

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



June 10, 2004

CERTIFIED MAIL: 7002 2030 0000 6695 105

RECEIVED

043-7582

JUN 16 2004

FDEP Bureau of Air Regulations
MS 5505, Blair Stone Road
Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

Attention: Bobby Bull, Engineer II, Bureau of Air Regulation

RE: BARTOW PLANT TITLE V RENEWAL, REQUEST FOR ADDITIONAL INFORMATION,
DEP FILE NO. 1050046-018-AV

Dear Mr. Bull:

Attached please find four (4) copies of the application addendum to the Bartow facility Title V permit for incorporation of the Mulberry facility Title V permit into the Bartow Title V permit. The intent of this package is to respond to comments, incorporate the Mulberry facility into the Bartow Title V permit, and delete emission units at the Mulberry facility that no longer operate.

Cargill Fertilizer, LLC (Cargill) is in receipt of the Department's request for additional information dated May 11, 2004, regarding the inclusion of the Mulberry facility into the Bartow facility Title V renewal application. The comments are addressed below in the order they appear in the letter.

1. Ms. Bergen stated that Mr. E.O. Morris will remain the Responsible Official for the Bartow Plant and Mulberry Plant under the Title V permit.

Response: This is correct, Mr. E.O. Morris will remain the Responsible Official for the combined Title V permit.

2. Per conversations between Jerry Kissel, DEP Southwest District, and Debra Waters on July 16, 2002, the only processes that will operate at the Mulberry Plant will be the Sulfuric Acid Plant (SAP). In order to combine the Mulberry Plant emission units into the Bartow Title V renewal permit, please indicate which emission units will be operating to support the Mulberry SAP by submitting additional application pages for the Mulberry Plant emission units to be included in the renewal application that is currently under review for the Bartow Plant.

Response: The SAP at Mulberry (to be named the No. 3 SAP) will continue to operate as well as the Auxiliary Boiler, Molten Sulfur Truck Unloading Pit, and the Molten Sulfur Storage Tank. Application pages for these emission units have been attached to this letter as an application addendum. The Molten Sulfur Truck Unloading Pit and the Molten Sulfur Storage Tank have been incorporated into the group of emission units termed the "Molten Sulfur Storage and Handling" at Cargill Bartow.

3. Our current records for the Mulberry Plant show that:
 - a. EU No. 002 (DC/DA Sulfuric Acid Plant), EU No. 013 (Molten Sulfur Storage Tank- North Vent), EU No. 014 (Molten Sulfur Storage Tank- Southeast Vent), EU No. 015 (Molten Sulfur Storage Tank- Southwest Vent), and EU No. 016 (Molten Sulfur Storage Tank- Middle Vent) are currently active, and Annual Operating Reports have been submitted in 2002 for each unit. Please indicate if you intend to continue to operate any of these emission units.

Response: Cargill intends to continue to operate the following emission sources:

- Sulfuric Acid Plant (EU 002)

- Molten Sulfur Truck Unloading Pit (EU 011)
- Molten Sulfur Storage Tank (EU 013, 014, 015, and 016)
- Auxiliary Boiler (EU 009)

- b. EU Nos. 003, 005, 009-012, 019-030, and 032-044 have not reported emissions since 1999. Please indicate if there is any intention to operate any of these emission units in the future.

Response: Emission units 003 (Phosphoric Acid Plant—North Scrubber), 005 (MAP/DAP Plant), 010 (Phosphoric Acid Plant—South Scrubber), and 012 (Molten Sulfur Railcar Delivery Pit) have been permanently shutdown. Emission units 009 (Auxiliary Boiler) and 011 (Molten Sulfur Truck Delivery Pit) are currently operating and have been reported in both the 2002 and 2003 Annual Operating Reports. Emission unit 019 is the Phosphogypsum stack, which Cargill does not own. This emission unit should not be included as part of the Cargill Bartow Title V permit. Refer also to response to comment No. 4 below.

Emission units 020 through 024 are unregulated emission units associated with the Sulfuric Acid Plant No. 3. These emission units will continue to operate, but will need to be assigned new emission unit numbers so that they do not duplicate the Bartow EU numbers.

Emission units 025 through 028 are unregulated emission units associated with Phosphoric Acid Production. Since this operation has been permanently shutdown, these emission units should be removed from the permit. Emission units 029 and 030 are unregulated emission units associated with the MAP/DAP Granulation Plant. Since this operation has been permanently shutdown, these emission units should be removed from the permit.

Emission unit 032 is unregulated emission sources associated with molten sulfur handling and storage. These sources will continue to operate, but will need to be assigned new emission unit numbers so that they do not duplicate the Bartow EU numbers.

Emission units 033 through 035 are unregulated emission sources associated with Phosphate Rock Handling and Processing. Since this operation has been permanently shutdown, these emission units should be removed from the permit.

Emission units 036 through 041 are unregulated emission sources associated with routine plant maintenance. These emission units will continue to operate, but will need to be assigned new emission unit numbers so that they do not duplicate the Bartow EU numbers.

Emission units 042 through 044 are unregulated "other sources". These emission units no longer operate, therefore they should be removed from the permit.

- c. EU Nos. 006, 017, and 018 last reported emissions in 1993, have not operated since that time, and are inactive. If this is incorrect, please let me know. If this is correct, these emission units can not be included in the renewal permit.

Response: These emission units have been permanently shutdown and were removed from the Title V permit under previous ownership. Cargill has no intention of operating these emission units.

- d. EU Nos. 026 and 031 are inactive. Please indicate if these unregulated units will be part of the renewal permit.

Response: These emission units have been permanently shutdown. Cargill has no intention of operating these emission units.

4. Per the July 16, 2002 conversation between Jerry Kissel and Debra Waters, she indicated that the Mulberry Plant cooling ponds were going to be drained. Please indicate the current status of the cooling ponds.

Response: The phosphogypsum stack system, including the cooling ponds is not owned by Cargill. Cargill has a contract with FDEP to close the systems per the requirements of 62-673, F.A.C. This includes removal of impounded water from cooling ponds. Cargill is in the process of closure now and has until 2012 to complete closure under the contract. Any reference to the Mulberry phosphogypsum stack system or cooling ponds should be removed from the Title V permit, as it does not apply to Cargill's operations at this site.

5. Please submit any additional other pertinent information regarding the Mulberry plant which needs to be included in the Title V renewal application for the Bartow Plant. For instance, do you want the combined plant to be known as the "Bartow Plant"?

Response: The combined operations of the current Bartow and Mulberry facilities will be named the Bartow facility. Please refer to the attached application pages for pertinent emission unit information.

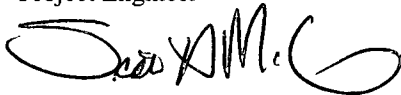
Please feel free to contact Fawn Bergen, Golder Associates Inc., at (352) 336-5600 or FBergen@golder.com, or Debra Waters, Cargill Bartow, at (863) 534-3615 or debbie_waters@cargill.com, if you have any questions regarding this information.

Sincerely,

GOLDER ASSOCIATES INC.



Fawn Bergen
Project Engineer



Scott McCann, P.E.
Associate Engineer

FWB/SAM

Enclosures

cc: D. Waters, Cargill Bartow

Y:\Projects\2004\0437582 CFI Mulberry TV\4.1\L061004-7582.doc



Mosaic Fertilizer, LLC
P.O. Box 9002
Bartow, FL 33831
www.mosaicco.com

Tel 863-534-9626
Fax 863-534-9680

February 4, 2005
Certified Mail 7099 3220 0007 3016 9455

Mr. Jim Pennington, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

FEB 10 2005

BUREAU OF AIR REGULATION

Dear Mr. Pennington;

**RE: MOSAIC FERTILIZER, LLC – BARTOW FACILITY
COMMENTS TO DRAFT TITLE V PERMIT
PERMIT NO. 1050046-018-AV**

Mosaic Fertilizer, LLC (Mosaic) is submitting the following comments to the above referenced Draft Title V Permit, received by Mosaic on December 28, 2005. The Intent to Issue was published in the Lakeland Ledger on January 7, 2005. This response constitutes a timely submittal of comments to the draft permit.

The comments below are referenced by section numbers that corresponds to the numbers in the draft permit. In addition, a copy of the draft permit is attached utilizing strike-through/underline edits for clarity. This letter and the edited draft permit have also being provided in electronic format to Mr. Bobby Bull for convenience of review.

Comments to the Statement of Basis

The first sentence of the forth paragraph incorrectly identifies the design capacity for the No. 3 Ammonium/Diammonium Phosphate Plant as 110 tons per hour of MAP/DAP. It should be changed to 3000 tons per day.

In the fifth sentence from the bottom of the same paragraph, please delete the references to "railroad tank car" and "railcar delivery pit" as part of this molten sulfur handling system.

Comments to Title V Air Operating Permit Renewal

DRAFT Permit No. 1050046-018-AV

Renewal to the Title V Air Operation Permit No.: 1050046-003-AV

Table of Contents:

III. I. 052 Change name to Bartow Phosphogypsum Stack to clarify that the requirements of this section do not include the stacks at Mulberry, which are not owned by Mosaic.

III. J. 054 Change name to No. 3 Sulfuric Acid Plant for consistency in naming with other plants under this permit

Section I. Subsection B.

E.U. ID No. -052 Change Brief Description name to Bartow Phosphogypsum Stack

E.U. ID No. -054 Change Brief Description name to No. 3 Sulfuric Acid Plant

Section II. Facility-wide Conditions

Add the following after Condition 22:

23. This permit includes a "Subsection" for each emission unit that includes a description of the emission unit. That description is descriptive only and is not enforceable.

Section III.

Subsection A. E.U. ID No. -001 Ammonium /Diammonium Phosphate Plant

The current design capacity for this plant is 3,000 tons per day of MAP/ DAP. The reference to the 110 tons per hour design is from the Title V permit prior to modifications under Construction Permit No. 1050046-008-AC. Please note this change in the first paragraph.

The second paragraph describing the unit does not reflect the modifications to the plant. Please delete this paragraph and insert the following description:

The dryer is fired with natural gas, or fuel oil with a maximum sulfur content of 0.25 percent, at a design heat input rate of 40 MMBtu per hour. Emissions from the dryer are controlled by a venturi scrubber and a cyclonic scrubber. Exhaust from the dryer scrubber goes through a packed tailgas scrubber. Emissions from the granulator are also controlled by a venturi and cyclonic scrubber. The reactor and vents have a separate venturi and cyclonic scrubber as does the cooler. Exhaust from the granulator, reactor, vents, and cooler go to a separate packed tailgas scrubber. The tailgas scrubbers exhaust goes to a common stack.

A.1. Capacity -please delete references to the 110.0 tons of DAP or 118.0 tons of MAP per hour as capacity limits.

A.2. Methods of Operation-(i.e., Fuels)— Mosaic has previously agreed to use only No. 2 fuel oil in the dryer with a sulfur content of no more than 0.25% by weight. The maximum amount of fuel oil that can be burned per year is 2.2 million gallons in either the #3 or #4 Fertilizer plants (E.U. ID Nos. -001 and -021) or as a combined total. This modification language is found in the #4 Fertilizer Plant construction permit No. 1050046-015-AC and should be referenced here as it effects this condition for the #3 Fertilizer Plant.

A.4. The permitting note incorrectly references fluoride emission limit Condition as A.5 and 0.06 lbs/ton equivalent P₂O₅ feed. The limit is in Condition A.4. and it is 0.041 lbs/ton equivalent P₂O₅ feed which is less than the applicable NESHAP.

A.12. Delete the first sentence. It references a condition in the former construction permit (1050046-008-AC) that no longer applies.

A.14. Delete the table of parametric limits. They do not reflect the current configuration of this plant following modifications under the construction permit. Also, as outlined in the Statement of Basis, this permit incorporates the Department approved Alternative Monitoring Plan for the scrubbers in this unit. We suggest the following language be inserted for this condition:

The pollution control equipment shall be operated in accordance with the Department approved Alternative Monitoring Plan for the scrubbers associated with this unit. Modification of the Alternative Monitoring Plan limits requires Department approval as referenced in Condition A. 27.

A.23. Change the reference in the first sentence from three hour averages to daily averages. The referenced section of Title 40 Part 63 Subpart BB (40 CFR 63.624 -Operating Requirements) was revised on June 13, 2002 (see 67 FR 40818) to require maintaining daily averages of the pressure drops and flows of each scrubber within allowable ranges. The approved Alternative Monitoring Plan also reflects the use of 24-hour averages.

A.27. The language found in 40 CFR 63.625(f) used for this condition was revised on December 17, 2001 (see 66 FR 65077). The Department may want to incorporate the revised language in this permit as well.

Subsection B. E.U. ID No -002 #4 Fertilizer Shipping Plant

B.4. Reword the second sentence to read "The conditions for the scrubber will remain in the permit and will apply if the scrubber is used for control of particulate emissions." This language is necessary to clarify the operations under which the scrubber conditions would be required to demonstrate compliance. Subsequent comments in this section are being offered as further clarification.

B.5. Add "...if the scrubber is used as PM control." to the end of the last sentence.

B.8. Add "... for PM control..." to the second sentence. As noted in the permit the scrubber may be used to control moisture in the shipping building while dust suppressant is being used for PM control. In this case, a compliance test should not be triggered by scrubber operation. The submittal of a waiver letter would include this information as required. Additionally, the final sentence in this paragraph incorrectly references Condition B. 8. It should be Condition B.9.

B.11. Add "If used for PM control, ..." to the beginning of the first sentence.

Subsection C. E.U. ID No. -004 No. 3 Fertilizer Shipping Plant

C.1. Capacity. Add "... (average daily basis)." to the end of the statement.

C.4. Delete the words "...particulates, and..." from the requirement for annual testing in the first sentence. This unit has no scrubber and requires a visual emissions test only.

Subsection D. E.U. ID No. -010 Phosphoric Acid Plant

D.1. In the Permitting Note, delete the sentence referencing the March 13, 1997 compliance test data. The allowed P2O5 feed rate is established with each annual compliance test.

D.5. Delete the table of parametric limits. As outlined in the Statement of Basis, this permit incorporates the Department approved Alternative Monitoring Plan for the scrubbers in this unit. We suggest the following language be inserted for this condition:

The pollution control equipment shall be operated in accordance with the Department approved Alternative Monitoring Plan for the scrubbers associated with this unit. Modification of the Alternative Monitoring Plan limits requires Department approval as referenced in Condition D. 19.

D.15. Change the reference in the first sentence from three hour averages to daily averages. The referenced section of Title 40 Part 63 Subpart AA (40 CFR 63.604 -Operating Requirements) was revised on June 13, 2002 (see 67 FR 40818) to require maintaining daily averages of the pressure drops and flows of each scrubber within allowable ranges. The approved Alternative Monitoring Plan also reflects the use of 24-hour averages.

D.18. The language found in 40 CFR 63.605(d) used for this condition was revised on December 17, 2001 (see 66 FR 65077). The Department may want to incorporate the revised language in this permit as well.

Subsection E. E.U. ID Nos. -012, -032, -033, No 4, 5 and 6 Sulfuric Acid Plants

E.6. Delete the words "...on or during the 60 day period"

Subsection F. E.U. ID No. -021 Diammonium Phosphate Fertilizer Plant

This emissions unit is currently operating under Construction Permit No. 1050046-015-AV. The conditions presented in this section will not apply until an operating permit is issued for this unit upon completion of

construction. The Alternative Monitoring Plan approved by the Department indicates that the parametric limits for the scrubbers are to be established upon completion of construction. Generally, our previous comments regarding revisions to 40 CFR 63.624 and 40 CFR 63.625(f) also apply to this unit. We will reserve any detailed comments on this unit until incorporation of the unit into the Title V operating permit.

Subsection G. E.U. ID Nos. -045, -046, -047, -050, Molten Sulfur System

No changes

Subsection H. E.U. ID No. -051 Package Watertube Boiler

H.4. Delete the words "...on or during the 60 day period"

Subsection I. E.U. ID No. -052 Phosphogypsum Stack

Change the Brief Description name of the unit to Bartow Phosphogypsum Stack.

Subsection J. E.U. ID No. -054 Double Contact/Double Absorption Sulfuric Acid Plant

Change the Brief Description name of the unit to No. 3 Sulfuric Acid Plant.

J.8. Add a sentence at the beginning of the paragraph that reads "Excess emissions resulting from startup, shutdown, or malfunction are permitted providing: (1) best operational practices to minimize emissions are adhered to and: (2) duration of excess emissions are minimized." Delete the second sentence in the paragraph that says "In no case shall the period of excess emissions exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration." These changes provide consistency with the language found in E.9. for the 4, 5, and 6 Sulfuric Acid Plants and with the Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants.

Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants.

1. Add a statement to the end of this condition that states "Due to the distance (approximately 2.5 miles) between plants, No. 3 Sulfuric Acid Plant may be started up and initiate sulfur burning regardless of the start up status of the No. 4, 5, or 6 Sulfuric Acid Plants. "
6. Change title to "Prevention of Ammonium Sulfate Cloud Formation at the No 3 Sulfuric Acid Plant"
 - a. Add "If the wind is to the west, ..." to the beginning of the first sentence.

Subsection K. E.U. ID No. -055 Auxiliary Process Steam Boiler

No changes

Subsection L. E.U. ID No. -056, -057, -058, -059, -060 Molten Sulfur Storage/Handling

In the description of the first paragraph, delete the references to the railroad tank car and railroad delivery pit. The system no longer has the capability to receive sulfur by rail.

Pennington
February 4, 2005
Page 5 of 5

If you have any questions or need any additional information regarding these comments please contact me at (863) 534-9615 or email debbie.waters@mosaicco.com

Sincerely,

A handwritten signature in cursive script that reads "Debra R. Waters". The signature is written in black ink and is positioned above the printed name and title.

Debra R. Waters
Environmental Superintendent

XC: Jellerson, MacConnell, - Mosaic
Scott McCann – Golder
File 60.03.03B