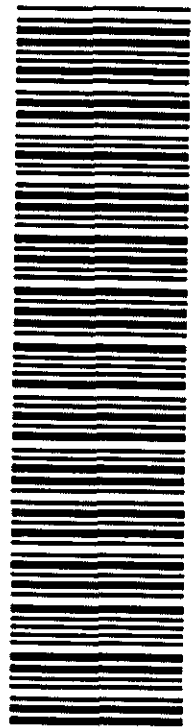
		2ND		Pieces: 1/1
FMI: DEP AIR RESOURCE MGMT P. Adams DIRECTOR OFFICE STE 23 111 S MAGNOLIADR TALLAHASSEE, FL 32301 UNITED STATES Phone: 850-921-9505 To: DEP SOUTHWEST DISTRICT OFFICE MS. MARA NASCA 8407 LAUREL FAIR CIRCLE AIR RESOURCES TAMPA, FL 33610 UNITED STATES		Sender's ref 37550201000 A7 AP255		ORIGIN: TLH
Description: 1050059-052-AC application Mosaic		Weight: Letter Date: 2006-08-16		POSTCODE: 33610
DHL standard terms and conditions apply.		TEL: 813-744-6100		Day 18FR
 (2L)US33610		ALEX OD FSC		
 WAYBILL: 17445228850 (Non-Negotiable)				

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 DEP Southwest District Office
 Air Resources
 8407 Laurel Fair Circle

Tampa, FL 33610
 UNITED STATES

Attention To: Ms. Mara Nasca
 Phone#: 813-744-6100

Sent By: P. Adams
 Phone#: 850-921-9505

Rate Estimate: 3.57
 Protection: Not Required
 Description: 1050059-052-AC application Mosaic

Weight (lbs.): Letter
 Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
 Service Level: 2nd Day (2nd business day by 5 PM)


Special Svc:

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 Bill To Acct: 778941286

DHL Signature (optional) _____ Route _____ Date _____ Time _____

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KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ■ FAX/377-7158

RECEIVED

KA 124-03-06

AUG 14 2006

August 11, 2006

BUREAU OF AIR REGULATION

Mr. A. L. Linero, P.E.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Construction Permit Application
Mosaic Fertilizer, LLC - New Wales Facility
Facility No. 1050059

Dear Mr. Linero:

Enclosed are four copies of an application for a construction permit for the above referenced facility. The request is for a revision to several permit conditions previously discussed with Scott Sheplak.

If you have any questions, please call me.

Very truly yours,

KOOGLER & ASSOCIATES

Pradceep Raval

Par.
Encl.

C: C. D. Turley, Mosaic
MOLA RASIA, SWD



Department of Environmental Protection RECEIVED

Division of Air Resources Management AUG 14 2006

APPLICATION FOR AIR PERMIT - TITLE V SOURCE AIR REGULATION

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Mosaic Fertilizer, LLC	
2. Site Name: New Wales Facility	
3. Facility Identification Number: 1050059 [] Unknown	
4. Facility Location: Street Address or Other Locator: 3095 Highway 640 City: Mulberry County: Polk Zip Code: 33860	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: Pradeep Raval, Consultant	
2. Application Contact Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 NW 13th Street City: Gainesville State: FL Zip Code: 32609	
3. Application Contact Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	8-14-06
2. Permit Number:	1050059-052-AC
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: _____
- 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: _____
- 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: _____

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.

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 [], 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.

Signature

(seal)

Date

8/10/2006

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
	(Arranged in order of discussion)		
048	30% Clarification Area (Area 10)	ACIF	0
045	DAP Plant No. 2 – East Train	ACIF	0
046	DAP Plant No. 2 – West Train	ACIF	0
056	DAP Plant No. 2 – East Train Cooler	ACIF	0
029	029 #1 Fertilizer Rail/Truck Shipping	ACIF	0
037	037 Fertilizer Truck Loadout No. 2	ACIF	0
041	041 Fertilizer Truck Loadout No. 3	ACIF	0
043	043 Fertilizer Rail Loadout No. 2	ACIF	0
059	059 Fertilizer Rail Loadout No. 3	ACIF	0
060-080	Molten Sulfur System	ACIF	0
081	Rental Boiler	ACIF	0

Application Processing Fee

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

Construction/Modification Information

1. Description of Proposed Project or Alterations: **See Attachment 1**

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

Application Comment

The information submitted herein is in the format discussed with FDEP.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 396.6 North (km): 3078.9			
2. Facility Latitude/Longitude: NA Latitude (DD/MM/SS): Longitude (DD/MM/SS):			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 28	6. Facility SIC(s): 2874
7. Facility Comment (limit to 500 characters): 			

Facility Contact

1. Name and Title of Facility Contact: Dean Ahrens, Env. Superintendent			
2. Facility Contact Mailing Address: Organization/Firm: Mosaic Fertilizer, LLC Street Address: P.O. Box 2000 City: Mulberry State: FL Zip Code: 33860			
3. Facility Contact Telephone Numbers: Telephone: Telephone: (863) 428- 2500 Fax: () -			

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	

List of Applicable Regulations

FDEP Core List, Rules 62-4, -204,-210,-212, -296,-297, FAC; FS 120,403.	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM/PM10	A				
SO2	A				
NOX	A				
SAM	A				
FL	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: Att. 1 <input type="checkbox"/> Not Applicable
7. Supplemental Requirements Comment: There are no changes from the information previously submitted to FDEP as part of the permit application.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> 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: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

ATTACHMENT 1

Additional Construction Permit Items for Mosaic New Wales Permit File Nos. 1050059-045-AV and 1050059-042-AC

The following items are presented in the sequence they were recently discussed with FDEP, to facilitate the review. The section references are from a previous "draft permit".

Item 1.

Subsection R

It is requested that Emission Unit (EU) ID No. 048 Uranium Recovery System – Acid Clean Up be renamed "30% Clarification Area (Area 10)" in the permit.

Further, it is requested that the particulate matter (PM) emissions limitation and the annual testing requirement for PM emissions be deleted. The PM requirements are from a BACT determination on the Uranium Recovery Process, which has been shutdown. The equipment is now used in the phosphoric acid clarification process. As there is no applicable PM standard, the limitation is inappropriate. A copy of the old BACT determination is presented in Attachment 2.

(Original reference, permit AC53-6084)

Item 2.

Subsection G

Emission Units ID Nos.:

045 DAP Plant No. 2 – East Train

046 DAP Plant No. 2 – West Train

056 DAP Plant No. 2 – East Train Cooler

It is requested that the requirement to maintain a minimum pressure drop of 15 inches of water for the venturi scrubbers be deleted from specific conditions since the MACT requirements address this issue. The MACT rule requires more extensive monitoring and operating requirements for the scrubbers. The test data, presented in Attachment 3, indicates compliance on a consistent basis with the scrubber operating in the required range that would apply under MACT. Also included in Attachment 3 is an excerpt from the BACT determination discussion regarding the pressure drop.

(Original reference, permit 1050059-020-AC)

Items 3 and 4

Subsection N

EU. 029 #1 Fertilizer Rail/Truck Shipping

Subsection Q

Emission Units ID Nos.:

037 Fertilizer Truck Loadout No. 2

041 Fertilizer Truck Loadout No. 3

043 Fertilizer Rail Loadout No. 2

059 Fertilizer Rail Loadout No. 3

It is requested that the shipping units be classified as an insignificant activity and allow removal of the emission unit control devices as there will be application of a dust suppressant at all times.

Per discussions with FDEP, the available VE test results are presented in Attachment 4. The following requested statement is submitted with the PE certification:

“The above units qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.”

FDEP has already made this determination for fertilizer loadout units at several similar facilities; and, it is anticipated that FDEP will list the reclassified emissions units, with the application of a dust suppressant at all times, in the Appendix I-1.

Item 5

Subsection W

Emission Unit ID No. 080 Molten Sulfur Truck Loading Station

It is requested that the emissions unit description in the permit reflect that only one loading station was constructed.

(Original reference, permit 1050059-034-AC, for Items 5, 6 and 7)

Item 6

Subection W

Emission Units ID Nos.:

- 060 7,500 Ton Rail Storage Molten Sulfur Storage Tank
- 062 5,000 Ton Molten Sulfur Storage Tank
- 063 1,500 Ton Truck Unloading Pit, Sulfur Pit (North)
- 064 350 Ton Truck Unloading Pit, Sulfur Pit (South)
- 064 800 Ton Railcar Unloading Pit
- 066 200 Ton Molten Sulfur Transfer Pit
- 067 1,500 Ton Truck Unloading Pit, Sulfur Pit Front Vent
- 068 1,500 Ton Truck Unloading Pit, Sulfur Pit Rear Vent
- 069 350 Ton Truck Unloading Pit, Sulfur Pit Vent
- 080 Molten Sulfur Truck Loading Station (amended as above Item)

It is requested that the VE testing be required once every 5 years (prior to renewal), consistent with Rule 62-297, FAC requirements for minor sources.

Item 7

Subection W

Emission Units ID Nos.:

- 064 800 Ton Railcar Unloading Pit
- 066 200 Ton Molten Sulfur Transfer Pit
- 080 Molten Sulfur Truck Loading Station (amended as above Item)

It is requested that the permit condition be revised to require sulfur deposition monitoring for a period of two years from the date of commencement of sulfur handling. As indicated in the January 29, 2004 letter from Koogler & Associates (submitted to you recently), the monitoring began on March 1, 2004, soon after all of the construction associated with this project was completed. The monitoring report, presented in Attachment 5, indicates insignificant sulfur deposition.

Item 8

Subection AA

Emission Units ID No.: 081 Rental Boiler

It is requested that the rental boiler be deleted from the permit as it has been removed from the site and will not be replaced.

ATTACHMENT 2

BACT DETERMINATION FOR URANIUM RECOVERY PLANT

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or Other Than The Addressee	
To: _____	Loctn.: _____
To: _____	Loctn.: _____
To: _____	Loctn.: _____
From: _____	Date: _____

TO: District, Subdistrict and Local Program Air Engineer

FROM: Mark Hodges, BAQM *M.H.*

DATE: September 22, 1980

SUBJ: B.A.C.T. as determined for IMC - New Wales' Uranium Recovery Plant, Polk County, Florida.

Attached find one copy of the above subject BACT as determined by the Florida Department of Environmental Regulation, Bureau of Air Quality Management.

Should you have any questions regarding this determination, please call me at (904) 488-1344 or Suncom 278-1344.

MH:dav

D. E. R.
OCT 3 1980
SOUTHWEST DISTRICT
TAMPA

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For routing to District Offices And/Or Other Than The Addressee	
To: _____	Locn.: _____
To: _____	Locn.: _____
To: _____	Locn.: _____
From: _____	Date: _____

TO: Jacob D. Varn

FROM: Steve Smallwood

DATE: September 15, 1980

SUBJ: Best Available Control Technology Determination IMC-
Uranium Recovery Plant/Acid Cleanup Area

Facility: Phosphoric acid clean up process that uses a series of carbon columns to remove undesirable material from the 30% acid before Uranium is recovered by a solvent extraction process. Particulate and fluoride emission are controlled with a scrubber.

The plant is a potential source of fluoride emissions. There are no specific emission standards for this source category in Chapter 17-2, F.A.C. BACT is required by Chapter 17-2.05(6)C.i.

BACT Determination requested by the applicant:

Fluorides Less than 0.5 #/hr.

Date of Receipt of a Complete BACT Application:

July 14, 1980

Date of Publication in the Florida Administrative Weekly:

August 8, 1980

Study Group Members:

Robert Garrett, DER, S. W. District
Teresa Heron, DER, BAQM

Study Group Recommendations:

	Fluoride	Particulate
Robert Garrett	0.003 #F/Ton P ₂ O ₅ (0.422 #F/hr.) ²	1.0 #/hr.
Teresa Heron	0.002 #F/Ton P ₂ O ₅ (0.28 #F/hr.) ²	-

BACT Determination by the Florida Department of Environmental Regulation:

Pollutant	Maximum Emissions
Fluoride	0.28 lb. fluoride/hr.
Particulate	1.0 lb. particulate/hr.

Compliance to be determined by reference methods 1, 2, 3, 5, 13A or 13B as published in 40 CFR 60, Appendix A, or other State approved method. Minimum sample time per run is 60 minutes and minimum sample volume is 30 DSCF.

Justification of DER Determination:

Test data on this source shows the proposed BACT standards can be met with the existing control equipment.

Details of the Determination May be Obtained by Contacting:

Willard Hanks
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Recommendations from the Bureau of Air Quality Management:

By: Steve Smallwood
Steve Smallwood

Date: _____

Approved by: Jacob D. Varn
Jacob D. Varn

Date: 19 SEPTEMBER 1980

Attachment

SS:caa

**New Wales DAP Plant No 2 - East Train (045)
Compliance Test Results**

Run	Time start	Time end	Test Date	Rate TPH	170 TPH max	fuel	mmBtu /hr	PM lb/hr	PM limit lb/hr	% limit	R/G Venturi dP	Dryer Venturi dP
1	943	1048	09/24/01	154				2.8			19.5	23.9
2	1710	1840	09/24/01	152				3.5			19.1	23.9
3	1920	2042	09/24/01	150				2.0			19.0	23.8
Test Average			09/24/01	152	89%	No. 6 Oil	9.9	2.8	5.8	48%	19.2	23.9
1	1035	1149	10/10/01	152				3.1			17.1	15.8
2	1230	1337	10/10/01	153				3.0			17.3	17.5
3	1405	1511	10/10/01	154				3.7			17.2	15.5
Test Average			10/10/01	154	91%	Nat Gas	1.3	3.3	5.8	56%	17.2	16.3
1	1209	1312	10/30/02	142				4.6			18.8	23
2	1350	1504	10/30/02	135				3.3			18.8	24.6
3	1539	1642	10/30/02	139				4.2			18.9	23.7
Test Average			10/30/02	139	82%	Nat Gas	1.2	4.0	5.2	77%	18.8	23.8
1	1407	1513	03/26/03					4.9			20.0	21.6
2	1546	1655	03/26/03					2.9			20.2	21.2
3	1727	1832	03/26/03					1.4			20.0	21.7
Test Average			03/26/03	142	84%	Nat Gas	3.3	3.1	5.4	56%	20.1	21.5
1	1118	1221	01/28/04	152				0.9			22.9	24.0
2	1249	1352	01/28/04	152				1.1			22.5	23.8
3	1420	1523	01/28/04	152				0.9			22.6	23.9
Test Average			01/28/04	152	89%	Nat Gas	3.3	1.0	5.8	17%	22.7	23.9
1	948	1053	01/28/05	156.3				1.4			22.8	22.3
2	1123	1229	01/28/05	158.3				1.6			22.7	22.6
3	1255	1359	01/28/05	160.3				1.7			22.5	22.7
Test Average			01/28/05	159.9	94%	Nat Gas	4.7	1.6	6.4	25%	22.7	22.5
1	918	1102	03/15/06	124.4				1.0			17.3	22.5
2	1140	1321	03/15/06	124.4				0.9			16.0	22.6
3	1350	1502	03/15/06	124.4				0.9			17.1	22.9
Test Average			03/15/06	124.4	73%	Nat Gas	3.9	0.9	6.0	lb/hr	16.8	22.7

**New Wales DAP Plant No 2 - West Train (046)
Compliance Test Results**

Rur	Time start	Time end	Test Date	Rate TPH	170 TPH max	Fuel	mm Btu /hr	PM lb/hr	PM limit lb/hr	% limit	R/G Venturi dP	Dryer Venturi dP
1	1115	1220	09/10/01	145	86%			3.6			20.4	19.5
2	1410	1523	09/10/01	148	87%			4.5			20.4	19.5
3	1538	1643	09/10/01	150	88%			3.1			20.8	19.6
Test Average			09/10/01	148	87%	No. 6 Oil	9.0	3.7	5.6	66%	20.5	19.5
1	1230	1346	05/22/02	145	85%			5.0			21.0	22.0
2	1500	1614	05/22/02	152	89%			2.2			21.5	21.8
3	1645	1750	05/22/02	150	88%			4.1			21.4	22.0
Test Average			05/22/02	149	88%	Nat Gas	1.4	3.8	5.7	66%	21.3	21.9
1	1042	1149	04/01/03	140	83%			2.9			21.2	22.0
2	1225	1329	04/01/03	141	83%			2.0			21.3	22.2
3	1356	1505	04/01/03	142	84%			3.1			21.3	22.0
Test Average			04/01/03	141	83%	Nat Gas	1.8	2.7	5.4	49%	21.3	22.1
1	907	1010	09/04/03	143	84%			2.1			21.7	18.4
2	1045	1147	09/04/03	143	84%			3.9			21.7	18.4
3	1223	1326	09/04/03	143	84%			0.9			21.7	18.5
Test Average			09/04/03	143	84%	Nat Gas	2.3	2.3	5.4	43%	21.7	18.4
1	932	1041	04/06/04	148	87%		5.9	1.8			22.6	21.0
2	1121	1227	04/06/04	148	87%		5.8	2.0			22.7	21.2
3	1255	1401	04/06/04	147	87%		4.7	2.1			22.7	20.8
Test Average			04/06/04	148	87%	Nat Gas	5.5	2.0	5.6	35%	22.7	21.0
1	947	1050	02/17/05	147	86%		4.6	2.4			21.1	19.3
2	1105	1208	02/17/05	147	86%		4.6	2.6			20.8	19.0
3	1227	1331	02/17/05	149	88%		4.5	1.2			21.0	18.8
Test Average			02/17/05	147	87%	Nat Gas	4.6	2.0	6.4	32%	21.0	19.0
1	1040	1145	11/16/05	151	89%		3.7	5.1			18.9	20.1
2	1215	1317	11/16/05	147	87%		3.7	3.3			18.6	19.9
3	1345	1447	11/16/05	147	86%		3.7	3.3			18.5	19.8
Test Average			11/16/05	148	87%	Nat Gas	3.7	3.9	5.6	69%	18.6	19.9

**New Wales DAP Plant No 2 East Product Cooler (056)
Compliance Test Results**

Run	Time start	Time end	Test Date	Rate TPH	170 TPH max	PM lb/hr	PM limit lb/hr	% limit	Cooler Venturi dP
1	1525	1630	09/18/01	158	93%	0.9			17.2
2	1655	1800	09/18/01	154	90%	3.9			17.3
3	1830	1935	09/18/01	157	92%	4.2			17.3
Test Average			09/18/01	156	92%	3.0	6.1	50%	17.3
1	1145	1247	12/06/01	150	88%	3.2			16.5
2	1000	1104	12/07/01	149	88%	2.8			16.0
3	1200	1304	12/07/01	148	87%	2.6			16.0
Test Average			12/06/01	149	88%	2.8	6.1	47%	16.2
1	1038	1142	12/17/02	133	78%	3.0			15.6
2	1205	1309	12/17/02	134	79%	2.6			15.5
3	1341	1445	12/17/02	135	79%	2.7			15.4
Test Average			12/17/02	134	79%	2.7	6.1	45%	15.5
1	902	1005	05/04/04	144	85%	3.3			17.1
2	1030	1135	05/04/04	151	89%	0.8			16.8
3	1205	1310	05/04/04	142	84%	0.6			17.0
Test Average			05/04/04	146	86%	1.6	6.1	26%	17.0
1	1010	1114	02/24/05	151	89%	9.9			15.6
2	1148	1244	02/24/05	137	81%	1.9			15.5
3	1317	1419	02/24/05	143	84%	3.0			16.1
Test Average			02/24/05	144	84%	4.9	6.1	82%	15.7
1	833	935	04/13/06	131		0.3			18.3
2	949	1051	04/13/06	133		0.3			18.2
3	1105	1206	04/13/06	131		0.2			18.1
Test Average			04/13/06	132	77%	0.3	6.1	4%	18.2

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

Characteristic of this process is that the first stage of scrubbing (acid scrubber) is primarily for ammonia recovery while the primary function of the second stage scrubber is fluoride removal, leaving PM/PM10 control with a secondary priority from a design standpoint. Since recovery of ammonia takes place by chemical reaction with the acid scrubbing medium, the required removal can be effected using a medium energy scrubber which also removes up to 85% of the product dust escaping the cyclones. The tail gas scrubber is a low pressure drop device that removes fluorides by absorption. For these reasons, employment of a high energy, high efficiency device for PM/PM10 removal has not been a design consideration for these plants.

If maximum PM/PM10 removal is considered to be a design parameter, the cost effectiveness of adding high energy scrubbing to the existing system (Option 1) would likely be in the range of \$50,000 - \$75,000 per incremental ton of PM/PM10 removed based on recent analyses for other projects. On a non-incremental basis, however, assuming replacement of the existing acid scrubbers with high energy ones, the cost effectiveness would drop to about \$7,000 to \$9,000 per ton for PM/PM10 removal in the 98+% efficiency range. Due to the high costs of installing new ducts, pumps, fans, and instrumentation for retrofitting an existing system, and the high energy costs, Option 1 is not feasible for this project.

Option 2 is the feasible choice, and since the existing venturi scrubbers are capable of being operated in the medium energy range, the BACT requirement will be satisfied by specifying their normal operation at a minimum pressure drop of 15 in. w.c. Analysis of recent test data for these scrubbers confirms that there is an inordinate safety margin between actual and allowable PM emissions, actuals being less than 20 percent of the allowables. Therefore, it is appropriate to reduce the allowables to a level consistent with typical margins for BACT limits. A margin of 100% above the highest representative data point from the 1997 stack tests ($0.04 \times 2 = 0.08$ lb/ton P2O5) appears reasonable for the reactor/granulators and dryers. The existing emission limit bases (gr/SCF) for the coolers are sufficient for this BACT determination.

COMPLIANCE

Compliance with the fluoride limit shall be in accordance with the EPA Reference Method 13A or 13B as contained in 40 CFR 60, Appendix A.

Compliance with the PM/PM10 limit shall be in accordance with the EPA Reference Method 5 as contained in 40 CFR 60, Appendix A.

Compliance with the visible emission limit shall be in accordance with the EPA Reference Method 9 as contained in 40 CFR 60, Appendix A.

ATTACHMENT 4

VISIBLE EMISSIONS FROM FERTILIZER LOADOUT

New Wales Fertilizer Loading VEs		
Facility ID 1050059		
Date	VE (6 min max)	VE Allowable
029 Fertilizer Truck/Rail Loadout No. 1		
8/1/1995	0	20
9/17/1996	0	20
7/22/1997	0	20
8/4/1998	0	20
8/3/1999	0	20
043 Fertilizer Rail Loadout No. 2		
3/30/1995	5	5
10/5/1995	0	5
4/26/1996	5	5
10/17/1996	0	5
3/19/1997	0	5
8/29/1997	0	5
2/9/1998	0	5
8/19/1998	0	5
3/2/1999	0	5
037 Fertilizer Truck Loadout No. 2		
3/28/1995	0	5
10/5/1995	0	5
4/24/1996	0	5
10/25/1996	0	5
3/19/1997	0	5
8/29/1997	0	5
2/10/1998	0	5
8/19/1998	0	5
3/2/1999	0	5
059 Fertilizer Rail Loadout No. 3		
3/9/1995	0	5
3/5/1996	0	5
2/14/1997	0	5
1/28/1998	0	5
3/2/1999	0	5
041 Fertilizer Truck Loadout No. 3		
3/10/1995	0	5
1/18/1996	5	5
2/14/1997	0	5
1/28/1998	0	5
3/2/1999	0	5
Note: Readings from control device exhausts		

ATTACHMENT 5
SULFUR DEPOSITION REPORT

Sulfur Deposition New Wales			Significant Level, lb/acre/yr:			75
Date Collected	Approx. Hours	S, mg	S, kg/hectare	S, lb/acre	S, lb/acre/yr, projected	Percent of Sig. Level, %
03/25/04	585	< 1.0	0.75	0.67	10.1	< 0.9
04/30/04	869	< 1.0	0.75	0.67	6.8	< 0.9
05/28/04	671	< 1.0	0.75	0.67	8.8	< 0.9
07/01/04	818	< 1.0	0.75	0.67	7.2	< 0.9
07/30/04	691	1.37	1.03	0.92	11.7	1.2
08/31/04	767	1.55	1.17	1.04	11.9	1.4
09/29/04	697	1.29	0.97	0.87	10.9	1.2
11/01/04	793	1.58	1.19	1.06	11.7	1.4
11/29/04	672	< 1.0	0.75	0.67	8.8	< 0.9
12/27/04	673	< 1.0	0.75	0.67	8.8	< 0.9
01/27/05	743	1.79	1.35	1.20	14.2	1.6
02/28/05	768	< 1.0	0.75	0.67	7.7	< 0.9
03/30/05	717	incorrect analysis preformed				
04/29/05	722	incorrect analysis preformed				
05/27/05	671	incorrect analysis preformed				
07/01/05	842	incorrect analysis preformed				
07/28/05	648	incorrect analysis preformed				
08/30/05	790	< 1.0	0.75	0.67	7.5	< 0.90
09/30/05	745	< 1.0	0.75	0.67	7.9	< 0.90
10/31/05	745	< 1.0	0.75	0.67	7.9	< 0.90
11/30/05	722	< 1.0	0.75	0.67	8.1	< 0.90
12/28/05	672	0.05	0.04	0.03	0.4	0.04
01/30/06	792	0.05	0.04	0.03	0.4	0.04
02/28/06	698	0.13	0.10	0.09	1.1	0.12
03/30/06	716	0.05	0.04	0.03	0.4	0.04
04/28/06	696	0.10	0.08	0.07	0.8	0.09
05/31/06	795	0.02	0.02	0.01	0.1	0.02
07/05/06	842	0.05	0.04	0.03	0.3	0.04
07/28/06	547	0.04	0.03	0.03	0.4	0.04