIDA

RECEIVED
FEB 21 2003
BUREAU OF AIR REGULATION

Prepared For:
Nitram, Inc.
5321 Hartford Street
Tampa, Florida 33619

Prepared By:
Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

February 2003
0237636

DISTRIBUTION:
4 Copies – FDEP
2 Copies – Nitram, Inc.
2 Copies – Golder Associates Inc.

Department of Environmental Protection

Division of Air Resources Management

D.E.P. FEB 18 2003 SOUTHWEST DISTRICT TAMPA

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **Nitram, Inc.**	
2. Site Name: **Nitram, Inc.** 0570029 - 008 - AV	
3. Facility Identification Number: **050029** [ ] Unknown	
4. Facility Location: **Nitram, Inc.** Street Address or Other Locator: **5321 Hartford Street** City: **Tampa** County: **Hillsborough** Zip Code: **33619**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Daniel E. Ross, P.E., President and COO**			
2. Application Contact Mailing Address: Organization/Firm: **Nitram, Inc.** Street Address: **P.O. Box 2968** City: **Tampa**	State: **FL**	Zip Code: **33601-2968**	
3. Application Contact Telephone Numbers: Telephone: **(813) 626-2181**	Fax: **(813) 623-6080**		

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

[ ] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number:_____

[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number:_____

Operation permit number to be revised:_____

[X] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: 0570029-007-AC

[X] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised:_____

Reason for revision Renewal of Title V

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Daniel E. Ross, Manager, President and COO
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **Nitram, Inc.**
   Street Address: **P.O. Box 2968**
   City: **Tampa** State: **FL** Zip Code: **33601-2968**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(813) 626-2181** Fax: **(813) 623-6080**
4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

   Daniel E. Ross — Signature
   2/17/03 — Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Scott A. McCann**
   Registration Number: **54172**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Golder Associates Inc.***
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers:
   Telephone: **(352) 336 - 5600** Fax: **(352) 336 - 6603**

*** Board of Professional Engineers Certificate of Authorization #00001670**

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [X], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Scott A McC — 2/17/03

Signature — Date

(seal)

* Attach any exception to certification statement.

SAM 2/17/03

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
003	B&W Package Boiler, Gas Fired		
004	FW Package Boiler, Gas Fired		
006	Ammonium Nitrate Prill Tower No. 2		
007	Nitric Acid Plant with 2 Stacks		
008	Kaolin Clay Handling and Storage w/Flex-Kleen Baghouse		
010	MgO Silo w/Griffin Environmental Baghouse (Silo #1)		
011	MgO Day Tank w/Griffin Environmental Baghouse (Silo #2)		
012	Prill Rotary Drums w/Wet Cyclones and Peabody Scrubber		
013	Gas Fired Hurst Package Boiler		
100	Facility-wide Unregulated Emissions Units/Activities		

Application Processing Fee

Check one: [ ] Attached - Amount: $: _____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:
2. Projected or Actual Date of Commencement of Construction:
3. Projected Date of Completion of Construction:

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **17** East (km): **363.50** North (km): **3089.00**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **27 / 55 / 13** Longitude (DD/MM/SS): **82 / 23 / 50**			
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **28**	6. Facility SIC(s):
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: **Daniel E. Ross, President and COO**
2. Facility Contact Mailing Address: Organization/Firm: **Nitram, Inc.** Street Address: **P.O. Box 2968** City: **Tampa** State: **FL** Zip Code: **33601-2968**
3. Facility Contact Telephone Numbers: Telephone: **(813) 626-2181** Fax: **(813) 623-6080**

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source? [ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?
5. [ ] Synthetic Minor Source of HAPs?
6. [X] One or More Emissions Units Subject to NSPS?
7. [ ] One or More Emission Units Subject to NESHAP?
8. [ ] Title V Source by EPA Designation?
9. Facility Regulatory Classifications Comment (limit to 200 characters): **The nitric acid plant is subject to the NSPS for nitric acid plants – 40 CFR 60 Subpart G.**

List of Applicable Regulations

See Title V Core List, Attachment NI-FI-A

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	A				Particulate Matter – Total
PM_{10}	A				Particulate Matter – PM_{10}
SO_2	B				Sulfur Dioxide
NO_X	A				Nitrogen Oxides
NH_3	A				Ammonia
CO	A				Carbon Monoxide

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID: NI-FI-C1 [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: NI-FI-C2 [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: NI-FI-C3 [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: NI-FI-C4 [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID: _____ [X] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [X] Attached, Document ID: NI-FI-C8 [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [X] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [X] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID:_____[X] Not Applicable

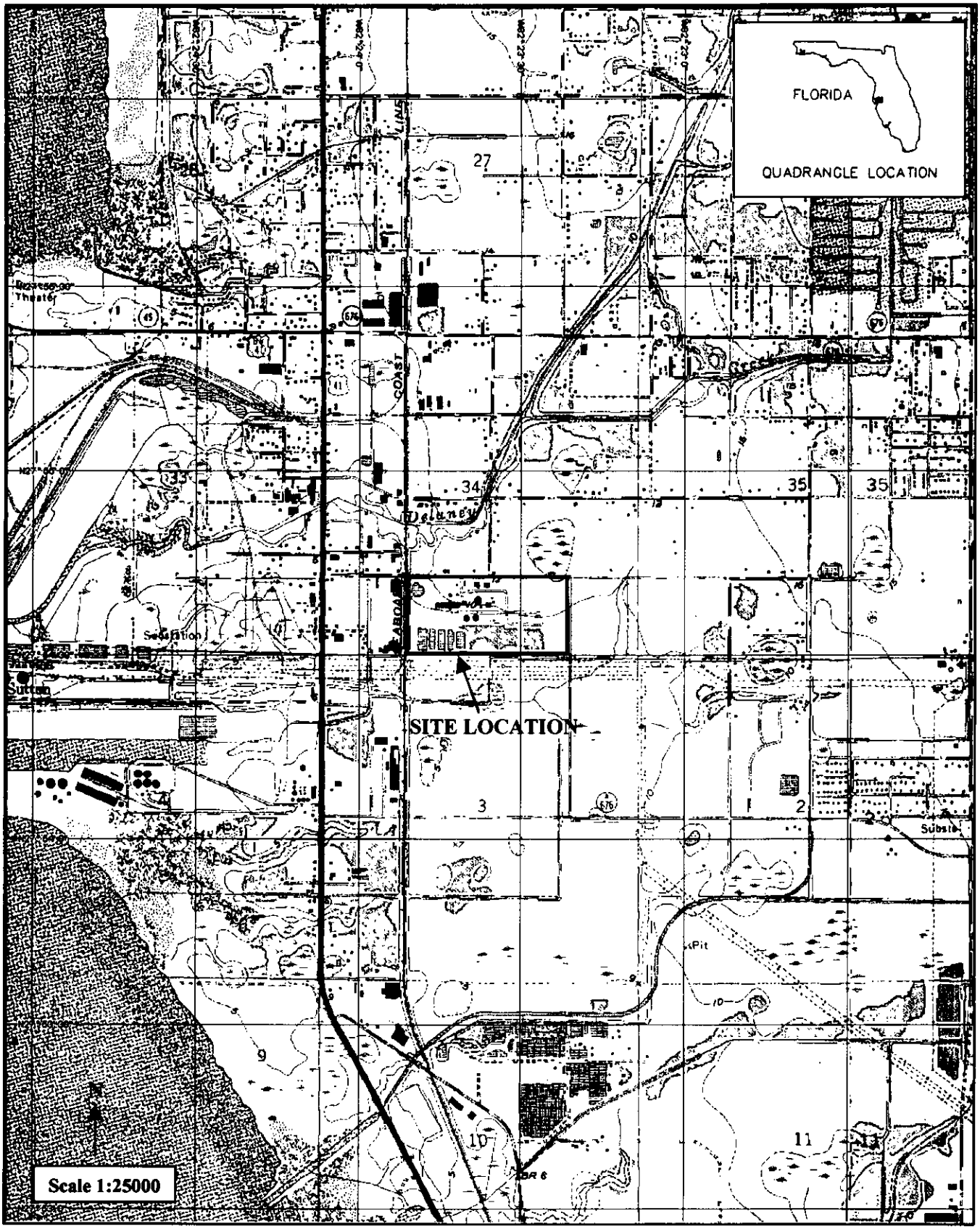
13. Risk Management Plan Verification:
    [X] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:) _____ or previously submitted to DEP (Date and DEP Office): 5-24-99; Southwest District
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [ ] Not Applicable

14. Compliance Report and Plan:
    [ ] Attached, Document ID: _____ [X] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [ ] Attached, Document ID:_____ [X] Not Applicable

ATTACHMENT NI-FI-C1

AREA MAP SHOWING FACILITY LOCATION



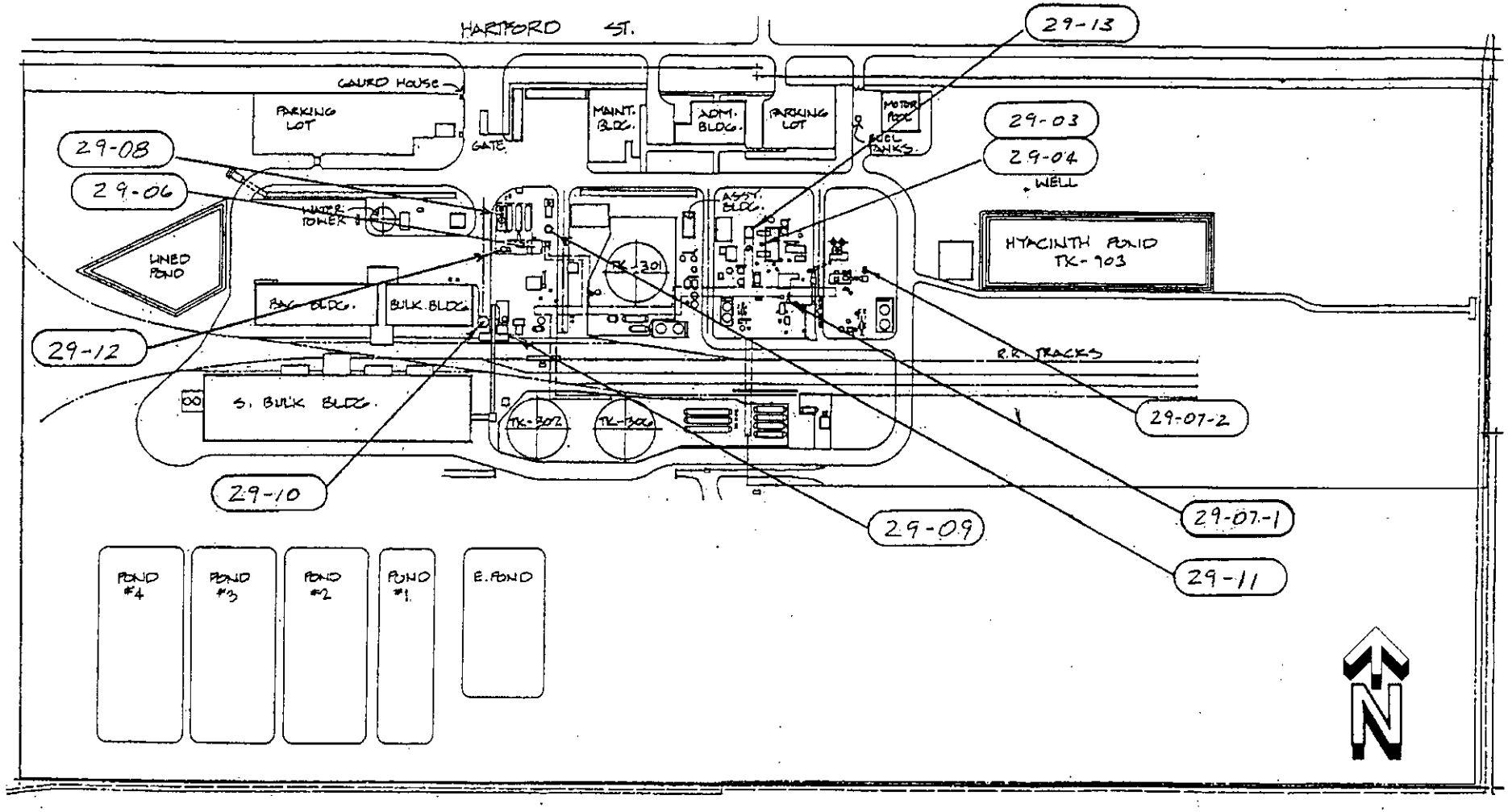
Attachment NI-FI-C1
Site Location Map

Source: Golder, 2001.

Golder Associates

ATTACHMENT NI-FI-C2

FACILITY PLOT PLAN



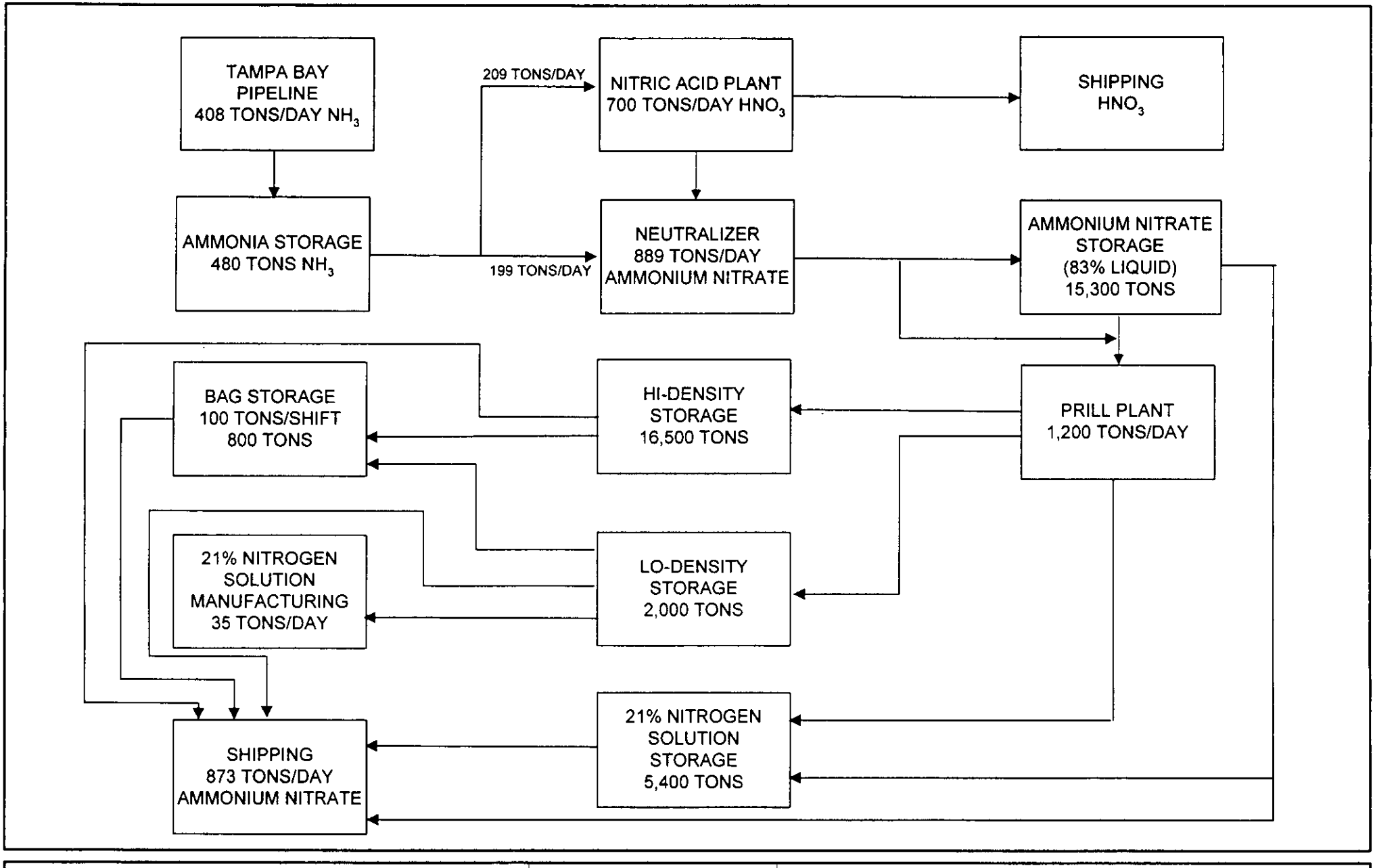
Attachment NI-FI-C2
General Plant Layout
Nitram Inc., Tampa, Florida

Source: Golder, 2003.

Golder Associates

ATTACHMENT NI-FI-C3

PROCESS FLOW DIAGRAM



ATTACHMENT NI-FI-C3
GENERALIZED FLOW SHEET AND MATERIAL BALANCE
NITRAM, INC., TAMPA, FLORIDA

Source: Golder, 2003.

Process Flow Legend:

Solid / Liquid ——→

0237636\4\4.4\4.4.1\NI-FI-C3.VSD

02/14/03

Golder Associates

ATTACHMENT NI-FI-C4

UNCONFINED PARTICULATE MATTER

ATTACHMENT NI-FI-C4

UNCONFINED PARTICULATE MATTER

Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

A. Attend to major operational upsets promptly and effectively. Stop operation, if necessary.

B. Maintain trafficked areas clean. Limit vehicular traffic to 10 miles per hour or less, if necessary.

C. Do not store or pile products in the open.

D. Inspect conveyors and elevators for visible emissions daily. Record any problems and actions taken.

E. Make plant personnel aware of the environmental requirements in this permit.

F. Exercise good housekeeping practices at all times.

ATTACHMENT NI-FI-C8

PROPOSED INSIGNIFICANT ACTIVITIES

ATTACHMENT NI-FI-C8

PROPOSED INSIGNIFICANT ACTIVITIES

The following listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Galoryl Ash Storage Tank,
2. Cooling Tower Operation (Non-contact Cooling Water),
3. Steam Jet and Steam Vent Discharges,
4. Emissions from Surface Impoundments (Containing Non-contact Cooling Water),
5. Bulk Ammonium Nitrate Truck and Rail Car Loading, and
6. Ammonium Nitrate Bagging.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Babcock & Wilcox Package Boiler, Gas Fired

4. Emissions Unit Identification Number:
ID: **003**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**1/1/1963**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Natural gas-fired package boiler with propane as an alternate fuel. Use of these fuels demonstrates compliance with RACT for particulate matter.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer:	**Babcock & Wilcox**	Model Number: **FM-10 (SG-703)**
2. Generator Nameplate Rating:		MW
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		75	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	7	days/week
	52 weeks/year	8,760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-210.700, F.A.C.

62-213.440(1), F.A.C.

62-296.406(2) and (3), F.A.C.

62-296-700, F.A.C.

62-296.700(6), F.A.C.

62-296-702, F.A.C.

62-296-702(2)(a), F.A.C.

62-296-702(2)(b), F.A.C.

62-297, F.A.C.

62-297.310(7)(a)(3), F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-03**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Babcock & Wilcox Boiler, SG-703 (Unit ID 003)** **Foster Wheeler Boiler, SG-701 (Unit ID 004)**		
5. Discharge Type Code: **V**	6. Stack Height: **30** feet	7. Exit Diameter: **4.5** feet
8. Exit Temperature: **450** °F	9. Actual Volumetric Flow Rate: **33,700** acfm	10. Water Vapor: **21.00** %
11. Maximum Dry Standard Flow Rate: **15,600** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **363.200** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters): **Flow rates are for two boilers (EU 003 and EU 004) firing simultaneously and exhausting through the common stack.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **1-03-006-02**	3. SCC Units: **Million Cubic Feet Burned (All Gaseous Fuels)**	
4. Maximum Hourly Rate: **0.075**	5. Maximum Annual Rate: **657**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Propane Combustion**		
2. Source Classification Code (SCC): **1-03-010-02**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **1.73**	5. Maximum Annual Rate: **15,168**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **43**
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
NO_x			EL
CO			NS
PM_{10}			EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.5** lb/hour **32.9** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.01 lb/MMBtu (allowable x 75 MMBtu/hr) = 7.5 lb/hr** **7.5 lb/hr x 8,760 hr/yr x 1/2000 = 32.9 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **The potential emissions are calculated as the allowable emissions under Rule 62-296.702(2)(a) F.A.C.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.10 lb/MMBtu**	4. Equivalent Allowable Emissions: **7.5** lb/hour **32.9** tons/year
5. Method of Compliance (limit to 60 characters): **Use of procedures described in the operation & maintenance plan to ensure proper operations.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **62-297.702(2)(a)**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **5** lb/hour **15.5** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **100 lb NO_X/ MMft^3 Natural Gas** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.05 MMft^3/hr x 100 lb NO_X/ MMft^3 = 5 lb NO_X/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **15.5 TPY**	4. Equivalent Allowable Emissions: lb/hour **15.5** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable NO_X emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.57** lb/hour **1.18** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **7.6 lb PM_{10}/MMft^3 Natural Gas** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **7.6 lb PM_{10}/MMft^3 Natural Gas x 0.075 MMft^3/hr = 0.057 lb/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **1.18 TPY**	4. Equivalent Allowable Emissions: lb/hour **1.18** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable PM_{10} emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 performed 8 to 12 months prior to permit renewal.**	
5. Visible Emissions Comment (limit to 200 characters): **62-296.702(2)(b) F.A.C.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: NI-EU1-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification
   [X] Attached, Document ID: NI-EU1-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report
   [ ] Attached, Document ID: _____
   [X] Previously submitted, Date: To be done Jan-Feb 2003
   [ ] Not Applicable
6. Procedures for Startup and Shutdown
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan
   [X] Attached, Document ID: NI-EU1-J7 [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Compliance Test Report – Existing operating permit requires that the compliance test be performed in the 120-day period prior to the expiration of the permit. This permit renewal application is due 180 days prior to expiration of the permit.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: NI-EU1-J11 [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU1-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

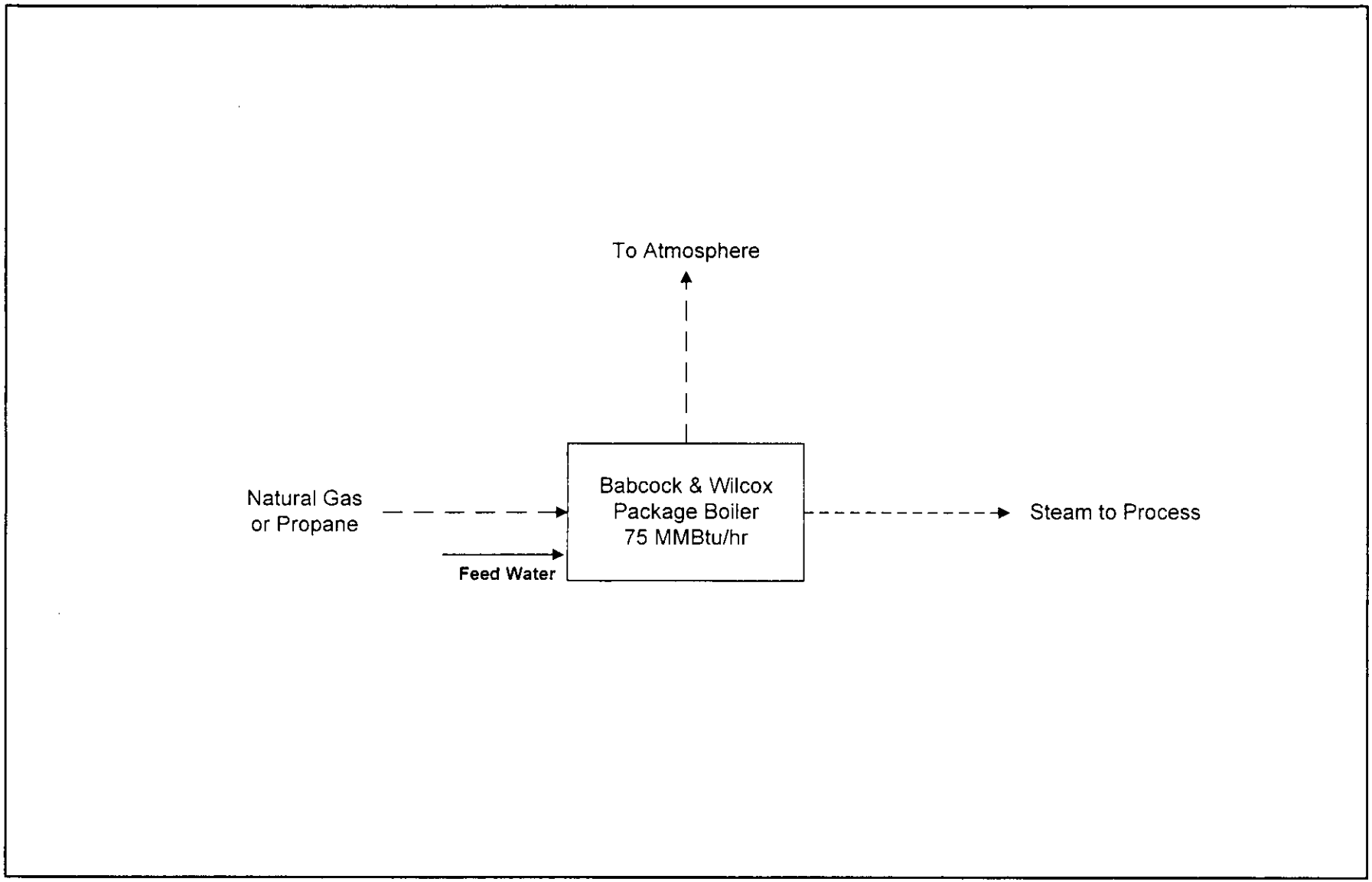
[ ] Phase II NO_x Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NO_x Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU1-J1

PROCESS FLOW DIAGRAM



Attachment NI-EU1-J1
Babcock & Wilcox Package Boiler - EU ID 003

Process Flow Diagram
Nitram, Inc. - Tampa, Florida

Process Flow Legend
Solid/Liquid
Gas
Steam

Golder Associates

ATTACHMENT NI-EU1-J2

FUEL ANALYSIS

ATTACHMENT NI-EU1-J2

FUEL ANALYSIS

Fuel	Density	Weight % Sulfur	Weight % Ash	Heat Capacity
Natural Gas	0.048 lb/scf	neg.	neg.	1,000 Btu/scf
Propane	4.2 lb/gal	neg.	neg.	43 MMBtu/ton

ATTACHMENT NI-EU1-J7

OPERATION AND MAINTENANCE PLAN

ATTACHMENT NI-EU1-J7

OPERATION AND MAINTENANCE PLAN

BABCOCK & WILCOX PACKAGE BOILER – EU ID 003

The Following Operation and Maintenance (O&M) Plan for Particulate Matter Control pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

A. Process Parameters:
   1. Babcock & Wilcox Package Boiler
      a. Model: (SG-703)
      b. Type: Water tube package boiler of "D" tube design
      c. Design Steam Production Rate: 60,000 lb/hr
      d. Design Steam Pressure: 230 psig
      e. Primary Fuel: Natural Gas
      f. Alternate Fuel: Propane
      g. Firing Rate: 75,000 cubic ft/hr natural gas or 3,463 lb/hr propane

   2. Common Stack (two boilers)
      a. Stack Height: 30 ft
      b. Stack Diameter: 4 ft 6 inches
      c. Gas Flow Rate: 33,700 acfm
      d. Gas Exit Temperature: 450°F

B. The following observations, checks, and operations apply to this emissions unit and shall be conducted on the schedule specified:
   1. The air/fuel ratio is to be controlled by a continuous oxygen monitor located in the air damper.
   2. The stack is periodically monitored (once per shift) for visible emissions.
   3. Boiler performance (fuel efficiency) is to be monitored on a daily basis comparing steam production to fuel consumed.

C. Records of inspections, maintenance, and performance parameters shall be retained and shall be made available to the Department or to the Environmental Protection Commission of Hillsborough County upon request.

ATTACHMENT NI-EU1-J11

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT NI-EU1-J11

ALTERNATIVE METHODS OF OPERATION

The primary fuel for the Babcock & Wilcox Package Boiler (EU ID 003) is natural gas. Alternatively, it may be fired with propane.

ATTACHMENT NI-EU1-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU1-J14

COMPLIANCE ASSURANCE MONITORING APPLICABILITY DETERMINATION

BABCOCK & WILCOX PACKAGE BOILER – EU ID 003

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

There is no emission control equipment associated with this source. Therefore, a compliance assurance monitoring plan is not required for this source.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Foster Wheeler Package Boiler, Gas Fired

4. Emissions Unit Identification Number: [ ] No ID [ ] ID Unknown
ID: **004**

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**1/11/1963**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Natural gas fired package boiler with propane as an alternate fuel. Use of these fuels demonstrates compliance with RACT for particulate matter.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Foster Wheeler Limited** Model Number: **AG-140 (SG-701)**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			50	mmBtu/hr.
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-210.700, F.A.C.

62-213.440(1), F.A.C.

62-296.406(2) and (3), F.A.C.

62-296-700, F.A.C.

62-296.700(6), F.A.C.

62-296-702, F.A.C.

62-296-702(2)(a), F.A.C.

62-296-702(2)(b), F.A.C.

62-297, F.A.C.

62-297.310(7)(a)(3), F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-04**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Babcock & Wilcox Boiler, SG-703 (EU ID 003)** **Foster Wheeler Boiler, SG-701 (EU ID 004)**		
5. Discharge Type Code: **V**	6. Stack Height: **30** feet	7. Exit Diameter: **4.5** feet
8. Exit Temperature: **450** °F	9. Actual Volumetric Flow Rate: **33,700** acfm	10. Water Vapor: **21.00** %
11. Maximum Dry Standard Flow Rate: **15,600** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **363.200** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters): **Flow rates are for two boilers (EU 003 and EU 004) firing simultaneously and exhausting through the common stack.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **1-03-006-02**	3. SCC Units: **Million Cubic Feet Burned (All Gaseous Fuels)**	
4. Maximum Hourly Rate: **0.05**	5. Maximum Annual Rate: **438**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Propane Combustion**		
2. Source Classification Code (SCC): **1-03-010-02**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **1.15**	5. Maximum Annual Rate: **10,113**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **43**
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
PM			EL
PM_{10}			EL
NO_x			EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **5** lb/hour **21.9** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **75 MMBtu/hr x 0.01 lb/MMBtu = 5.0 lb/hr** **5.0 lb/hr x 8,760 hr/yr x 1/2000 = 21.9 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **The allowable emissions under 62-296.702(2)(a) F.A.C. were used to calculate potential emissions for the boiler**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.01 lb/MMBtu**	4. Equivalent Allowable Emissions: **5.0** lb/hour **21.9** tons/year
5. Method of Compliance (limit to 60 characters): **Use of procedures described in the operation & maintenance plan to ensure proper operations.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **62-297.702(2)(a)**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.38** lb/hour **1.18** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **7.6 lb PM_{10}/$MMft^3$** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.05 $MMft^3$/hr x 7.6 lb PM_{10}/$MMft^3$ = 0.38 lb PM_{10}/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **1.18 TPY**	4. Equivalent Allowable Emissions: lb/hour **1.18** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable PM_{10} emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.5** lb/hour **15.5** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **100 lb NO_X/ $MMft^3$ Natural Gas** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.075 $MMft^3$/hr x 100 lb NO_X/ $MMft^3$ = 7.5 lb NO_X/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **15.5 TPY**	4. Equivalent Allowable Emissions: lb/hour **15.5** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable NO_X emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC..**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 performed 8 to 12 months prior to permit renewal.**	
5. Visible Emissions Comment (limit to 200 characters): **62-296.702(2)(b)**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: NI-EU2-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification
   [X] Attached, Document ID: NI-EU2-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report
   [ ] Attached, Document ID: _____
   [X] Previously submitted, Date: To be done Jan-Feb 2003
   [ ] Not Applicable
6. Procedures for Startup and Shutdown
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan
   [X] Attached, Document ID: NI-EU2-J7 [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Compliance Test Report – Existing operating permit requires that the compliance test be performed in the 120-day period prior to the expiration of the permit. This permit renewal application is due 180 days prior to expiration of the permit.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: NI-EU2-J11 [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
~~[X] Attached~~, Document ID: NI-EU2-J14 [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

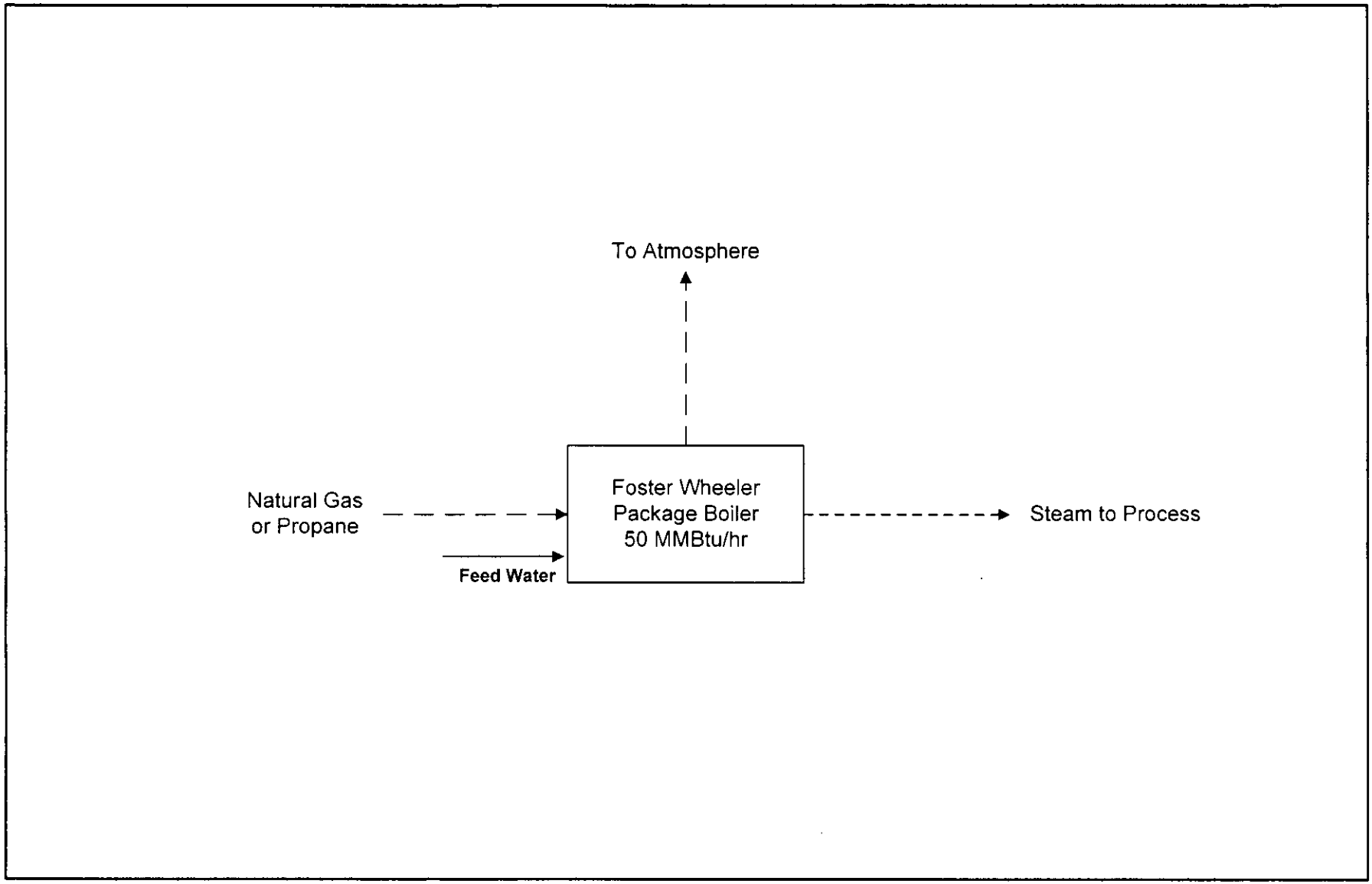
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU2-J1

PROCESS FLOW DIAGRAM



Attachment NI-EU2-J1
Foster Wheeler Package Boiler - EU ID 004

Process Flow Diagram
Nitram, Inc. - Tampa, Florida

Process Flow Legend
Solid/Liquid
Gas
Steam

Golder Associates

ATTACHMENT NI-EU2-J2

FUEL ANALYSIS

ATTACHMENT NI-EU2-J2

FUEL ANALYSIS

Fuel	Density	Weight % Sulfur	Weight % Ash	Heat Capacity
Natural Gas	0.048 lb/scf	neg.	neg.	1,000 Btu/scf
Propane	4.2 lb/gal	neg.	neg.	43 MMBtu/ton

ATTACHMENT NI-EU2-J7

OPERATION AND MAINTENANCE PLAN

ATTACHMENT NI-EU2-J7

OPERATION AND MAINTENANCE PLAN

FOSTER WHEELER PACKAGE BOILER – EU ID 004

The Following Operation and Maintenance (O&M) Plan for Particulate Matter Control pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

A. Process Parameters:
   1. Foster Wheeler Package Boiler
      a. Model: (SG-703)
      b. Type: Water tube package boiler of "D" tube design
      c. Design Steam Production Rate: 40,000 lb/hr
      d. Design Steam Pressure: 230 psig
      e. Primary Fuel: Natural Gas
      f. Alternate Fuel: Propane
      g. Firing Rate: 50,000 cubic ft/hr natural gas or 2,309 lb/hr propane

   2. Common Stack (two boilers)
      a. Stack Height: 30 ft
      b. Stack Diameter: 4 ft 6 inches
      c. Gas Flow Rate: 33,700 acfm
      d. Gas Exit Temperature: 450°F

B. The following observations, checks, and operations apply to this emissions unit and shall be conducted on the schedule specified:
   1. The air/fuel ratio is to be controlled by a continuous oxygen monitor located in the air damper.
   2. The stack is periodically monitored (once per shift) for visible emissions.
   3. Boiler performance (fuel efficiency) is to be monitored on a daily basis comparing steam production to fuel consumed.

C. Records of inspections, maintenance, and performance parameters shall be retained and shall be made available to the Department or to the Environmental Protection Commission of Hillsborough County upon request.

ATTACHMENT NI-EU2-J11

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT NI-EU2-J11

ALTERNATIVE METHODS OF OPERATION

The primary fuel for the Foster Wheeler Package Boiler (EU ID 004) is natural gas. Alternatively, it may be fired with propane.

ATTACHMENT NI-EU2-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU2-J14

COMPLIANCE ASSURANCE MONITORING APPLICABILITY DETERMINATION

FOSTER WHEELER PACKAGE BOILER – EU ID 004

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

There is no emission control equipment associated with this source. Therefore, a compliance assurance monitoring plan is not required for this source.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Ammonium Nitrate Prill Tower No. 2

4. Emissions Unit Identification Number:
ID: **006**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**11/15/1981**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

This emissions unit is an ammonium nitrate prill tower with a Beco scrubber.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

The Prill Tower emissions are controlled by a Beco vortex cell scrubber. The scrubber has six sections, each with its own stack.

2. Control Device or Method Code(s): **002**

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature:
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:	**50 TPH HD prills**			
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

As an alternate method of operation, the prill tower can process 37 TPH of LD prills (Construction Permit 0570029-007-AC). Note: HD = high density, LD = low density.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.070(4), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-212.300, F.A.C.

62-212.400(6), F.A.C.

62-213.440(1), F.A.C.

62-296.320, F.A.C.

62-297, F.A.C.

62-297.310(7)(a)(4), F.A.C.

62-297.620, F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-06**	2. Emission Point Type Code: **3**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

The Prill Tower scrubber discharge is through six identical stacks in a 2 by 3 array.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code: **V**	6. Stack Height: **178** feet	7. Exit Diameter: **3.25** feet
8. Exit Temperature: **115** °F	9. Actual Volumetric Flow Rate: **41,000** acfm	10. Water Vapor: **8.00** %
11. Maximum Dry Standard Flow Rate: **36,500** dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **353.200** North (km): **3089.000**

14. Emission Point Comment (limit to 200 characters):

Data is for one of six identical stacks.

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **High Density Prill Production**		
2. Source Classification Code (SCC): **3-01-027-12**	3. SCC Units: **Tons Produced or Manufactured**	
4. Maximum Hourly Rate: **50 (Daily Average)**	5. Maximum Annual Rate: **438,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Daily average production rate.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Low Density Prill Production**		
2. Source Classification Code (SCC): **3-01-027-22**	3. SCC Units: **Tons Produced or Manufactured**	
4. Maximum Hourly Rate: **37 (Daily Average)**	5. Maximum Annual Rate: **324,120**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Daily average production rate.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	002		EL
PM_{10}	002		NS
NH_3			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **26.0** lb/hour **50.5** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **26.0 lb/hr, 50.5 TPY**	4. Equivalent Allowable Emissions: **26.0** lb/hour **50.5** tons/year
5. Method of Compliance (limit to 60 characters): **Annual testing using EPA Methods 1, 2, 4, and 5.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Construction Permit No. AC29-39724 set the allowable hourly PM emissions rate at 26 lb/hr. Construction Permit No. 0570029-007-AC set the combined annual PM emission limit for the Prill Tower and Prill Rotary Drums at 50.5 TPY.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Maximum Period of Excess Opacity Allowed:	Exceptional Conditions: **20** % min/hour
4. Method of Compliance: **Annual testing using EPA Method 9.**	
5. Visible Emissions Comment (limit to 200 characters): **62-296.320(4)(b), F.A.C.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU3-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: NI-EU3-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: NI-EU3-J4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [X] Previously submitted, Date: April 2002 [ ] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: _____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU3-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

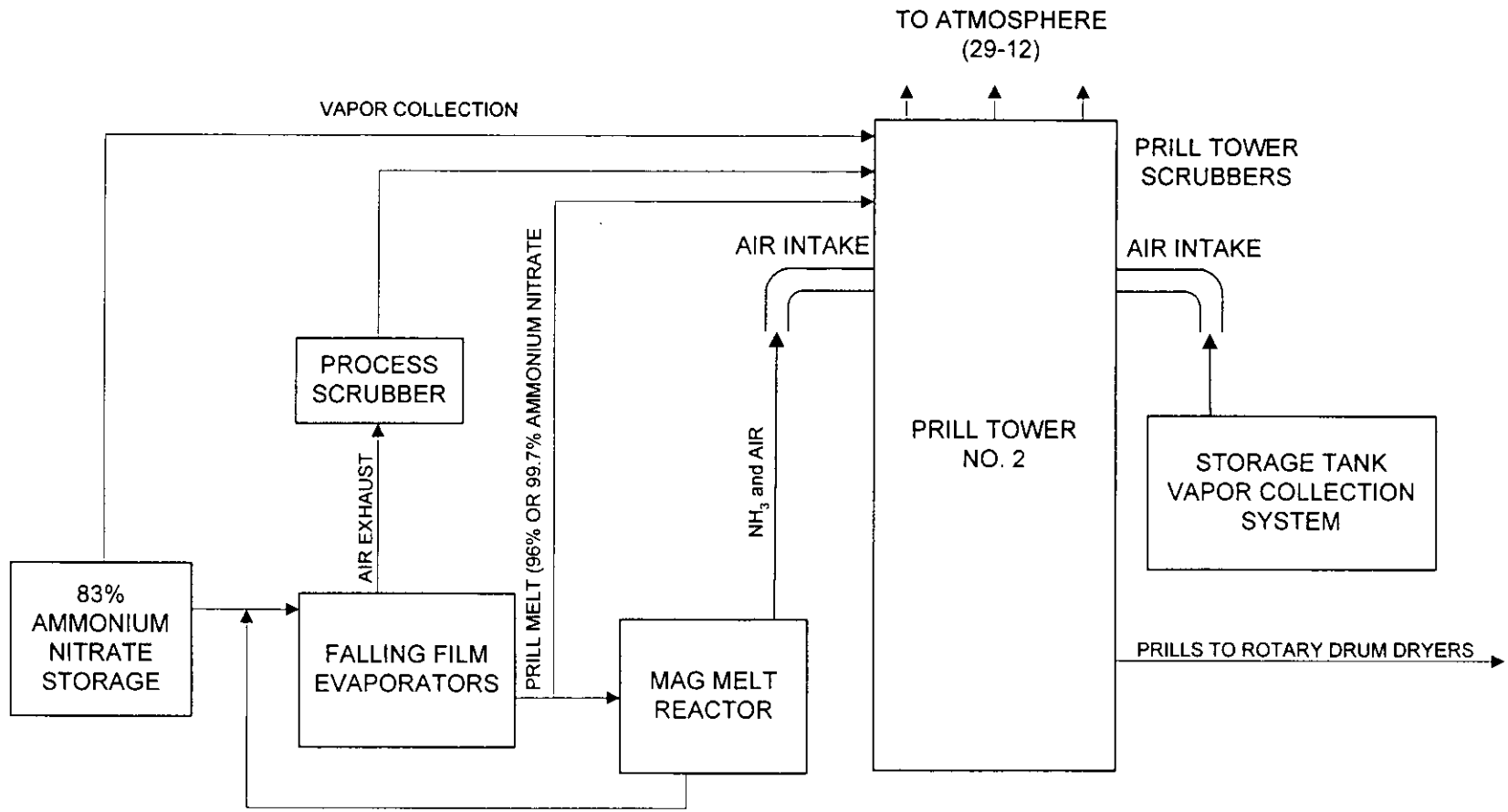
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU3-J1

PROCESS FLOW DIAGRAM



ATTACHMENT NI-EU3-J1
PROCESS FLOW DIAGRAM
AMMONIA NITRATE PRILL TOWER - EU ID 006
NITRAM, INC., TAMPA, FLORIDA

Source: Golder, 2003.

0237636\4\4.4\4.4.1\NI-EU3-J1.VSD

2/14/2003

Golder Associates

ATTACHMENT NI-EU3-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU3-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

NO. 2 PRILL TOWER EU ID 006

The control equipment is a vortex cell scrubber designed and built by Beco Engineering, Inc. The scrubber is located at the top of the prill tower.

The prill melt is sprayed down the tower from up to six spray bells. The scrubber has six cells, each one located above a spray bell. Air flowing up the tower cools the prills, then enters the scrubber and passes through two stages of vortex generators where finely divided droplets of circulating ammonium nitrate solution are sprayed into the air stream.

Above the recirculating solution sprays, the air stream passes through "Mist Master" mist eliminators that are irrigated from below with clean make up water. Each cell has an induced draft fan, which discharges to the atmosphere.

ATTACHMENT NI-EU3-J4

STACK SAMPLING FACILITIES

ATTACHMENT NI-EU3-J4

STACK SAMPLING FACILITIES

NO. 2 PRILL TOWER STACKS

The six Prill Tower stacks have a deck with approximately 889 square feet of work space that extends 360 degrees around the stack. The work space is 30 feet on each side with six 32-inch-diameter stacks evenly spaced in the work area.

There are six stacks. Each stack has two sample ports that are 3-inch-inside diameter that can be sealed off.

The sample ports are 69 inches up from the deck and 19 inches from the top of the stack.

The stacks have a 0.75-inch eyebolt and 3- by 3- by 1.5- by 0.25-inch angle placed above each sample port. The eyebolt is capable of supporting a 500-pound load.

Two 120-volt electrical supplies will be supplied, upon request, by the plant by way of extension cords.

ATTACHMENT NI-EU3-J14

COMPLIANCE ASSURANCE MONITORING PLAN

AMMONIUM NITRATE PRILL TOWER NO. 2

I. Background

A. Emissions Unit

Description:	Ammonium Nitrate Prill Tower No. 2
Emission Unit ID:	006
Facility:	Nitram, Inc. Tampa, FL

B. Applicable Regulation, Emission Limits, and Monitoring Requirements

Regulations:	Permit 0570029-007-AC
Emissions Limits:	
Opacity:	20 percent [Construction Permit AC29-29724 May 7, 1981 and BACT determination March 8, 1981].
Particulate Matter:	26.0 lb/hr [Construction Permit AC29-29724 May 7, 1981 and BACT determination March 8, 1981]
Monitoring Requirements:	Maintain a log recording pressure differential and volumetric liquid flow rate (fresh water and make-up water) at least once per 8-hour shift.

C. Control Technology

BECO Dual Vortex Scrubber

II. Monitoring Approach

Nitram will continue to monitor and record the scrubber pressure differential as required in their current Title V Operation Permit.

Table 1. Monitoring Approach

		Indicator No. 1
I.	Indicator	Scrubber pressure differential.
	Measurement Approach	Measured separately at each of six scrubber cells using magnehelics.
II.	Indicator Range	While Prill Tower No. 2 is operating, an excursion is defined as a pressure differential outside the range from 0.4 and 3.0 inches of water for any cell. Excursions trigger an inspection, corrective action, and a reporting requirement.
III.	Performance Criteria	
I.	Data Representativeness	The magnehelics measure the pressure differential between the inlet and outlet duct of the scrubber cell.
II.	Verification of Operation Status	Not Applicable.
III.	QA/QC Practices and Criteria	The magnehelics will be zeroed prior to reading. The operational status of the magnehelics will be checked if the pressure differential is outside the proposed indicator. The magnehelics will be calibrated against a U-tube manometer annually.
IV.	Monitoring Frequency	The pressure differential will be observed and recorded daily for each scrubber cell when Prill Tower No. 2 is operating.
	Data Collection Procedures	Pressure differential recorded with the time, date, and name of the observer.
	Averaging Period	Not Applicable.

MONITORING APPROACH JUSTIFICATION

I. Background

Prill Tower No. 2 is used to crystallize and dry liquid ammonium nitrate into either high- or low-density prills. The prill tower has a capacity to produce 37 tons per hour of low-density prills and 50 tons per hour of high-density prills on a daily average basis.

Particulate matter (PM) emissions from Prill Tower No. 2 are controlled by a Beco Dual Vortex Scrubber. The facility's current Title V Operation Permit requires that a log be maintained containing daily observation of the liquid (water) flow rate to the scrubber and the pressure differential across the scrubber.

U.S. Environmental Protection Agency (EPA) Method 5 compliance tests were performed on the No. 2 Prill Tower during March 7 and 8, 2002 on each of the six scrubber cells. These compliance tests are attached. The total (sum of all six cells) PM emission rate measured during the compliance tests was 14.9 pounds per hour, well below the permitted PM emission limit of 26 lb/hr. The average measured ammonium nitrate production rate measured during the compliance tests was 49.6 tons per hour of high density prills. The pressure differential measured during the compliance test at each scrubber cell ranged between 0.5 and 1.5 inches of water.

The PM emission limit for Prill Tower No. 2 was established in Air Construction Permit No. AC29-29724 (May 7, 1981) and a BACT determination (March 8, 1981).

II. Rationale for Selection of Performance Indicators

A log containing daily observations of the pressure differential is already required by the existing Title V Operation Permit for the facility. Through negotiations with the Florida Department of Environmental Protection (FDEP) and the Environmental Protection Commission of Hillsborough County (EPC), compliance with the PM emission limit has been established to be demonstrated when the pressure differential is within the specified range of 0.4 to 3.0 inches of water, inclusive (Construction Permit No. 0570029-007-AC). An increase in the pressure differential may indicate clogging of the scrubber or increased gas flow. A decrease in the pressure differential may indicate a decrease in the gas or liquid flow or poor liquid distribution. EPA, in Example 4a of Appendix B, of their technical guidance document titled: Compliance Assurance Monitoring, recommends that pressure differential be monitored as an indication of proper scrubber performance.

III. Rationale for Selection of Indicator Ranges

The most recent stack test for Prill Tower No. 2 were performed on March 7 and March 8, 2002. The stack test demonstrated compliance with the established emission limit. During those compliance tests, the minimum pressure differential measured at any cell was 0.5 inches of water. The maximum pressure differential was 1.5 inches of water. The results of previous stack tests have demonstrated compliance with the permitted PM emission rate at measured pressure differentials of 0.4 to 3 inches of water. These compliance tests have been submitted to FDEP and EPC and accepted by these agencies as sufficient evidence that compliance is demonstrated at the range of pressure differentials currently permitted. Nitram intends to use the results of future compliance tests to further refine this indicator range, as necessary. Additional compliance tests were performed in January 2003. These tests were performed while producing high-density prills and then again while processing low-density prills. These results of these tests were not available prior to the submittal deadline for this Title V Permit renewal application.

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Plant: Nitram, Inc.
Unit: No. 2 Prill Tower

STACK	DATE	PROCESS RATE (TONS/HR)	STACK TEMP. (°F)	STACK GAS FLOW RATE		PARTICULATE EMISSIONS	
				ACFM	DSCFM	GRAINS/DSCF	LBS/HR
A	3/7/02	49.91	105.5	36,069	31,818	0.011	3.0
B	3/7/02	49.91	107.7	40,056	34,738	0.011	3.1
C	3/8/02	49.10	110.4	42,292	35,792	0.012	3.7
D	3/7/02	49.91	99.1	34,060	30,872	0.006	1.6
E	3/7/02	49.91	98.9	34,225	30,670	0.010	2.7
F	3/8/02	49.10	102.0	35,419	31,176	0.003	0.8
AVERAGE		49.64	103.9	37,020	32,511	0.009	2.5
TOTAL				222,121	195,066		14.9

Allowable Emissions (total of all stacks) = 26.0 lbs/hr
Emission rate (lb/hr) = A + B + C + D + E + F

Note: Standard conditions 68°F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack A

	Run 1	Run 2	Run 3
Date of Run	3/7/02	3/7/02	3/7/02
Process Rate (TPH)	49.91	49.91	49.91
Start Time (24-hr. clock)	0820	0946	1102
End Time (24-hr. clock)	0922	1047	1203
Vol. Dry Gas Sampled Meter Cond. (DCF)	42.329	43.216	43.979
Gas Meter Calibration Factor	1.002	1.002	1.002
Barometric Pressure at Barom. (in. Hg.)	30.22	30.24	30.24
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	41.953	41.663	42.242
Vol. Liquid Collected Std. Cond. (SCF)	1.763	3.027	3.098
Moisture in Stack Gas (% Vol.)	4.0	6.8	6.8
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.56	28.25	28.25
Stack Gas Static Press. (in. H2O gauge)	-0.73	-0.65	-0.63
Stack Gas Static Press. (in. Hg. abs.)	30.02	30.04	30.04
Average Square Root Velocity Head	1.278	1.267	1.266
Average Orifice Differential (in. H2O)	1.548	1.535	1.550
Average Gas Meter Temperature (Deg. F)	78.5	94.0	96.0
Average Stack Gas Temperature (Deg. F)	101.7	106.1	108.8
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	74.31	74.32	74.44
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	32,621	31,475	31,357
Stack Gas Flow Rate Stack Cond. (ACFM)	36,046	36,049	36,111
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.182	0.182	0.182
Percent Isokinetic	96.0	98.8	100.5
Particulate Collected (mg.)	34.0	34.8	21.9
Particulate Emissions (grains/DSCF)	0.013	0.013	0.008
Particulate Emissions (lb./hr.)	3.5	3.5	2.2
Avg. Particulate Emissions (lb./hr.)	**3.0**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack B

	Run 1	Run 2	Run 3
Date of Run	3/7/02	3/7/02	3/8/02
Process Rate (TPH)	49.91	49.91	49.91
Start Time (24-hr. clock)	1223	1406	0810
End Time (24-hr. clock)	1327	1510	0911
Vol. Dry Gas Sampled Meter Cond. (DCF)	45.560	45.880	46.738
Gas Meter Calibration Factor	1.002	1.002	1.002
Barometric Pressure at Barom. (in. Hg.)	30.22	30.22	30.20
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	43.742	44.175	44.971
Vol. Liquid Collected Std. Cond. (SCF)	3.367	3.315	3.376
Moisture in Stack Gas (% Vol.)	7.1	7.0	7.0
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.21	28.23	28.23
Stack Gas Static Press. (in. H2O gauge)	-0.74	-0.78	-0.78
Stack Gas Static Press. (in. Hg. abs.)	30.02	30.01	29.99
Average Square Root Velocity Head	1.417	1.344	1.453
Average Orifice Differential (in. H2O)	1.647	1.739	1.773
Average Gas Meter Temperature (Deg. F)	96.0	94.6	94.6
Average Stack Gas Temperature (Deg. F)	106.0	108.5	108.5
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	83.20	79.03	85.50
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	35,072	33,224	35,917
Stack Gas Flow Rate Stack Cond. (ACFM)	40,358	38,335	41,474
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.182	0.182	0.184
Percent Isokinetic	93.1	99.2	91.4
Particulate Collected (mg.)	28.7	24.6	36.7
Particulate Emissions (grains/DSCF)	0.010	0.009	0.013
Particulate Emissions (lb./hr.)	3.0	2.4	3.9
Avg. Particulate Emissions (lb./hr.)	**3.1**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack C

	Run 1	Run 2	Run 3
Date of Run	3/8/02	3/8/02	3/8/02
Process Rate (TPH)	49.10	49.10	49.10
Start Time (24-hr. clock)	0931	1052	1210
End Time (24-hr. clock)	1032	1154	1314
Vol. Dry Gas Sampled Meter Cond. (DCF)	50.018	51.315	51.790
Gas Meter Calibration Factor	0.997	0.997	0.997
Barometric Pressure at Barom. (in. Hg.)	30.22	30.22	30.22
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	46.043	47.093	47.577
Vol. Liquid Collected Std. Cond. (SCF)	3.640	3.117	3.230
Moisture in Stack Gas (% Vol.)	7.3	6.2	6.4
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.19	28.32	28.30
Stack Gas Static Press. (in. H2O gauge)	-0.83	-0.83	-0.88
Stack Gas Static Press. (in. Hg. abs.)	30.01	30.01	30.01
Average Square Root Velocity Head	1.474	1.489	1.374
Average Orifice Differential (in. H2O)	1.938	2.048	2.050
Average Gas Meter Temperature (Deg. F)	117.5	119.4	118.8
Average Stack Gas Temperature (Deg. F)	109.0	110.2	112.1
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	86.81	87.57	81.00
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	36,323	37,003	34,050
Stack Gas Flow Rate Stack Cond. (ACFM)	42,110	42,476	39,289
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.184	0.184	0.184
Percent Isokinetic	92.5	92.9	102.0
Particulate Collected (mg.)	35.5	44.8	28.0
Particulate Emissions (grains/DSCF)	0.012	0.015	0.009
Particulate Emissions (lb./hr.)	3.7	4.7	2.7
Avg. Particulate Emissions (lb./hr.)	**3.7**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack D

	Run 1	Run 2	Run 3
Date of Run	3/7/02	3/7/02	3/7/02
Process Rate (TPH)	49.91	49.91	49.91
Start Time (24-hr. clock)	0822	0948	1103
End Time (24-hr. clock)	0930	1050	1205
Vol. Dry Gas Sampled Meter Cond. (DCF)	62.836	44.842	44.370
Gas Meter Calibration Factor	1.000	1.000	1.000
Barometric Pressure at Barom. (in. Hg.)	30.22	30.24	30.24
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	62.151	43.468	42.813
Vol. Liquid Collected Std. Cond. (SCF)	1.490	2.296	2.664
Moisture in Stack Gas (% Vol.)	2.3	5.0	5.9
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.74	28.45	28.36
Stack Gas Static Press. (in. H2O gauge)	-0.60	-0.55	-0.60
Stack Gas Static Press. (in. Hg. abs.)	30.03	30.05	30.05
Average Square Root Velocity Head	1.212	1.214	1.205
Average Orifice Differential (in. H2O)	3.210	1.435	1.415
Average Gas Meter Temperature (Deg. F)	80.7	89.7	92.2
Average Stack Gas Temperature (Deg. F)	97.0	99.3	101.0
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	69.90	70.50	70.24
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	31,500	30,800	30,315
Stack Gas Flow Rate Stack Cond. (ACFM)	33,907	34,199	34,073
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.226	0.184	0.184
Percent Isokinetic	95.5	103.0	103.1
Particulate Collected (mg.)	15.4	16.6	23.4
Particulate Emissions (grains/DSCF)	0.004	0.006	0.008
Particulate Emissions (lb./hr.)	1.0	1.6	2.2
Avg. Particulate Emissions (lb./hr.)	**1.6**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack E

	Run 1	Run 2	Run 3
Date of Run	3/7/02	3/7/02	3/8/02
Process Rate (TPH)	49.91	49.91	49.91
Start Time (24-hr. clock)	1222	1342	0810
End Time (24-hr. clock)	1324	1444	0912
Vol. Dry Gas Sampled Meter Cond. (DCF)	45.411	43.620	43.875
Gas Meter Calibration Factor	1.000	1.000	1.000
Barometric Pressure at Barom. (in. Hg.)	30.22	30.22	30.20
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	43.710	42.819	42.968
Vol. Liquid Collected Std. Cond. (SCF)	3.159	3.046	1.688
Moisture in Stack Gas (% Vol.)	6.3	6.4	3.8
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.31	28.30	28.58
Stack Gas Static Press. (in. H2O gauge)	-0.56	-0.56	-0.48
Stack Gas Static Press. (in. Hg. abs.)	30.03	30.03	30.01
Average Square Root Velocity Head	1.227	1.172	1.243
Average Orifice Differential (in. H2O)	1.449	6.850	1.395
Average Gas Meter Temperature (Deg. F)	93.3	89.6	83.3
Average Stack Gas Temperature (Deg. F)	98.2	99.8	98.6
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	71.38	68.29	72.01
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	30,798	29,347	31,866
Stack Gas Flow Rate Stack Cond. (ACFM)	34,623	33,124	34,928
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.184	0.184	0.184
Percent Isokinetic	103.6	106.5	98.4
Particulate Collected (mg.)	25.4	26.8	34.7
Particulate Emissions (grains/DSCF)	0.009	0.010	0.012
Particulate Emissions (lb./hr.)	2.4	2.4	3.4
Avg. Particulate Emissions (lb./hr.)	**2.7**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: No. 2 Prill Tower - Stack F

	Run 1	Run 2	Run 3
Date of Run	3/8/02	3/8/02	3/8/02
Process Rate (TPH)	49.10	49.10	49.10
Start Time (24-hr. clock)	0932	1053	1211
End Time (24-hr. clock)	1034	1155	1313
Vol. Dry Gas Sampled Meter Cond. (DCF)	46.655	45.881	45.614
Gas Meter Calibration Factor	1.000	1.000	1.000
Barometric Pressure at Barom. (in. Hg.)	30.22	30.22	30.20
Elev. Diff. Manom. to Barom. (ft.)	150	150	150
Vol. Gas Sampled Std. Cond. (DSCF)	44.119	43.948	44.061
Vol. Liquid Collected Std. Cond. (SCF)	3.018	3.579	3.065
Moisture in Stack Gas (% Vol.)	6.4	7.0	6.5
Molecular Weight Dry Stack Gas	29.00	29.00	29.00
Molecular Weight Wet Stack Gas	28.30	28.23	28.28
Stack Gas Static Press. (in. H2O gauge)	-0.51	-0.54	-0.49
Stack Gas Static Press. (in. Hg. abs.)	30.03	30.03	30.01
Average Square Root Velocity Head	1.259	1.241	1.248
Average Orifice Differential (in. H2O)	1.496	1.453	1.468
Average Gas Meter Temperature (Deg. F)	103.2	96.0	91.0
Average Stack Gas Temperature (Deg. F)	99.0	102.6	104.5
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	73.35	72.61	73.10
Effective Stack Area (sq. ft.)	8.08	8.08	8.08
Stack Gas Flow Rate Std. Cond. (DSCFM)	31,574	30,853	31,102
Stack Gas Flow Rate Stack Cond. (ACFM)	35,578	35,221	35,457
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.182	0.182	0.182
Percent Isokinetic	104.3	106.3	105.7
Particulate Collected (mg.)	11.1	13.0	0.5
Particulate Emissions (grains/DSCF)	0.0039	0.0046	0.0002
Particulate Emissions (lb./hr.)	1.05	1.21	0.05
Avg. Particulate Emissions (lb./hr.)	**0.8**		
Allowable Particulate Emissions (lb./hr.)			

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

OPERATION AND MAINTENANCE LOG FOR THE SX-352 PEABODY SCRUBBER

DATE: 3-7-02 TIME: 09:15 TEMP.: 70° WIND DIR. NE

DAILY READING

1. OBSERVE THE STACK? YES ✓ NO _____
2. ANY UNUSUAL OCCURENCS IN PROCESS BEING VENTED? YES: _____ NO: ✓
3. WEATHER CONDITIONS? cloudy
4. BECO STRAINER CLEAN? YES: _____ NO: ✓ PRESSURE DROP? 14
5. RECORD TYPE OF PRODUCT PRODUCED TODAY. HI- DENSITY A/N ✓ LO-DENSITY A/N _____

MONTHLY, TO BE CHECKED ON THE FIRST OF EVERY MONTH

1. INSPECT FAN FOR CORROSION AND MATERIAL BUILD UP? YES: _____ NO: _____
2. INSPECT ALL HOSES AND CLAMPS? YES: _____ NO: _____
3. INSPECT ALL BELTS AND CHAINS FOR WEAR AND TENSION? YES: _____ NO: _____
4. INSPECT HOUSING FOR CORRSION? YES: _____ NO: _____

COMMENTS?:

ANNUALLY, TO BE CHECKED EACH YEAR

1. DEADHEAD CIRC.PUMP & NOTE DISCHARGE PRESSURE? YES: _____ NO: _____
2. CHEKCK FOR LEAKS AND REPAIR AS NEEDED? YES: _____ NO: _____
3. CHECK LEVEL CONTROL DEVICE & REPAIRED AS NEEDED? YES: _____ NO: _____
4. CLEAN THE LEVEL GAUGE SIGHTGLASS? YES: _____ NO: _____
5. OPEN AND INSPECT SIEVE TRAYS, SPRAYS & MIST ELIMINATORS & DO NEEDED REPAIRS? YES: _____ NO: _____

COMMENTS:

MONTHLY AND ANNUAL REPORTS ARE TO BE TURNED IN RESPECTIVLY IN ADDITION TO THIS LOG SHEET

"BECO" PRESSURE DIFFERENTAL

"A" CUBICLE PRESS. DIF.	1.0	"D" CUBICLE PRESS. DIF.	1.5
"B" CUBICLE PRESS. DIF.	.5	"E" CUBICLE PRESS. DIF.	1.0
"C" CUBICLE PRESS. DIF.	1.5	"F" CUBICLE PRESS. DIF.	1.5

SX-381 "BECO" FLOW - G.P.M.s

12 - 08 [illegible] 3200 GPM 08 - 16 3200 GPM 16 -24 3200 GPM

SX-352 "PEABODY" FLOW - G.P.M.s

12 - 08 [illegible] 400+ GPM 08 - 16 400+ GPM 16 -24 400+ GPM

SX-352 "PEABODY" DELTA -T (MANOMETER)

12 - 08 3.0 DIFF. 08 - 16 2.9 DIFF 16 -24 3.0 DIFF

OPERATOR: Joey Blackwell

DAILY OPERATIONS LOG FOR THE SX-352 PEABODY SCRUBBER

DATE: 3-8-02 TIME: 08:30 TEMP.: 68° WIND DIR. NE

DAILY READINGS

1. OBSERVE THE STACK? YES ✓ NO ____
2. ANY UNUSUAL OCCURENCS IN PROCESS BEING VENTED? YES: ____ NO: ✓
3. WEATHER CONDITIONS? Cloudy & hazy
4. BECO STRAINER CLEAN? YES: ✓ NO: ____ PRESSURE DROP? 14
5. RECORD TYPE OF PRODUCT PRODUCED TODAY. HI-DENSITY A/N ✓ LO-DENSITY A/N ____

"BECO" PRESSURE DIFFERENTAL

	24:00 - 08:00	08:00 - 16:00	16:00 - 24:00
A CUBICLE PRESSURE DIFF.	1	1.0	1.0
B CUBICLE PRESSURE DIFF.	1.5	1.5	1.5
C CUBICLE PRESSURE DIFF.	1.5	1.5	1.5
D CUBICLE PRESSURE DIFF.	1	1.0	1.0
E CUBICLE PRESSURE DIFF.	1	1.0	1.0
F CUBICLE PRESSURE DIFF.	1	1.0	1.0

2x	24:00 - 08:00	08:00 - 16:00	16:00 - 24:00
SX-381 "BECO" FLOW - G.P.M.s	3200 GPMS	3400 GPMS	3200 GPMS

4	24:00 - 08:00	08:00 - 16:00	16:00 - 24:00
SX-352 "PEABODY" FLOW - G.P.Ms	400+ GPMS	400+ GPMS	400 GPMS

	24:00 - 08:00	08:00 - 16:00	16:00 - 24:00
DELTA - T SX-352 "PEABODY" SCRUBBER MANOMETER	3.0 DIFF.	3.0 DIFF	3.0 DIFF

OPERATORS: Brian Loughton 24 - 08 Joey Blackwell 08 -16 Ken Davis 16 -24

(SEE OTHER SIDE)

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Nitric Acid Plant with 2 Stacks

4. Emissions Unit Identification Number:
ID: **007**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**3/15/1985**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Nitric acid plant with natural gas fueled catalytic combustor for NO_x abatement.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Catalytic combustor using natural gas to reduce NO_x to molecular nitrogen.

2. Control Device or Method Code(s): **065**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			53	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:	**825 TPD 100% acid**			
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

The maximum allowable production rate (as 100% HNO_3) is 825 TPD. The maximum annual production rate is 255,500 TPY (700 TPD average).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

1-3.63(b), E.P.C.H.C.

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-204.800, F.A.C.

62-204.800(7)(b)9., F.A.C.

62-210.200, F.A.C.

62-212.300, F.A.C.

62-212.400, F.A.C.

62-296.320, F.A.C.

62-296.408, F.A.C.

62-296.408(1) and (2), F.A.C.

62-296.800, F.A.C.

62-297, F.A.C.

62-297.310(7)(a)(4), F.A.C.

40 CFR 60, Appendix A

40 CFR 60, Subpart G

40 CFR 60.7(c) and (e)

40 CFR 60.13(h)

40 CFR 60.72(a)(2)

40 CFR 60.73(a) and (e)

40 CFR 60.74(b)(4)

40 CFR 60.74(d)

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-07-1 & 29-07-2**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **No. 1 Stack, 30-inch diameter, 65 ft above grade**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **65** feet	7. Exit Diameter: **3.21** feet
8. Exit Temperature: **275** °F	9. Actual Volumetric Flow Rate: **47,000** acfm	10. Water Vapor: **5.00** %
11. Maximum Dry Standard Flow Rate: **39,000** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **363.200** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters): **Representative data is given for stack 29-07-2. Additional No. 1 stack data is as follows: Flow, acfm = 40,500; dscfm = 28,300; Moisture = 5%; and Temperature = 265°F.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Nitric Acid Production**		
2. Source Classification Code (SCC): **3-01-013-02**	3. SCC Units: **Tons Produced or Manufactured**	
4. Maximum Hourly Rate: **34.4**	5. Maximum Annual Rate: **255,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Production rates are in tons of 100% nitric acid. The maximum annual production rate is based on an annual average daily production of 700 TPD. The maximum hourly rate equates to 825 TPD.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO_x	065		EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **90**
3. Potential Emissions: **103.1** lb/hour **287.2** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **40 CFR 60.70 Subpart G**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **The allowable hourly emissions rate: 34.38 (tons 100% HNO_3)/hr x 3 lb NO_x/ton HNO_3 = 103.1 lb/hr Annual emissions are synthetically limited to 287.2 TPY to avoid PSD review.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **40 CFR 60.70 limits emissions to 3.0 lb NO_x per ton, but compliance test data are consistently less than 3.0 lb/ton.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **287.2 TPY**	4. Equivalent Allowable Emissions: **103.1** lb/hour **287.2** tons/year
5. Method of Compliance (limit to 60 characters): **Continuous Emission Monitor Required by 40 CFR 60 Subpart G.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual EPA Method 9 Test**	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: **NO_x**	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Thermo Environmental, Inc.** Model Number: **TEI 42C** Serial Number: **RFNA-1289-074**	
5. Installation Date: **22 May 2002**	6. Performance Specification Test Date: **09 Aug 2002**
7. Continuous Monitor Comment (limit to 200 characters): **Required by 40 CFR 60 Subpart G.**	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU4-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: NI-EU4-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: NI-EU4-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: NI-EU4-J4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date: July 2002 [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: NI-EU4-J6 [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU4-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

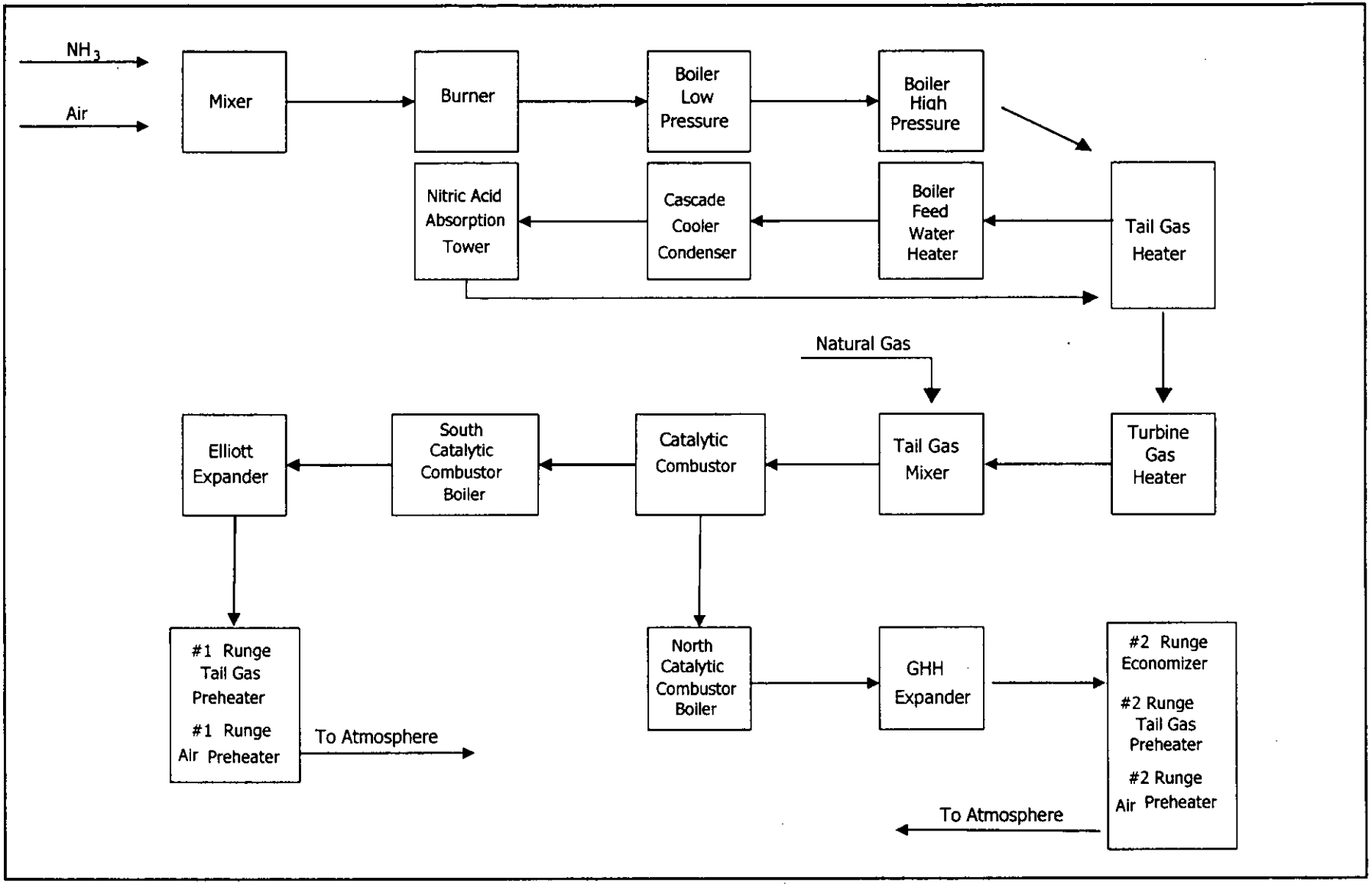
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU4-J1

PROCESS FLOW DIAGRAM

0237636/4/4.4/4.4.1/NI-EU4-J1.vsd 02/11/03



Attachment NI-EU4-J1
Nitric Acid Plant with 2 Stacks

Process Flow Diagram
Nitram, Inc. - Tampa, Florida

Golder Associates

ATTACHMENT NI-EU4-J2

FUEL ANALYSIS

ATTACHMENT NI-EU4-J2

FUEL ANALYSIS

Fuel	Density	Weight % Sulfur	Weight % Ash	Heat Capacity
Natural Gas	0.048 lb/scf	neg.	neg.	1,000 Btu/scf

ATTACHMENT NI-EU4-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU4-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

The function of the catalyst is to reduce the NO_x content of the tail gases from a nitric acid plant from a level of 1,000 to 3,000 ppm to 200 ppm (NO_x) (volume basis) at the operating conditions specified below. The catalyst is installed in a brick-lined vessel 10 ft to 0 inch ID for continuous plug flow operation. Natural gas is added prior to contacting the catalyst. The fuel gas reacts with the tail gas as it passes through the catalyst bed and the heat generated in the combustor is recovered downstream as high-pressure steam in a boiler and as power for driving an air compressor.

ATTACHMENT NI-EU4-J4

STACK SAMPLING FACILITIES

ATTACHMENT NI-EU4-J4a

STACK SAMPLING FACILITIES

NO. 1 STACK

The stack has a carbon steel deck that extends at least 120 degrees around the stack and is at least 3 feet wide with a minimum of 24 square feet of work area.

The ladders, railings, and ladder cage are to OSHA specifications.

There are two sample ports 90 degrees apart, one of which has a temperature gauge in it. The ports are 2-inch inside diameter.

The sample port is 5 feet from the top of the stack.

The stack has two ports enlarged (3-inch inside diameter) that are 90 degrees apart and accessible to a 120-degree deck. The stack has a 0.75-inch eyebolt and 3- by 3- by 1.5- by 0.25-inch angle spaced above each sample port.

The sample ports are closed off when sampling is completed.

Two 120-volt electrical supplies will be supplied by way of extension cords.

ATTACHMENT NI-EU4-J4b

STACK SAMPLING FACILITIES

NO. 2 STACK

The stack has a carbon steel deck that has approximately 67 square feet of work space that extends 360 degrees around the stack in the shape of an octagon with 42 inches on each outside leg and 32 inches from the outside railing to the stack.

The ladders, railings, and ladder cage are to OSHA specifications. The stack has two ports (3-inch inside diameter) that are 90 degrees apart. The stack has a 3/4–inch eyebolt and 3 foot by 3 inch by 1 1/2 inch by ¼ inch angle placed above each sample port.

The sample ports are 6 feet 10 inches from the top of the stack. The sample port with the temperature gauge is 11 inches off the deck and the other port is 6 inches off the deck.

The eyebolt is capable of supporting a 500-lb load.

The sample ports can be closed off when sampling is completed.

Two 120-volt electrical supplies will be supplied by way of extension cords.

ATTACHMENT NI-EU4-J6

STARTUP AND SHUTDOWN PROCEDURES

ATTACHMENT NI-EU4-J6

STARTUP AND SHUTDOWN PROCEDURES

The nitric acid plant will be started so that the minimum autoignition temperature of the absorber tail gas stream is reached as quickly as possible. This usually takes about 40 minutes. When the combustor reaches the minimum required autoignition temperature, natural gas will immediately be introduced into the system so that the combustor can begin to meet its design efficiency. The excess visible emissions will recede rapidly once this occurs, and NO_x emissions will abate more slowly. A shift supervisor will be standing by during startup to monitor the NO_x emissions recorded by the continuous monitor and oversee the startup procedures to ensure that these best management practices are implemented.

At shutdown, the process is vented over a period of approximately 10 minutes. At the time of shutdown, the natural gas fuel to the catalytic combustor is shutoff to prevent forming an explosive mixture, and the plant is purged with air. Visible emissions are present during this time.

Source: Title V Operation Permit No. 0570029-007-AC.

ATTACHMENT NI-EU4-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU4-J14

COMPLIANCE ASSURANCE MONITORING PLAN

NITRIC ACID PLANT – EU ID 004

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

Nitrogen oxide is the only pollutant for which there is a federally enforceable emission limit for this emission unit. A continuous emission monitor is already installed to measure nitrogen oxide emissions from this emissions unit as required by 40 CFR 60, Subpart G. Therefore, a compliance assurance monitoring plan is not required.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Kaolin Clay Handling and Storage w/Flex-Kleen Baghouse

4. Emissions Unit Identification Number:
ID: **008**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**3/23/1978**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

This emission unit is not currently in use.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Flex-Kleen Model 84-RA-64KD (III) Baghouse

2. Control Device or Method Code(s): **018**

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Flex-Kleen Corp.** Model Number: **84-RA-64KD (III)**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:		**25 TPH Clay**		
4. Maximum Production Rate:		**50,000 lb/hr Prills**		
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-210.300(1), (2), and (5), F.A.C.

62-213.440(1), F.A.C.

62-296.320, F.A.C.

62-296.700, F.A.C.

62-296.700(6), F.A.C.

62-296.711, F.A.C.

62-296.711(2)(a) and (b), F.A.C.

62-296.711(3)(c), F.A.C.

62-297, F.A.C.

62-297.310(7)(a), F.A.C.

62-297.310(7)(a)4, F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-08**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This baghouse serves as dust control for the clay coating operation and the bin vent.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **1. Clay Coating Operation** **2. Clay Truck Unloading**		
5. Discharge Type Code: **H**	6. Stack Height: **39** feet	7. Exit Diameter: **1.0** feet
8. Exit Temperature: **85** °F	9. Actual Volumetric Flow Rate: **2,500** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: **2,385** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **353.150** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Clay Processing and Kaolin – Product Storage**		
2. Source Classification Code (SCC): **3-05-041-71**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **12**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Chemical Manufacturing – Ammonium Nitrate Production: Coating (Low Density)**		
2. Source Classification Code (SCC): **3-01-027-28**	3. SCC Units: **Tons Produced**	
4. Maximum Hourly Rate: **25**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Daily average rate for Kaolin clay unloading and storage.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.60** lb/hour **2.60** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **40 CFR 60.70 Subpart G**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.03 gr/dscf x 2,385 dscfm x 60 min/hr/7000 gr/lb = 0.6 lb/hr** **0.6 lb/hr x 8,760 hr/yr/2000 lb/T = 2.6 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **The allowable pollutant emissions pursuant to 62-296.711(2)(b) F.A.C. were used to calculate potential emissions.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **0.60** lb/hour **2.70** tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **62-296.711(2)(b)**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): 62-296.711(2)(a) F.A.C.	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU5-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: NI-EU5-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [X] Attached, Document ID: NI-EU5-J7 [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU5-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

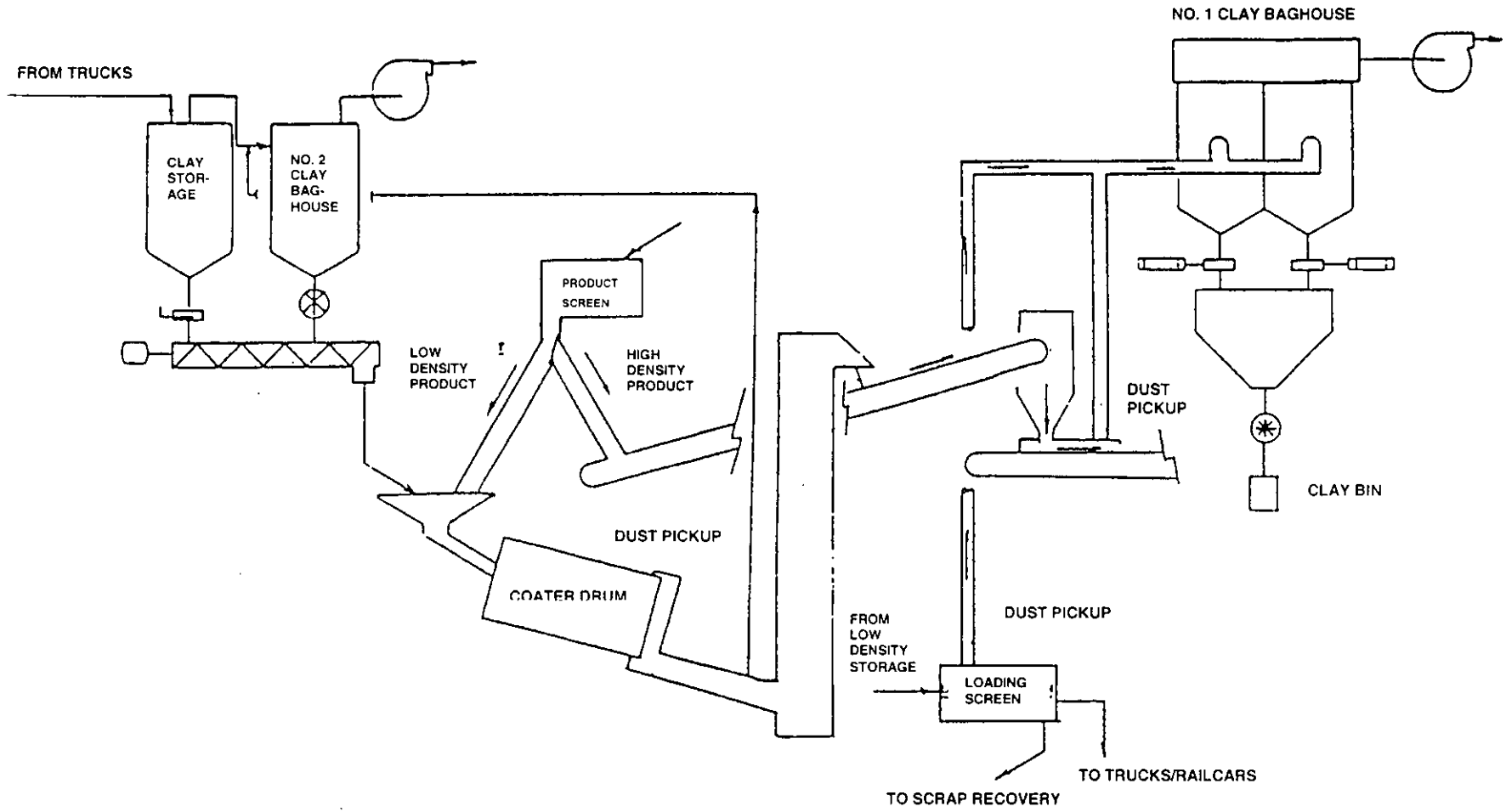
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU5-J1

PROCESS FLOW DIAGRAM



ATTACHMENT NI-EU5-J1
PROCESS FLOW DIAGRAM
KAOLIN CLAY HANDLING AND STORAGE – EU ID 008
NITRAM, INC.; TAMPA, FLORIDA

Source: Golder, 2003.

Golder Associates

ATTACHMENT NI-EU5-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU5-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

KAOLIN CLAY HANDLING AND STORAGE

Manufacturer and Model No.	Flex-Kleen Model 84-RA-64-KD (III)	
Date of Installation	February 1989	
Inlet Gas Temperature	85	°F
Inlet Gas Flow Rate	2,500	acfm
Outlet Gas Temperature	85	°F
Outlet Gas Flow Rate	2,500	acfm
	2,385	dscfm
Pressure Drop Across Device	1-3	inches of H_20
Air to Cloth Ratio	3.9:1.0	
Bag Material	16	oz Polyester
Bag Cleaning	shake	
Maximum Permitted Particulate Matter Emissions	0.6	lb/hr
	0.03	gr/dscf

ATTACHMENT NI-EU5-J7

OPERATION AND MAINTENANCE PLAN

ATTACHMENT NI-EU5-J7

OPERATION AND MAINTENANCE PLAN

KAOLIN CLAY HANDLING AND STORAGE

The Following Operation and Maintenance (O&M) Plan for Particulate Matter Control pursuant to Rule 62-296.700(6), F.A.C., shall be followed if the unit is in operation:

A. Process Parameters:
1. Source Designators: Kaolin Clay Storage and Transfer
2. Baghouse Manufacturer: Flex-Kleen Corporation
3. Model Name and Number: Flex-Kleen 84-TA-64KD (III)
4. Design Flow Rate: 2,500 acfm
5. Efficiency Rating at Design Capacity: 99+%
6. Pressure Drop: 1-3 inches H_2O
7. Air to Cloth Ratio: 3.9:1.0
8. Bag Material: 16-ounce polyester felt
9. Bag Cleaning Conditions: shake
10. Gas Temperature: Ambient
11. Gas Flow Rate: 2,500 acfm
12. Stack Height Aboveground: 39 ft
13. Exit Diameter: 1.05 ft
14. Exit Velocity: 84 ft/sec
15. Process Controlled by Collection System: Clay Silo and Transfer Conveyor
16. Maximum Permitted Material Handling Rate: 25 tons/hr
17. Hours of Operation: 24 hr/day; 7 days/wk; 52 wk/yr (8,760 hr/yr)

B. The following observations, checks, and operations apply to this emissions unit and shall be conducted on the schedule specified:

Daily
1. Observe baghouse pressure drop.
2. Observe stack visual emission level.
3. Walk through system listening for proper operation (audible leaks, proper fan and motor functions, bag cleaning systems, etc.).
4. Note any unusual occurrence in the process being ventilated.
5. Observe all indicators on control panel.
6. Assure that dust is being removed from system.

Weekly
1. Inspect air lock bearings for lubrication.
2. Operate all damper valves (isolation, by-pass, etc.).
3. Check bag cleaning sequence to see that all valves are opening and closing properly.
4. Spot check bag tension inside bag collectors.
5. Check pressure drop indicating equipment for plugged lines.
6. Check compressed air lines, including line oilers and filters.

Monthly

1. Check cleaning mechanism moving parts.
2. Inspect fans for corrosion and material build-up.
3. Check all drive belts and chains for wear and tension.
4. Check all hoses and clamps.
5. Check accuracy of all indicating equipment.
6. Inspect housing for corrosion.

Quarterly

1. Inspect baffle plate for wear.
2. Thoroughly inspect bags.
3. Check duct for dust build-up.
4. Observe damper valves for proper seating.
5. Check gaskets on all doors.
6. Inspect paint.

Annually

1. Check all bolts.
2. Check welds.
3. Inspect hopper for wear.
4. Check airlock rotor for wear.

ATTACHMENT NI-EU5-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU5-J14

COMPLIANCE ASSURANCE MONITORING PLAN

KAOLIN CLAY HANDLING AND STORAGE

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

Particulate matter (PM) emissions from this emission unit are controlled using a baghouse. Potential uncontrolled emissions from this emission unit are about 100 tons per year (TPY). Therefore, a compliance assurance monitoring plan is required for this emission unit. However, this emission unit is not currently in use. Should Nitram decide to operate the Kaolin Clay Handling and Storage Operation, they will submit a compliance assurance monitoring plan 60 days prior to commencing operation.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
M_gO Silo w/Griffin Environmental Baghouse (Silo #1)

4. Emissions Unit Identification Number:
ID: **010**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**1/1/1981**	**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Griffin Environmental Bin Vent baghouse servicing a silo that is pneumatically filled from a tank truck.

2. Control Device or Method Code(s): **018**

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Griffin Environmental** Model Number: **JV-24-4X**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:		**12 ton/hr**		
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	3	hours/day	**3**	days/week
	52	weeks/year	**468**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-210.300(1), (2), and (5), F.A.C.

62-213.440(1), F.A.C.

62-296.320, F.A.C.

62-296.700(6), F.A.C.

62-296.711, F.A.C.

62-296.711(2)(a) and (b), F.A.C.

62-296.711(3)(c), F.A.C.

62-297, F.A.C.

62-297.310(7)(a), F.A.C.

62-297.310(7)(a)4, F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-10**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This source is a "Bin Vent" baghouse on a pneumatically filled silo.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **63** feet	7. Exit Diameter: **0.7** feet
8. Exit Temperature: **85** °F	9. Actual Volumetric Flow Rate: **450** acfm	10. Water Vapor: **3.00** %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **353.100** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **M_gO Handling and Storage**		
2. Source Classification Code (SCC): **3-05-092-01**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **12**	5. Maximum Annual Rate: **4,680**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Maximum hourly truck unloading rate of 12 TPH.** **Maximum annual rate of 4,680 TPY is total for this emission unit and emission unit 011.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.12** lb/hour **0.03** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **5**
8. Calculation of Emissions (limit to 600 characters): **0.03 gr/dscf x 450 cfm x 60 min/hr/7000 gr/lb = 0.12 lb/hr** **0.12 lb/hr x 3 hr/day x 3 day/wk x 52 wk/yr/2000 lb/ton = 0.03 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Unit does not operate continuously, as is reflected in emissions calculations.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCRACT**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **0.12** lb/hour **0.03** tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limits on hours of operation synthetically limit the annual potential emissions.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **62-296.310(4)(b) F.A.C.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: NI-EU6-J1 [ ] Not Applicable [ ] Waiver Requested

2. Fuel Analysis or Specification
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested

3. Detailed Description of Control Equipment
   [X] Attached, Document ID: NI-EU6-J3 [ ] Not Applicable [ ] Waiver Requested

4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested

5. Compliance Test Report
   [ ] Attached, Document ID: _____
   [X] Previously submitted, Date: April 2002
   [ ] Not Applicable

6. Procedures for Startup and Shutdown
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested

7. Operation and Maintenance Plan
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested

8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID: _____ [X] Not Applicable

9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU6-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

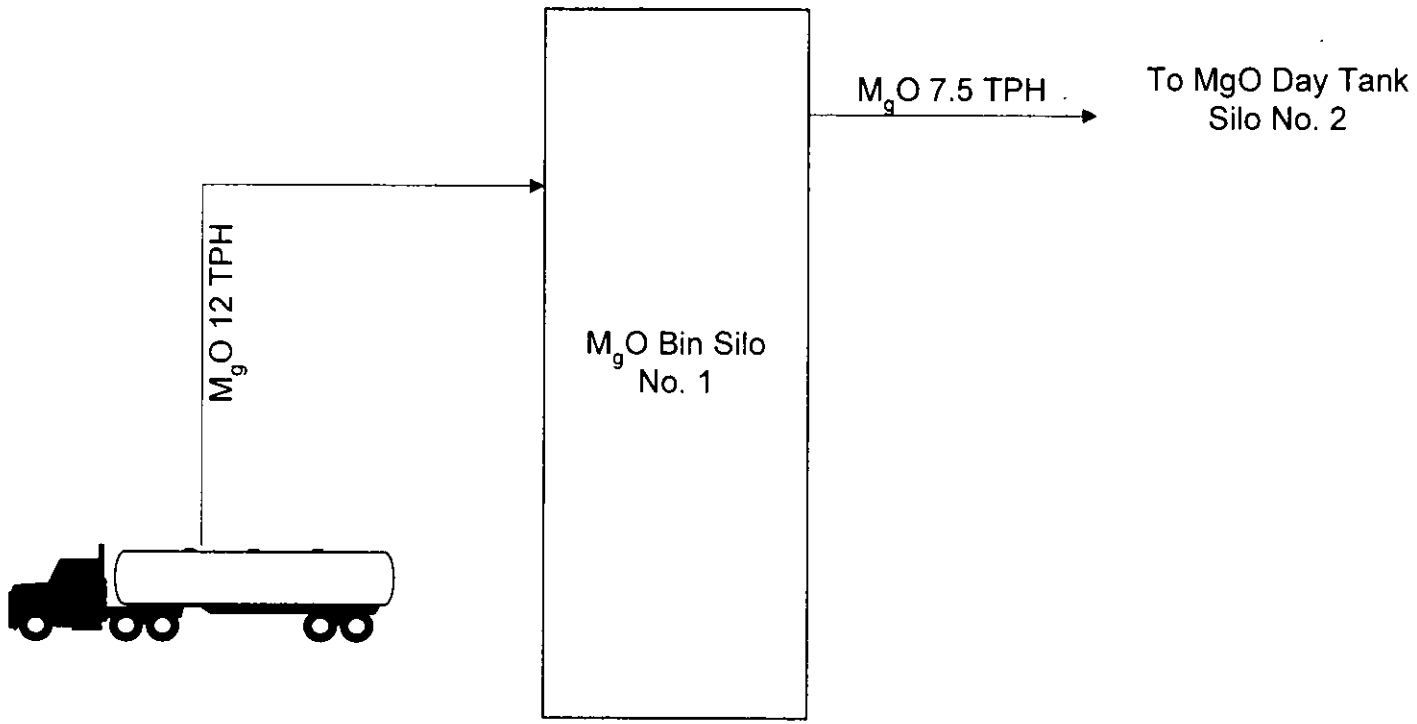
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU6-J1

PROCESS FLOW DIAGRAM



ATTACHMENT NI-EU6-J1
PROCESS FLOW DIAGRAM
M_gO Bin Silo No. 1 - EU ID 010
NITRAM, INC., TAMPA, FLORIDA

Source: Golder, 2003.

0237636\4\4.4\4.4.1\NI-EU6-J1.VSD

1/27/2003

Golder Associates

ATTACHMENT NI-EU6-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU6-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

M_gO BIN SILO NO. 1 BAGHOUSE

Manufacturer and Model No.	Griffen Env. Model 24-J4-4x	
Inlet Gas Temperature	85	°F
Inlet Gas Flow Rate	450	acfm
Outlet Gas Temperature	85	°F
Outlet Gas Flow Rate	450	acfm
Cloth Area	106	ft^2
Air to Cloth Ratio	4.25:1	
No. of Bags	24	
Type of Bag	16	oz Polyester Felt
Maximum Permitted Particulate Matter Emissions	0.12	lb/hr
	0.03	TPY

ATTACHMENT NI-EU6-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU6-J14

COMPLIANCE ASSURANCE MONITORING PLAN

M_gO BIN SILO NO. 1 WITH BAGHOUSE – EU ID 010

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

M_gO Bin Silo No. 1 has a federally enforceable particulate matter (PM) emission limit of 0.03 tons per year (TPY). PM emissions are controlled using a baghouse. Assuming a control efficiency of the baghouse of 99 percent, uncontrolled PM emissions from M_gO Bin Silo No. 1 are 30 TPY. Since potential uncontrolled PM emissions from this emission unit are below the major source threshold for PM of 100 TPY, a compliance assurance monitoring plan is not required.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
M_gO Day Tank w/Griffin Environmental Baghouse (Silo #2)

4. Emissions Unit Identification Number:
ID: **011**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

This baghouse is a bin vent for a pneumatically filled day tank.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Griffin Environmental baghouse serving as a bin vent for a pneumatically filled day tank. The day tank is filled from the M_gO Bin Silo.

2. Control Device or Method Code(s): **018**

Emissions Unit Details

1. Package Unit:		
Manufacturer: **Griffin Environmental**	Model Number: **JV-24-4X**	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:			**7.5 TPH**	
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	2	hours/day	**7**	days/week
	52	weeks/year	**728**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-210.300(1), (2), and (5), F.A.C.

62-213.440(1), F.A.C.

62-296.320, F.A.C.

62-296.700, F.A.C.

62-296.700(6), F.A.C.

62-296.711, F.A.C.

62-296.711(2)(a) and (b), F.A.C.

62-296.711(3)(c), F.A.C.

62-297, F.A.C.

62-297.310(7)(a), F.A.C.

62-297.310(7)(a)4, F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-11**	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
5. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: **63** feet	7. Exit Diameter: **0.7** feet
8. Exit Temperature: **85** °F	9. Actual Volumetric Flow Rate: **550** acfm	10. Water Vapor: **3.00** %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **353.100** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **M_gO Handling and Storage**		
2. Source Classification Code (SCC): **3-05-092-01**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **7.5**	5. Maximum Annual Rate: **4,680**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Maximum annual rate of 4,680 TPY is total for this emission unit and emission unit 010.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.14** lb/hour **0.05** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **5**
8. Calculation of Emissions (limit to 600 characters): **0.03 gr/scf x 550 cfm x 60 min/hr/7000 gr/lb = 0.14 lb/hr** **0.14 lb/hr x 2 hr/day x 7 day/wk x 52 wk/yr/2000 lb/ton = 0.05 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Pollutant emissions are synthetically limited by limits on hours of operation.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCRACT**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: **0.14** lb/hour **0.05** tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **62-296.320(4)(b) F.A.C.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU7-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: NI-EU7-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU7-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

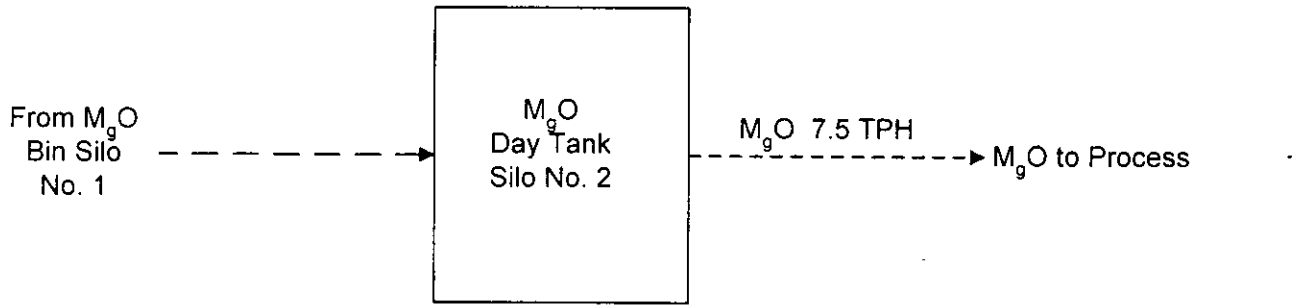
[X] Not Applicable

ATTACHMENT NI-EU7-J1

PROCESS FLOW DIAGRAM

0237636/4/4.4/4.4.1/NI-EU7-J1.vsd

01/27/03



Attachment NI-EU7-J1
M_gO Day Tank Silo No. 2 - EU ID 011

Process Flow Diagram
Nitram, Inc. - Tampa, Florida

Process Flow Legend
Solid/Liquid
Gas
Steam

Golder Associates

ATTACHMENT NI-EU7-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU7-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

M_gO DAY TANK SILO NO. 2 WITH BAGHOUSE

Manufacturer and Model No.	Griffen Env. Model 24-J4-4x	
Inlet Gas Temperature	85	°F
Inlet Gas Flow Rate	550	acfm
Outlet Gas Temperature	85	°F
Outlet Gas Flow Rate	550	acfm
Cloth Area	106	ft^2
Air to Cloth Ratio	5.19:1	
No. of Bags	24	
Type of Bag	16	oz Polyester Felt
Maximum Permitted Particulate Matter Emissions	0.14	lb/hr;
	0.05	TPY

ATTACHMENT NI-EU7-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU7-J14

COMPLIANCE ASSURANCE MONITORING PLAN

M_gO DAY TANK SILO NO. 2 WITH BAGHOUSE – EU ID 010

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

M_gO Day Tank Silo No. 2 has a federally enforceable particulate matter (PM) emission limit of 0.05 ton per year (TPY). PM emissions are controlled using a baghouse. Assuming a control efficiency of the baghouse of 99 percent, uncontrolled PM emissions from M_gO Day Tank Silo No. 2 are 50 TPY. Since potential uncontrolled PM emissions from this emission unit are below the major source threshold for PM of 100 TPY, a compliance assurance monitoring plan is not required.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Prill Rotary Drums w/Wet Cyclones and Peabody Scrubber

4. Emissions Unit Identification Number:
ID: **012**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Air exiting each drum enters a wet cyclone before combining into a common scrubber.

2. Control Device or Method Code(s): **009, 055**

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Peabody Engineering, Inc.** Model Number: **SX-351**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:		**100,000 lb/hr**		
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

The maximum rate of 100,000 lb/hr is for the processing of HD prills. LD prills are processed at a maximum rate of 46,000 lb/hr. These methods of operation will not affect allowable PM emissions. Note: HD = high density, LD = low density.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-210.200, F.A.C.

62-213.440(1), F.A.C.

62-296.320, F.A.C.

62-296.700(6), F.A.C.

62-296.711(3)(c), F.A.C.

62-296.712, F.A.C.

62-296.712(2), F.A.C.

62-297, F.A.C.

62-297.310(7)(a)3, F.A.C.

62-297.310(7)(a)4, F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-12**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
6. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **35** feet	7. Exit Diameter: **5.0** feet
8. Exit Temperature: **101** °F	9. Actual Volumetric Flow Rate: **41,700** acfm	10. Water Vapor: **7.00** %
11. Maximum Dry Standard Flow Rate: **36,100** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **363.200** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **High Density Prill Processes**		
2. Source Classification Code (SCC): **3-01-027-06**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **50 (Daily Average)**	5. Maximum Annual Rate: **438,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **The maximum annual rate is based on 8,760 hr/yr of HD prill processed and assumes no LD processing.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Low Density Prill Processed**		
2. Source Classification Code (SCC): **3-01-027-06**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **37 (Daily Average)**	5. Maximum Annual Rate: **324,120**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **The maximum annual rate is based on LD prill processed 8,760 hr/yr and assumes no HD prill is processed.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	009	055	EL
PM_{10}	009	055	NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **9.28** lb/hour **50.5** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.03 gr/dscf x 36,100 dscfm x 60 min/hr/7000 gr/lb = 9.28 lb/hr** **9.28 lb/hr x 8,760 hr/yr/2000 lb/ton = 40.7 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **The allowable emissions pursuant to 62-296.711(2)(b) F.A.C. were used to estimate potential emissions.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 gr/dscf, 50.5 TPY**	4. Equivalent Allowable Emissions: **9.28** lb/hour **50.5** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 9 testing annually with EPA Method 5 testing at permit renewal.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Hourly particulate limits in gr/dscf are pursuant to 62-296.711(2)(b) F.A.C. Construction Permit No. 0570029-007-AC set the combined annual PM emission rate for the Prill Tower and Prill Rotary Drums at 50.5 TPY.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.3** lb/hour **15.5** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **100 lb NO_X/MMft^3 Natural Gas** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.013 MMft^3/hr x 100 lb NO_X/ MMft^3 = 1.3 lb NO_X/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **15.5 TPY**	4. Equivalent Allowable Emissions: lb/hour **15.5** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable NO_X emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.099** lb/hour **1.18** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **7.6 lb PM_{10}/$MMft^3$** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.013 $MMft^3$/hr x 7.6 lb PM_{10}/ $MMft^3$ = 0.099 lb PM_{10}/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **1.18 TPY**	4. Equivalent Allowable Emissions: lb/hour **1.18** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable PM_{10} emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): 62-296.711(2)(a) F.A.C.	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU8-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: NI-EU8-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: NI-EU8-J4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [X] Previously submitted, Date: January 2002 [ ] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [X] Attached, Document ID: NI-EU8-J7 [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: NI-EU8-J11 [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU8-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

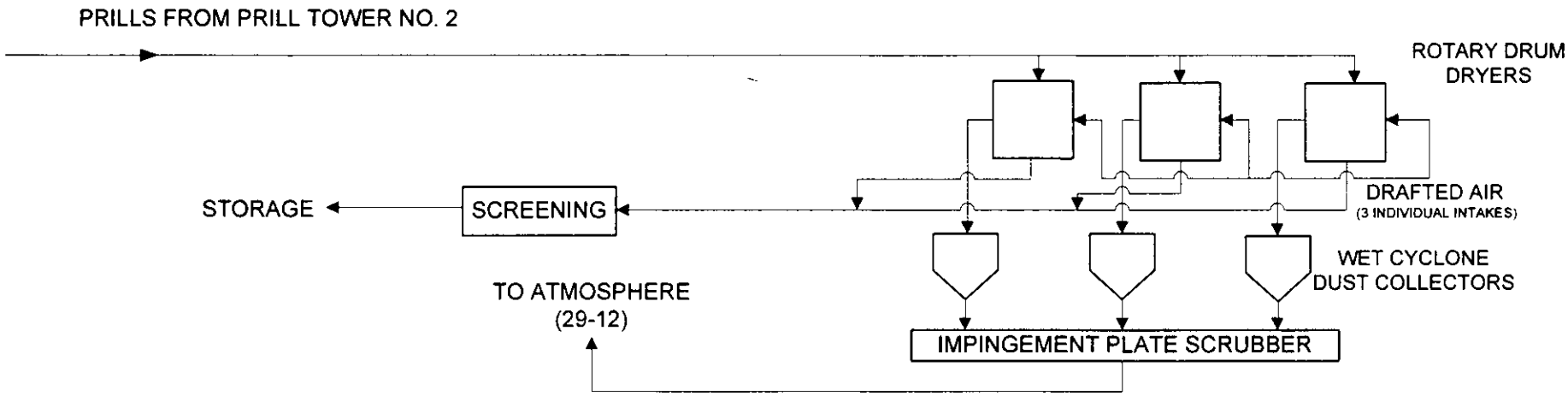
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU8-J1

PROCESS FLOW DIAGRAM



ATTACHMENT NI-EU8-J1
PROCESS FLOW DIAGRAM
PRILL ROTARY DRUMS - EU ID 012
NITRAM, INC., TAMPA, FLORIDA

Source: Golder, 2003.

0237636\4\4.4\4.4.1\NI-EU8-J1.VSD

2/14/2003

Golder Associates

ATTACHMENT NI-EU8-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT NI-EU8-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

PRILL ROTARY DRUMS WITH WET CYCLONES AND SCRUBBER

Manufacturer and Model No.	Peabody Model SX-351	
Outlet Gas Temperature	101	°F
Outlet Gas Flow Rate	41,700	acfm;
	36,100	dcsfm
Design Efficiency (Particulate Matter)	99	percent
Maximum Permitted Particulate Matter Emissions	9.28	lb/hr;
	40.7	TPY

ATTACHMENT NI-EU8-J4

STACK SAMPLING FACILITIES

ATTACHMENT NI-EU8-J4

STACK SAMPLING FACILITIES

PEABODY SCRUBBER

The scrubber has a stainless-steel deck that extends approximately 170 degrees around the stack. There is approximately 33 square feet of catwalk area. The railings, ladders, and ladder cage are to OSHA specifications. The two sample ports are 3-inch-inside diameter approximately 90-degrees apart. The sample ports are 7 feet from top of stack.

The stack has a 0.75-inch eyebolt and 3- by 3- by 1.5 by 0.25-inch angle placed above each sample port.

The sample ports are 3-inch-inside diameter and have plugs to close up the ports when not in use.

Two 120-volt electrical supplies will be supplied by way of extension cords.

ATTACHMENT NI-EU8-J7

OPERATION AND MAINTENANCE PLAN

ATTACHMENT NI-EU8-J7

OPERATION AND MAINTENANCE PLAN

PRILL ROTARY DRUMS WITH WET CYCLONES AND SCRUBBER

The following Operation and Maintenance (O&M) Plan for particulate matter (PM) control pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

A. Process Parameters:
1. Source Designators: Rotary Drum Scrubber with Wet Cyclone
2. Scrubber Manufacturer: Peabody
3. Model Name and Number: SX-351
4. Design Flow Rate: 41,700 acfm but variable depending on prill grade production
5. Efficiency Rating at Design Capacity: 99%
6. Gas Temperature: Outlet; 101°F
7. Stack Height Aboveground: 35 ft
8. Exit Diameter: 5 ft
9. Water Vapor Content: 100% (100% Relative Humidity)
10. Process Controlled by Collection System: Drying/Cooling of Ammonium Nitrate
11. Material Process Rate: 23 to 55 tons/hr
12. Hours of Operation: 24 hr/day; 7 days/wk; 52 wk/yr (8,760 hr/yr)

B. The following observations, checks, and operations apply to this emissions unit and shall be conducted on the schedule specified:

Daily
1. Observe stack.
2. Note any unusual occurrence in the process being ventilated.
3. Log the volumetric liquid flow of the scrubber (gpm).

Monthly
1. Inspect fans for corrosion and material build-up.
2. Check all hoses and clamps.
3. Check all drive belts and chains for wear and tension.
4. Inspect housing for corrosion.

Annually
1. Open and inspect sieve trays, sprays, and mist eliminators and make any necessary repairs.
2. Check deadline circulating pump and note discharge pressure
3. Check for leaks and repair as necessary.
4. Check level control device and make repairs as necessary.
5. Check level gauge sight glass.

C. Records:
Records of inspections, maintenance, and performance parameters shall be retained and shall be made available to the Department of Environmental Protection Commission of Hillsborough County upon request [Rule 62-296.700(6), F.A.C.].

ATTACHMENT NI-EU8-J11

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT NI-EU8-J11

ALTERNATIVE METHODS OF OPERATION

PRILL ROTARY DRUMS – EU ID 012

This equipment can be used to produce either high- or low-density prills.

ATTACHMENT NI-EU8-J14

COMPLIANCE ASSURANCE MONITORING PLAN

PRILL ROTARY DRUMS

I. Background

A. Emissions Unit

Description:	Prill Rotary Drums
Emission Unit ID:	012
Facility:	Nitram, Inc. Tampa, FL

B. Applicable Regulation, Emission Limits, and Monitoring Requirements

Regulations:	Permit 0570029-007-AC
Emissions Limits:	
Opacity:	5 percent [Rule 62-296.712(2), F.A.C.]
Particulate Matter:	The lesser of 9.24 lb/hr or 0.03 grains per dry standard cubic foot [Rules 62-210.200 and 62-296.712(2), F.A.C.]
Monitoring Requirements:	Maintain a log recording pressure differential and volumetric liquid flow rate (fresh water and make-up water) at least once per 8-hour shift.

C. Control Technology

Three wet cyclones in series with a Peabody Model SX-351 Impingement Scrubber

II. Monitoring Approach

Nitram will continue to monitor and record the scrubber pressure differential as required in their current Title V Operation Permit.

and Flow-Rate ?

Table 1. Monitoring Approach

		Indicator No. 1
I.	Indicator	Scrubber pressure differential.
	Measurement Approach	Measured using a U-tube manometer.
II.	Indicator Range	While the Rotary Drums are operating, an excursion is defined as a pressure differential outside the range from 0.5 and 5.0 inches of water. Excursions trigger an inspection, corrective action, and a reporting requirement.
III.	Performance Criteria	
I.	Data Representativeness	The U-tube manometer measures the pressure differential between the inlet and outlet duct of the scrubber.
II.	Verification of Operation Status	Not Applicable.
III.	QA/QC Practices and Criteria	The U-tube manometer will be zeroed prior to reading. The operational status of the manometer will be checked if the pressure differential is outside the proposed indicator.
IV.	Monitoring Frequency	The pressure differential will be observed and recorded daily when the Rotary Drums are operating.
	Data Collection Procedures	Pressure differential recorded with the time, date, and name of the observer.
	Averaging Period	Not Applicable.

MONITORING APPROACH JUSTIFICATION

I. Background

The Prill Rotary Drums are used to further dry and cool both high- and low-density prills. The Prill Rotary Drums have a capacity to process 37 tons per hour of low-density prills and 50 tons per hour of high-density prills on a daily average basis.

Particulate matter (PM) emissions from the Prill Rotary Drums are controlled by three wet cyclones in parallel followed in series by a Peabody Model SX-351 Impingement Scrubber. The facility's current Title V Operation Permit requires that a log be maintained containing daily observation of the liquid (water) flow rate to the scrubber and the pressure differential across the scrubber.

U.S. Environmental Protection Agency (EPA) Method 5 compliance tests were performed on the Prill Rotary Drums on December 27, 2001 (processing high-density prills) and on December 28, 2001 (processing low-density prills). Summary pages from these compliance tests are attached. The measured PM emission rate measured while processing high-density prills was 1.4 pounds per hour. The measured PM emission rate measured while processing low-density prills was 0.8 pounds per hour. The results of both compliance tests were below the permitted PM emission limit of 9.24 lb/hr. The process rates during the compliance tests were within 90% of the permitted process rates for both high- and low-density prills. The pressure differential across the scrubber measured during the compliance test while processing high-density prills ranged from 2.5 to 2.7 inches of water. The pressure differential across the scrubber measured during the compliance test while processing low-density prills was 2.6 inches of water.

The PM emission limit for Prill Rotary Drums, the lesser of 9.24 lb/hr, 0.03 grains per dry standard cubic foot, or 40.7 TPY was established by Rules 62-210.200 and 62-296.712(2), F.A.C.

II. Rationale for Selection of Performance Indicators

A log containing daily observations of the pressure differential is already required by the existing Title V Operation Permit for the facility. Through negotiations with the Florida Department of Environmental Protection (FDEP) and the Environmental Protection Commission of Hillsborough County (EPC), compliance with the PM emission limit has been established to be demonstrated when the pressure differential is within the specified range of 0.5 to 5.0 inches of water, inclusive (Construction Permit No. 0570029-007-AC). An increase in the pressure differential may indicate clogging of the scrubber or increased gas flow. A decrease in the pressure differential may indicate a decrease in the gas or liquid flow or poor liquid distribution. EPA, in Example 4a of Appendix B, of their technical guidance document titled: Compliance Assurance Monitoring, recommends that pressure differential be monitored as an indication of proper scrubber performance.

III. Rationale for Selection of Indicator Ranges

The most recent stack test for the Prill Rotary Drums were performed on December 27 and 28, 2001. The stack tests demonstrated compliance with the established PM emission limit while processing either high- or low-density product. During those compliance tests, the minimum pressure differential measured across the scrubber was 2.5 inches of water. The maximum pressure differential was 2.7 inches of water. The results of previous stack tests have demonstrated compliance with the permitted PM emission rate at measured pressure differentials of 0.5 to 5 inches of water. These compliance tests have been submitted to FDEP and EPC and accepted by these agencies as sufficient evidence that compliance is demonstrated at the range of pressure differentials currently permitted. Nitram intends to use the results of future compliance tests to further refine this indicator range as necessary. Additional compliance tests were performed in January 2003. These tests were performed while

producing high-density prills and then again while processing low-density prills. These results of these tests were not available prior to the submittal deadline for this Title V Permit renewal application.

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: PEABODY SCRUBBER
Product: High Density Prill

	Run 1	Run 2	Run 3
Date of Run	12/27/01	12/27/01	12/27/01
Process Rate (TPH)	49.75	49.75	49.75
Start Time (24-hr. clock)	0938	1114	1257
End Time (24-hr. clock)	1039	1217	1300
Vol. Dry Gas Sampled Meter Cond. (DCF)	39.541	38.814	39.506
Gas Meter Calibration Factor	1.000	1.000	1.000
Barometric Pressure at Barom. (in. Hg.)	30.17	30.15	30.08
Elev. Diff. Manom. to Barom. (ft.)	0	0	0
Vol. Gas Sampled Std. Cond. (DSCF)	40.142	38.718	39.009
Vol. Liquid Collected Std. Cond. (SCF)	1.278	1.749	1.641
Moisture in Stack Gas (% Vol.)	3.1	4.3	4.0
Molecular Weight Dry Stack Gas	30.00	30.00	30.00
Molecular Weight Wet Stack Gas	29.63	29.48	29.52
Stack Gas Static Press. (in. H2O gauge)	-0.25	-0.27	-0.25
Stack Gas Static Press. (in. Hg. abs.)	30.15	30.13	30.06
Average Square Root Velocity Head	0.420	0.395	0.409
Average Orifice Differential (in. H2O)	0.989	0.893	0.946
Average Gas Meter Temperature (Deg. F)	65.7	74.5	78.8
Average Stack Gas Temperature (Deg. F)	105.6	105.3	105.7
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	24.01	22.65	23.48
Effective Stack Area (sq. ft.)	19.63	19.63	19.63
Stack Gas Flow Rate Std. Cond. (DSCFM)	25,783	24,020	24,893
Stack Gas Flow Rate Stack Cond. (ACFM)	28,281	26,689	27,660
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.305	0.305	0.305
Percent Isokinetic	100.5	104.0	101.1
Particulate Collected (mg.)	12.7	20.6	18.6
Particulate Emissions (grains/DSCF)	**0.005**	**0.008**	**0.007**
Avg. Particulate Emissions (grains/DSCF)		**0.007**	
Allowable Particulate Emissions (grains/DSCF)		**0.03**	
Particulate Emissions (lb./hr.)	**1.1**	**1.7**	**1.6**
Avg. Particulate Emissions (lb./hr.)		**1.4**	
Allowable Particulate Emissions (lb./hr.)		**9.24**	

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

NITRAM
PEABODY SCRUBBER
HIGH DENSITY PRILL PRODUCTION

12/27/01

Run No.	1	2	3
Scrubber liquid flow rate (gpm)	400	400	400
Water pressure to scrubber (PSIG)	84	85	85
Pressure drop across scrubber in H_2O)	2.5	2.6	2.7
Scrubber liquid pH	7.1	7.2	7.2
Product concentration of drums scrubber	9.0	8.9	8.8

TABLE 1. PARTICULATE EMISSIONS TEST SUMMARY

Company: NITRAM, INC.
Source: PEABODY SCRUBBER
Product: Low Density Prill

	Run 1	Run 2	Run
Date of Run	12/28/01	12/28/01	12/28/01
Process Rate (TPH)	33.64	33.64	33.64
Start Time (24-hr. clock)	0828	0950	1131
End Time (24-hr. clock)	0929	1052	1233
Vol. Dry Gas Sampled Meter Cond. (DCF)	44.398	48.184	50.567
Gas Meter Calibration Factor	1.000	1.000	1.000
Barometric Pressure at Barom. (in. Hg.)	30.04	30.07	30.07
Elev. Diff. Manom. to Barom. (ft.)	0	0	0
Vol. Gas Sampled Std. Cond. (DSCF)	44,409	47,206	48,986
Vol. Liquid Collected Std. Cond. (SCF)	2.249	2.513	3.357
Moisture in Stack Gas (% Vol.)	4.8	5.1	6.4
Molecular Weight Dry Stack Gas	30.00	30.00	30.00
Molecular Weight Wet Stack Gas	29.42	29.39	29.23
Stack Gas Static Press. (in. H2O gauge)	-0.02	-0.03	-0.03
Stack Gas Static Press. (in. Hg. abs.)	30.04	30.07	30.07
Average Square Root Velocity Head	0.481	0.526	0.574
Average Orifice Differential (in. H2O)	1.297	1.501	0.946
Average Gas Meter Temperature (Deg. F)	71.7	83.6	89.0
Average Stack Gas Temperature (Deg. F)	99.7	100.8	100.1
Pitot Tube Coefficient	0.84	0.84	0.84
Stack Gas Vel. Stack Cond. (ft./sec.)	27.50	30.09	32.90
Effective Stack Area (sq. ft.)	19.63	19.63	19.63
Stack Gas Flow Rate Std. Cond. (DSCFM)	29,200	31,846	34,360
Stack Gas Flow Rate Stack Cond. (ACFM)	32,393	35,449	38,754
Net Time of Run (min.)	60.0	60.0	60.0
Nozzle Diameter (in.)	0.305	0.305	0.305
Percent Isokinetic	98.2	95.7	92.0
Particulate Collected (mg.)	13.0	3.7	9.5
Particulate Emissions (grains/DSCF)	**0.005**	**0.001**	**0.003**
Avg. Particulate Emissions (grains/DSCF)		**0.003**	
Allowable Particulate Emissions (grains/DSCF)		**0.03**	
Particulate Emissions (lb./hr.)	**1.1**	**0.3**	**0.9**
Avg. Particulate Emissions (lb./hr.)		**0.8**	
Allowable Particulate Emissions (lb./hr.)		**9.24**	

Note: Standard conditions 68 Deg. F, 29.92 in. Hg

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NITRAM
PEABODY SCRUBBER
LOW DENSITY PRILL PRODUCTION

12/28/01

Run No.	1	2	3
Scrubber liquid flow rate (gpm)	400	400	400
Water pressure to scrubber (PSIG)	86	87	86
Pressure drop across scrubber in H_2O)	2.6	2.6	2.6
Scrubber liquid pH	6.4	6.4	6.5
Product concentration of drums scrubber	5.0	5.0	5.0

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Gas Fired Hurst Package Boiler

4. Emissions Unit Identification Number:
ID: **013**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Package boiler fired exclusively by natural gas or propane as a standby fuel. The boiler is exempt from RACT; however, is subject to NSPS Subpart Dc.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Hurst Boiler and Welding Company** Model Number: **S4-G-300-250**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			12.9	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-4.070(3), F.A.C.

62-4.160(2), F.A.C.

62-204.800(7)(b)4., F.A.C.

62-210.200, F.A.C.

62-210.700, F.A.C.

62-213.440(1), F.A.C.

62-296.406(2) and (3), F.A.C.

62-296-700, F.A.C.

62-296.700(6), F.A.C.

62-296-702, F.A.C.

62-296-702(2)(b), F.A.C.

62-297, F.A.C.

62-297.310(7)(a)(3), F.A.C.

40 CFR 60, Appendix A

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **29-13**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
7. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **23** feet	7. Exit Diameter: **1.7** feet
8. Exit Temperature: **490** °F	9. Actual Volumetric Flow Rate: **4,360** acfm	10. Water Vapor: **21.00** %
11. Maximum Dry Standard Flow Rate: **1,885** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **363.200** North (km): **3089.000**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **1-03-006-02**	3. SCC Units: **Million Cubic Feet Burned (All Gaseous Fuels)**	
4. Maximum Hourly Rate: **0.013**	5. Maximum Annual Rate: **114**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Propane Combustion**		
2. Source Classification Code (SCC): **1-03-010-02**	3. SCC Units: **Thousand Gallons Burned (All Liquid Fuels)**	
4. Maximum Hourly Rate: **0.14**	5. Maximum Annual Rate: **1,244.00**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **92**
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO_x			EL
PM			EL
SO_2			EL
PM_{10}			EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.3** lb/hour **15.5** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **100 lb NO_X/MMft^3 Natural Gas** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.013 MMft^3/hr x 100 lb NO_X/ MMft^3 = 1.3 lb NO_X/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **15.5 TPY**	4. Equivalent Allowable Emissions: lb/hour **15.5** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable NO_X emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour **0.27** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Pollutant emissions were assumed equal to the allowable emissions set forth by permit condition.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.27 TPY**	4. Equivalent Allowable Emissions: lb/hour **0.27** tons/year
5. Method of Compliance (limit to 60 characters): **Allow firing of only natural gas or propane.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Allowable emissions set forth by permit condition.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SO_2	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour **0.11** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Pollutant emissions calculated by allowable emissions set for the in permit condition.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.11 TPY**	4. Equivalent Allowable Emissions: lb/hour **0.11** tons/year
5. Method of Compliance (limit to 60 characters): **Allow firing of only natural gas or propane.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Allowable emissions set forth by permit condition.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.099** lb/hour **1.18** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **7.6 lb PM_{10}/$MMft^3$** Reference: **AP-42, Section 1.4**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **0.013 $MMft^3$/hr x 7.6 lb PM_{10}/ $MMft^3$ = 0.099 lb PM_{10}/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **1.18 TPY**	4. Equivalent Allowable Emissions: lb/hour **1.18** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel use records.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Limit for total combined allowable PM_{10} emissions for the Babcock & Wilcox Package Boiler (EU 003), Foster Wheeler Package Boiler (EU 004), and the Hurst Package Boiler (EU 013). See Permit No. 0570029-007-AC.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Test using EPA Method 9 performed 8 to 12 months prior to the expiration date of the permit.**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-297, F.A.C. and 40 CFR 60, Appendix A.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: NI-EU9-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: NI-EU9-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [X] Previously submitted, Date: To be done Jan-Feb 2003 [ ] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment: **Compliance Test Report – Existing operating permit requires that the Compliance Test be performed in the 120-day period prior to expiration of the permit. This permit renewal application is due 180 days prior to expiration of the permit.**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: NI-EU9-J11 [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: NI-EU9-J14 [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

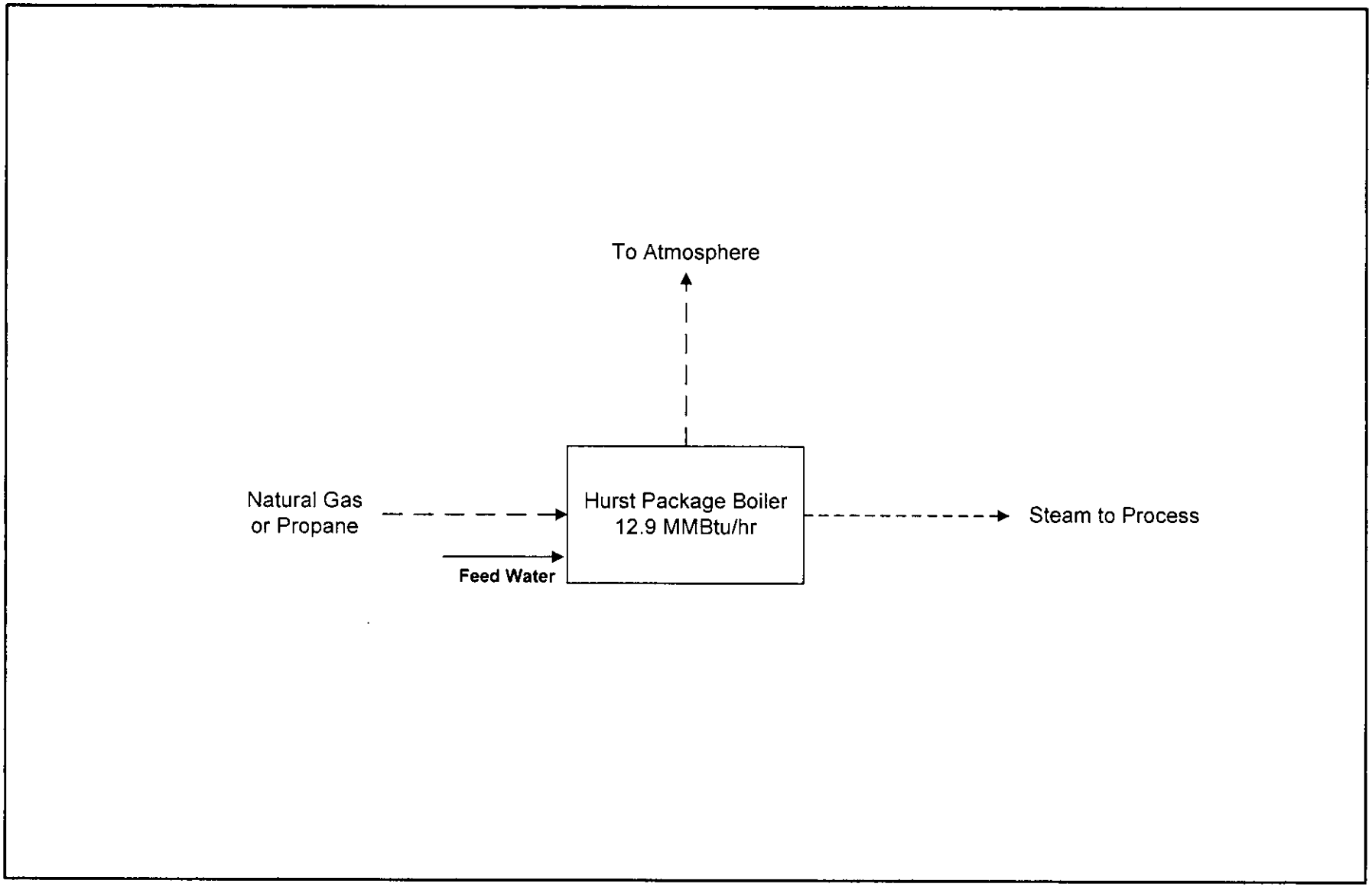
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT NI-EU9-J1

PROCESS FLOW DIAGRAM



Attachment NI-EU9-J1
Hurst Package Boiler - EU ID 013

Process Flow Diagram
Nitram, Inc. - Tampa, Florida

Process Flow Legend
Solid/Liquid
Gas
Steam

Golder Associates

ATTACHMENT NI-EU9-J2

FUEL ANALYSIS

ATTACHMENT NI-EU9-J2

FUEL ANALYSIS

Fuel	Density	Weight % Sulfur	Weight % Ash	Heat Capacity
Natural Gas	0.048 lb/scf	neg.	neg.	1,000 Btu/scf
Propane	4.2 lb/gal	neg.	neg.	43 MMBtu/ton

ATTACHMENT NI-EU9-J11

ALTERNATIVE METHODS OF OPERATIONS

ATTACHMENT NI-EU9-J11

ALTERNATIVE METHODS OF OPERATION

The primary fuel for the Hurst Package Boiler (EU ID 013) is natural gas. Alternatively, it may be fired with propane.

ATTACHMENT NI-EU9-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT NI-EU9-J14

COMPLIANCE ASSURANCE MONITORING PLAN

HURST PACKAGE BOILER – EU ID 013

Compliance Assurance Monitoring Plan Applicability Determination

Applicability Analysis

There is no emission control equipment associated with this source. Therefore, a compliance assurance monitoring plan is not required for this source.

Source: Golder, 2003.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
see Attachment NI-EU10-A3

4. Emissions Unit Identification Number:
ID: **100**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**28**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer:	Model Number:	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:		**438,000 TPY**		
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

High-density Ammonium Nitrate Prills.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
8. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:)	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			NS
PM_{10}			NS
VOC			NS
NH_3			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: _____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: _____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: _____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: _____

[X] Not Applicable

ATTACHMENT NI-EU10-A3

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES

ATTACHMENT NI-EU10-A3

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES

The following listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

EU ID No.	Brief Description of Emissions Units and/or Activity
-100	Bulk loading and handling of ammonium nitrate
-100	Rail and truck of ammonium nitrate solution loading
-100	Petroleum tank breathing losses
-100	Emissions from surface impoundments (excludes non-contact cooling water impoundments)
-100	Ammonium nitrate neutralizer and condensing stack
-100	Product bagging operations
-100	Process fugitive emissions (equipment leaks and particulate matter)
-100	Truck loading of nitric acid solution
-100	Coated $NH_4 NO_3$ storage