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October 1, 2003

Florida Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road, MS 5500  
Tallahassee, FL 32399-2400

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BUREAU OF AIR REGULATION

Attention: Mr. Syed Arif, P. E.

RE: CARGILL FERTILIZER INC., GREEN BAY FACILITY  
DEP FILE NO. 1050053-033-AC/PSD-FL-334  
MODIFICATION OF PHOSPHORIC ACID PLANTS AND MAP/DAP PLANTS

Dear Mr. Arif:

Cargill Fertilizer Inc. (Cargill) has received the Department's letter dated May 23, 2003, concerning the application to modify the Green Bay facility. Cargill is providing the following additional information regarding this permit application in response to the Department's request.

1. **Please provide in detail with drawings the different scrubber systems being used and the proposed new scrubbers, if any, for the three Phosphoric acid plants and the two MAP/DAP plants. The information should include but not be limited to sufficient engineering description of the new and existing scrubbers including their calculated design efficiencies for PM/PM<sub>10</sub> and fluoride removal and provide mechanical sketches of their design.**

The selection of the emission control systems proposed by Cargill is based on actual performance and test results from the operating emission control units rather than on theoretical design efficiencies, as described below.

**Phosphoric Acid Plants (PAPs) -**

A review of the emission test history for the PAP scrubbers demonstrates that all three of the existing scrubbers installed on the PAP No. 1 and PAP No. 2 plants perform at BACT levels (i.e., fluoride emissions of less than 0.012 lb/ton P<sub>2</sub>O<sub>5</sub>). See revised Table 5-3 in Attachment A. Note that this table has been revised from the original application to include the 2003 compliance test results. Also note that the fluoride emissions for the entire PAP (all three sources combined) in lb/ton P<sub>2</sub>O<sub>5</sub> input, presented in the original Table 5-3, were stated incorrectly. The correct values, obtained by summing the total fluoride emissions measured for each source and dividing this sum by the sum of the process rates for each source, are shown in the revised Table 5-3.

Over the last four compliance tests, fluoride emissions have ranged from 0.0015 to 0.0096 lb/ton P<sub>2</sub>O<sub>5</sub>. Evaluation of the data and scrubber parameters indicates that the emission levels from these scrubbers are governed by the air/water fluoride equilibrium. This equilibrium can vary each year based on the pond water fluoride concentration, which is affected by process

variables as well as rainfall amounts. Therefore, as shown by the test data, fluoride emissions can range up to the proposed BACT level of 0.012 lb/ton  $P_2O_5$ .

In the permit application, Cargill proposed replacing the two existing scrubbers operating in series with a single packed-bed scrubber on the PAP No. 1-North train. However, again based on the stack test data, the existing scrubbing system on the PAP No. 1-North train has operated at below BACT levels for the last three years. In the year 2000, it is believed that the higher fluoride emissions were due to drought conditions, which led to increased fluoride concentrations in the pond water. Nevertheless, the overall emissions from the three plants combined (0.0096 lb/ton  $P_2O_5$ ) were below the proposed BACT level. As a result, Cargill is no longer proposing replacing the two existing PAP No.1-North scrubbers.

In conclusion, Cargill believes that the existing scrubbing systems serving the PAPs represent BACT for fluoride emissions. Therefore, Cargill is not proposing any modifications to these scrubbers at this time. However, Cargill plans on investigating the reasons that the PAP No.1-North scrubbing system emissions are higher than the other two PAP scrubbing systems, in an effort to further reduce emissions. As described in the application, Cargill is not requesting any increase in total production rate for the PAPs (only that the three PAPs be combined into one process unit for process flexibility).

Engineering drawings of the existing PAP scrubbers is provided in Appendix A attached.

**South AP Fertilizer Plant-**

Refer to response to Comment #6 below.

**North AP Fertilizer Plant-**

Cargill's review of the emission test history for the granulation plant RG scrubbing system demonstrates that the existing system on the North AP plant provides emission reductions to levels at or below limits established under the most recent BACT determinations (i.e., less than 0.04 lb/ton  $P_2O_5$  for fluorides, and less than 0.17 lb/ton  $P_2O_5$  for PM). As a result, Cargill is no longer proposing any changes to the existing RG scrubbing system (refer to updated application pages in Attachment A).

As an update to the previous test data, please refer to revised Table 5-7 in Attachment A, which revises the original table in the PSD application. In the table, test results when producing MAP and when producing DAP are shown separately. These results represent total emissions from both the RG stack and the dryer/cooler/vents stack.

The new venturi/cyclonic scrubbers selected for the <sup>not shown as "new" on drawing</sup> cooler dryer and equipment vents are designed based on recent BACT determinations indicating that appropriate particulate emission control will be achieved with a pressure drop greater than or equal to 15 inches water. As requested, please see Appendix B for engineering drawings of the existing and proposed scrubbers.

2. **The application in Section 2.1.1 requests to classify storage, clarification, aging and blending tanks as unregulated sources. Please provide information on the construction permit that required these sources to be regulated sources. The Department is not sure if the applicant is requesting an operating permit revision to be processed concurrently with this construction permit or if there were requirements in some construction permit that needs to be modified. If a construction permit needs to be modified, please provide details of the construction permit.**

**Response:**

Four phosphoric acid storage tanks (EU 014); One clarification tank and one aging tank (EU 015)

We have no record of a construction permit ever being issued for these sources. Appendix H-1 of the Title V permit only lists air operating permits dating back to 1976 for these tanks. The 1983 operating permit (No. AO53-63020) did not have any fluoride emission limit. The first time that a fluorides emission limit appeared in a permit was the 1987 operating permit (No. AO53-139525). This operating permit references a letter from Farmland Hydro to the Department dated November 16, 1984, but does not reference any construction permit. The testing of these tanks has shown fluoride emissions of less than 0.025 lb/hr, and typically less than 0.001 lb/hr.

We therefore must conclude that there was no construction permit issued. Based on this conclusion, we believe that the limit can be deleted through the Title V process, since the limit was not federally enforceable to begin with. However, we have included it as part of this construction application in the event that the Department concludes that a construction permit is required. If the Department concludes that it is not needed, we can apply to the District office for a Title V revision.

Four phosphoric acid blend tanks (EU 037)

These tanks were issued a construction permit in 1994 (permit no. AC53-246149)(see Attachment B). The permit contained a fluoride emission limit as well as conditions relating to the operation of the scrubber. The testing of these tanks has shown fluoride emissions to be less than 0.001 lb/hr.

These construction permit conditions have been brought forth into the Title V permit. Therefore, we believe that the fluoride limit and the requirement to have a scrubber must be deleted through a new determination by the Department, to eliminate the federally enforceable requirements. We have included this request as part of this construction application in the event that the Department concludes that a construction permit is required. In this case, we ask for concurrent processing of the construction permit with the Title V permit.

It is also noted that the Department issued a determination of insignificance for two new 30% phosphoric acid tanks in 1994 (see attached letter dated Sep. 27, 1994 in Attachment B). Through this letter, the Department determined that phosphoric acid storage tanks were insignificant sources of fluorides emissions.

- 3. The application in Section 2.1.2 requests a combined production rate of 128 TPH P<sub>2</sub>O<sub>5</sub> for the three Phosphoric Acid Plants. Please provide information with some documentation on the individual design capacity of each plant.**

**Response:**

As shown in Table 2-1 of the application, Cargill is not requesting to increase the total production capability of the three phosphoric acid trains. The present design capacity of PAP No. 1-North is 27.5 TPH P<sub>2</sub>O<sub>5</sub>; PAP No. 1-South is 45.03 TPH P<sub>2</sub>O<sub>5</sub>; and PAP No. 2 is 55.0 TPH P<sub>2</sub>O<sub>5</sub>. This totals to 128 TPH P<sub>2</sub>O<sub>5</sub>.

The best documentation regarding the existing design rates of the PAPs is in the past compliance testing. As shown in revised Table 5-3 in Attachment A, PAP No. 1-North has achieved process rates of 26.0, 23.0, 27.0, and 25.0 TPH  $P_2O_5$  during the last four compliance tests, respectively. These rates are all within 84 to 98 percent of the requested maximum permitted rate of 27.5 TPH  $P_2O_5$ .

PAP No. 1-South has achieved process rates of 42.1, 45.0, 45.0, and 42.5 TPH  $P_2O_5$  during the last three compliance tests, respectively. These rates are all within 94 to 100 percent of the requested maximum permitted rate of 45 TPH  $P_2O_5$ .

PAP No. 2 has achieved process rates of 44.6, 51.2, 53.3, and 50.0 TPH  $P_2O_5$  during the last three compliance tests, respectively. These rates are all within 77 to 97 percent of the requested maximum permitted rate of 55 TPH  $P_2O_5$ .

The compliance test data affirm the maximum process rates requested in the application. This represents the best documentation on the individual design rate of each PAP.

Furthermore, this request is consistent with the permitting of the phosphoric acid plants at the Cargill Bartow and Riverview facilities, where multiple phosphoric acid trains have been combined into a single plant for permitting purposes. We believe that the consolidation of the plants into a single source is appropriate due to the commingling of process streams within the affected emission unit. For example, clarifier product from both units are concentrated in common evaporators which are part of the effected facility. Similarly, the clarifier bottoms may be returned to any of the reactors, regardless of where the feed acid originated.

- 4. Please provide the reasons for not modifying the scrubbers for Phosphoric Acid Plant (PAP) No. 1 South and PAP No. 2-to include cross-flow packed scrubbers. The reasons should include but not be limited to doing mass transfer calculations for the present set-up and the mass transfer calculations with the cross-flow packed scrubbers. The calculations should be sufficiently detailed to show control system flow rates (gas and liquid streams), pond water fluoride concentrations, fluoride gas phase equilibrium concentrations, and temperatures.**

**Response:**

As discussed in the response to Comment #1 above, and as shown in revised Table 5-3 in Attachment A, the PAP No. 1-North train has experienced actual fluoride emissions between 0.0025 to 0.0044 lb/ton  $P_2O_5$  over the past three years. These emissions are less than 0.012 lb/ton  $P_2O_5$ , which is the most stringent BACT standard issued to date for PAPs. As a result, Cargill no longer has plans to modify the PAP No. 1-North scrubbing system.

The PAP No. 1-South and PAP No. 2 trains have also exhibited actual fluoride emissions of less than 0.012  $P_2O_5$ , which is the most stringent BACT standard issued to date, and the BACT limit proposed for the combined PAPs at Green Bay. These scrubbers have performed very well, and are already operating at BACT levels. Therefore, there is no reason or justification to replace the existing scrubbing systems on these trains.

In fact, the PAP No. 1-South Scrubber historically has performed near the fluorine/pond water equilibrium. For example, using the highest compliance test for PAP No. 1-South, the average air flow rate for the PAP No. 1-South scrubber is 27,000 dscfm. The average stack gas temperature is 110<sup>o</sup> F and the average fluorine emissions in the air stream is 0.244 lbs F per hour. From page 166 of the Fertilizer Technical Data Book (5<sup>th</sup> Edition) by Ed Sepehri-Nik, the

vapor pressure equilibrium between fluorine and 0.6% fluorine in the pond water at 110 F is 0.045 mg F per actual cubic foot (acf). The equilibrium at 0.8% fluorine in the pond water (at 110 F) is 0.094 mg F per acf. The concentration in our pond water is between 0.6%-0.8% fluorine.

Converting 27,000 dscfm to acfm results in 31,200 acfm at 110<sup>0</sup> F and 29.92" Hg. Dividing the average stack emission rate (0.244 lbs F per hour) by the average air flow (31,200 acfm), results in  $1.30 \times 10^{-7}$  lbs F per acf, or 0.06 mg F per acf. In comparison, as described above, the equilibrium vapor pressure of pond water is between 0.045-0.094 mg F per acf. The other compliance tests show even lower fluoride emissions. Therefore, the PAD No. 1-South scrubber has historically performed near the fluorine/pond water equilibrium.

Cargill believes both the PAP No. 1-South and PAP No. 2 scrubbing systems have been operating near the fluorine/pond water equilibrium. Therefore, there is no benefit to further modify these scrubbing systems.

- 5. The application contains only a summary of fluoride stack test data for the three Phosphoric Acid Plants. Please submit the detailed test reports for the 2001 and 2002 annual fluoride stack tests containing data on production rates, stack flows, scrubber conditions, etc. for each test run. Also, include additional three years of stack test data summary, if available, for fluoride emissions. Table 5-3 shows higher fluoride emissions for the year 2000 compared to the other two years. Please explain the reasons for such high fluoride emission rates during 2000. Were there any modifications done to the plants after 2000?**

**Response:**

See revised Tables 5-3 from the PSD report that summarizes the data from these tests (see Attachment A). Also refer to Attachment C for detailed source and scrubber operating data.

The cause of the elevated emissions in 2000 is not known. This could have been due to drought conditions, which caused levels water in the pond to diminish, causing higher fluoride concentrations in the scrubber water. Despite the elevated emissions, the PAP was below its permitted emission limit. There were no modifications performed on the plants to cause this anomaly, nor have any modifications been performed since then.

- 6. The application in Section 2.2.2 refers to upgrading of the present scrubber system for the South DAP Plant. Please describe in detail the upgrading being done to the R/G venturi/cyclonic scrubber, R/G tailgas scrubber (vaporizer), Dryer venturi/cyclonic scrubber, Screens/mills (S/M) venturi/cyclonic scrubber, and Cooler venturi/cyclonic scrubber. Also, explain the necessary equipment and operational changes required to produce MAP at a DAP plant.**

**Response:**

R/G Scrubbing System

The present R/G scrubbing system in the South DAP Plant consists of a venturi/cyclonic scrubbing system. In this system, process gases are contacted in a venturi scrubber to remove ammonia fumes and particulate matter. A cyclonic section immediately follows to remove entrained particles and water droplets.

The proposed system will be similar to the scrubbers currently used at the North DAP plant. The process gases pass through the primary RG scrubber, which uses acid slurry as the scrubbing liquid. This scrubber removes ammonia fumes and a portion of the particulate matter with reduced evolution of fluoride from the scrubbing liquid. After exiting the primary scrubber, the air stream is then contacted by the secondary RG scrubber, an acid slurry venturi/cyclonic scrubber, which removes the balance of the ammonia fumes and the particulate matter in the air stream. Since a significant portion of the ammonia fumes have been removed in the first stage, the heat generation is reduced and the fluorine evolution is significantly less than that produced with a single stage scrubber. In addition, there is a higher absorption percentage of ammonia fumes by use of two-stage scrubbing.

After acid scrubbing, the air stream passes through the tubes of a shell and tube heat exchanger. On the shell side, ammonia is vaporized for use in the manufacturing process while moisture condenses from the air stream on the tube side. This condensed moisture absorbs the majority of the fluorine escaping the acid scrubbers. In order to properly wet all surfaces and promote improved operation, a portion of the condensate is continuously recirculated over the tube sheet and through the tubes. This technology has been in service since 1992 on the North MAP/DAP Plant with excellent success.

Since the plant rate is increasing from that originally designed in 1972, the air flow through the R/G scrubbing system will need to increase. To accommodate the higher air flow rate, the existing scrubbing system and fan will be removed and be replaced.

#### Cooler, Dryer, and Screen/Mill Evacuation Scrubbing Systems

Increased air flow rate through the Dryer will be implemented to provide proper moisture removal from the product. A new Dryer Venturi/Cyclonic scrubber will provide proper particulate removal and the scrubber exhaust will go to a new Dryer fan sized to provide the necessary flow rate.

The Screen/Mill Evacuation system inside the plant will be modified as required to provide proper dust control and will pass through the existing dry cyclones for removal of the majority of the particulate matter prior to passing through a new Venturi/Cyclonic scrubber. The exhaust of the scrubber will go to a new Screen/Mill evacuation fan sized to provide the proper air flow for effective dust control in the plant.

Upon further evaluation by Cargill, at the higher production rate, the present Cooler and airflow are adequate to provide proper heat exchange, with no increase in air flow. By increasing the efficiency of the Cooler, but not the airflow, the fertilizer will still leave the Cooler at the required temperature for storage and shipping. Hence, there is no benefit to modify this scrubber, so no modifications will be made to it.

Although the Cooler, Dryer, and Screen/Mill Evacuation air streams contain mostly particulate matter with little ammonia, other considerations dictate the use of recirculated process water. (Low strength phosphoric acid will be used for pH control in all three Venturi/Cyclonic scrubbers). The process water scrubber liquid will absorb the dust and provide proper control of particulate. Since acid is *not* being used in the venturi/cyclonic scrubbers, no fluorine is evolved beyond the expected process water equilibrium. Therefore, no tail gas scrubber is required for fluorine removal. A single new stack will discharge the cleaned gases to the atmosphere.

The currently planned equipment list for the South DAP Plant is provided below. Note that this equipment list is subject to change pending final engineering design.

- New Dryer Scrubber, dryer fan, and associated equipment (i.e. ducts, seal tank for scrubber liquid, piping, circulation pumps, motors, etc)
- New Screen/Mill Scrubber, SM fan, and associated equipment
- New Primary and Secondary RG Scrubbers and associated equipment
- New RG Tailgas scrubber, RG fan, and associated equipment
- Replace granulator
- Increase cooler efficiency
- Screening and product recycle improvements
- Other miscellaneous changes necessary to meet production and quality goals

Engineering drawings for the current and proposed scrubbers are provided in Appendix C.

Cargill was recently issued a permit for modification of the South Fertilizer plant to make MAP.

7. **Please explain the reasons for removing the cross-flow scrubber used for the dryer and S/M gas flow in the South DAP Plant and the North MAP/DAP Plant. The reasons should include but not be limited to comparing mass transfer calculations for the present set-up and the mass transfer calculations with the cross-flow packed scrubbers removed. The calculations should be sufficiently detailed to show control system flow rates (gas and liquid streams), pond water fluoride concentrations, fluoride gas phase equilibrium concentrations, and temperatures.**

**Response:**

The air flow from the dryer in each plant will be increased to provide proper moisture removal from the granulated product. In addition, the evacuation flow from the screens and mills will be increased to provide improved dust collection. These increases in air flow will render the existing cross-flow scrubber as inadequate to handle the higher air flow. The primary reason for removing the cross-flow scrubbers serving the dryer/screens/mills on each plant is that this equipment produces very little fluoride emissions. Since the proposed venturi/cyclonic particulate control scrubbers will utilize pond water rather than phosphoric acid as a scrubbing liquid, they will not contribute fluoride loading to the evacuation air. Therefore, a new scrubber dedicated solely to fluoride removal would be very costly while providing virtually no environmental benefit. The proposed fluoride BACT limit of 0.04 lb/ton P<sub>2</sub>O<sub>5</sub> will be met without a replacement pond water scrubber in each plant.

8. **The application in Section 2.2.3 paragraph 2 refers to the proposed modification to the R/G scrubbing system for the South DAP Plant (includes installation of a phosphoric acid venturi/cyclonic scrubber) which will primarily remove particulate. Figure 2-4 shows the present set-up of the South DAP Plant, which already shows the unit to be in existence. Please explain the discrepancy.**

**Response:**

The existing scrubber is insufficient to meet emission limits and will not be able to accommodate the increased air flow rate associated with the modified R/G system (refer to Table 2-5 in Attachment A). Therefore, the RG scrubbing system will be upgraded to match the North Side RG scrubbing system.

9. **The application in Section 3.5.3.1 refers to the exemption from complying with the New Source Performance Standards (NSPS) for the existing PAPs and the North and South MAP/DAP Plants due to the National Emission Standards for Hazardous Air Pollutants (NESHAP). 40 CFR 63.610 Subpart AA and 40 CFR 63.631 Subpart BB provide those exemptions once the requirements of certain sections are met in those rules. Please provide documentation to the Department that the requirements of Sections 63.604, 63.605, 63.606 Subpart AA and Sections 63.604, 63.605, 63.606 Subpart BB have been demonstrated.**

**Response:**

Monitoring systems have been installed for the NESHAP applicable emission units. Furthermore, Cargill has applied for an alternative monitoring plan, which is currently under review with DEP. Upon resolution of the alternative monitoring plan request, Cargill will submit parameter limits to the district office for inclusion into its Title 5 permit.

10. **Please submit engineering design data for the venturi/cyclonic scrubbers currently utilized for fluoride control. The data should include at a minimum the design capability, the stated efficiency of the control equipment and the performance curves for the scrubbers.**

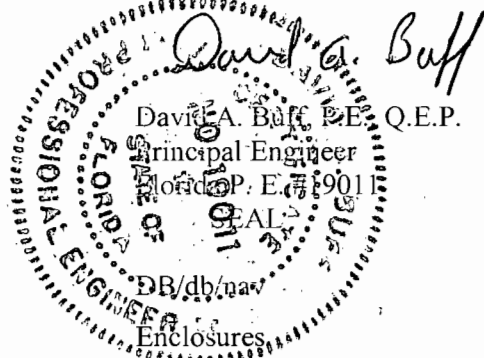
**Response:**

The existing venturi/cyclonic scrubbers in the South DAP Plant and the North MAP/DAP Plant are not used for fluoride control. These scrubbers are used for particulate control and to recover ammonia. In the South DAP Plant, the existing fluoride scrubbers consist of the R/G process water scrubber and the cross-flow scrubber serving the dryer and screens/mills. In the North MAP/DAP Plant, the existing fluoride scrubbers consist of the R/G ammonia vaporizer and the cross-flow scrubber serving the dryer and screens/mills. See also response to Comment #1 and #6 above.

Please call if you have any questions concerning this additional information.

Sincerely,

GOLDER ASSOCIATES INC.



cc: T. Abel, Cargill  
F. Bergen, Golder  
D. Jellerson, Cargill  
C. Holladay, DEP

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Q. Kireel, SWD  
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February 2, 2004

0337506

Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 5505  
Tallahassee, Florida 32399-2400

Attention: Jim Pennington, P.E., Permitting Administrator, North Section

RE: DRAFT PERMIT NO. 1050053-033-AC  
DRAFT PERMIT COMMENTS  
CARGILL FERTILIZER, INC., GREEN BAY FACILITY

Dear Mr. Pennington:

Cargill Fertilizer, Inc. (Cargill) is in receipt of the draft air construction permit (Permit No. 1050053-033-AC/PSD-FL-334) for the Green Bay Phosphate Fertilizer Facility located in Polk County. Cargill and its consultant, Golder Associates Inc. (Golder), have reviewed the draft permit. The comments on the draft permit are listed below by the original permit condition number.

General comments are as follows:

- ✓ 1. In the application, on pages 2-2 and 2-3, Cargill requested that the phosphoric acid storage, clarification, aging and blending tanks be classified as unregulated sources. In response to the Department's request for additional information (RAI) dated May 23, 2003, Cargill provided additional information on these emission units, including historic permits, in a letter dated October 1, 2003, from Golder to the Department. However, the draft permit does not clearly address these emission units. In the October 1, 2003, response letter, it was Golder's belief that EU014 (clarification tank and aging tank) could be revised through the Title V process, but that EU 037 (four phosphoric acid blend tanks) would have to be revised through an air construction permit. We request that the Department address both of these emission units in the permit and/or in the TE&PD, as appropriate (see specific comments on draft permit below).
- ✓ 2. In the application, on page 2-12, Cargill requested that the fluoride emission limit for the MAP/DAP Storage and Shipping Buildings (EU 020) be removed because this limit was imposed due to granular triple superphosphate (GTSP) manufacturing and storage. Since Cargill will not manufacture GTSP at the Green Bay facility, this limit should be removed. In addition, it was requested that the allowable PM emission limit apply to the "shipping" operation only (i.e., the PM limit should not include the storage buildings). We request that the Department address this emission unit in the permit and/or in the TE&PD.

Specific comments on the Technical Evaluation and Preliminary Determination (TE&PD), draft permit and Best Available Control Technology Determination (BACT) are as follows:

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

✓ Pg. 3 of 12. **Facility Description** – Note that the Green Superphosphoric Acid plant has been shutdown.

✓ Pg. 7 of 12, **Federal and State Emission Standards** – As discussed on page 3-11 of the application, we do not believe that the NSPS will apply to the Phosphoric Acid Plants or to the Ammoniated Phosphate

Plants at Green Bay due to the proposed project. In addition, according 40 CFR 63.610 and 63.631, sources subject to Part 63 Subparts AA or BB are exempt from the NSPS Subparts T, U, V, W and X.

**CLEVE**  
Pg. 11 of 12. **AAQS Analysis** – Background PM10 concentrations of 21 ug/m<sup>3</sup> (annual) and 50 ug/m<sup>3</sup> (24-hour average), were used in the submitted air modeling analysis. The annual background was based on the lower measured values since the modeled sources would have impacted this monitor. The 24-hour value was based on the 6<sup>th</sup>-highest measured value, consistent with the form of the AAQS. The TE&PD states that the background concentrations are 27 and 78 ug/m<sup>3</sup>, respectively. This results in higher predicted ambient impacts for the project.

✓ Pg. 12 of 12 - **Additional Impact Analysis** – change “Cargill Bartow facility” to “Cargill Green Bay facility”.

**DRAFT PERMIT**

✓ Pg. 2 of 12 - **Regulatory Classification** – change “Cargill Bartow Facility” to “Cargill Green Bay Facility”.

✓ **Relevant Documents** – Add the applicant’s letter dated October 1, 2003 to the list of documents on file.

✓ Pg. 3 of 12, item 5, **Expiration** – In the application, Cargill requested a project completion date of June 1, 2007. We therefore request a permit expiration date of June 1, 2007. This will allow sufficient time to complete actual construction and then perform all the compliance testing, prepare and submit a Title V revision application, and then obtain a revised Title V permit.

✓ Pg. 4 of 12, item 11, **Quarterly Reports** – This condition references 40 CFR Part 60, which are the new source performance standards (NSPS) regulations. As discussed on page 3-11 of the application, we do not believe that the NSPS will apply to the Phosphoric Acid Plants or to the Ammoniated Phosphate Plants at Green Bay due to the proposed project.

**Subsection A. Common Conditions**

✓ **Emission Unit Description**- The Phosphoric Acid Tanks should be designated as insignificant or unregulated emissions units, and not as part of the regulated phosphoric acid plants.

**Subsection B. Phosphoric Acid Production System**

✓ Pg. 7 of 12, item 3. To clarify that the phosphoric acid tanks are not subject to any fluoride emission limits, reword as follows. As discussed under comments to the BACT Determination (see below), also include the requested fluoride emission limit of 0.012 lb/ton.

“The combined fluoride emissions from the three Phosphoric Acid Plants’ scrubber stacks (controlling the reactors, filters and filtrate tanks) shall not exceed 0.012 lb/ton of equivalent P<sub>2</sub>O<sub>5</sub> feed, 1.53 lb/hr, and 6.70 TPY.”

✗ Pg. 7 of 12, item 5. To be consistent with condition 1, reword the fourth sentence as:

“The current maximum operating capacity limit is 128 TPH P<sub>2</sub>O<sub>5</sub>.”

✓ Pg. 7 of 12, items 7 and 8. An Administrative Order has been issued by DEP for the Green Bay facility which approves an alternative monitoring method for compliance with the Subpart 63 MACT standards. Therefore, Conditions 7 and 8 are in conflict with the Order. It is recommended that these conditions be modified to just state that this emission unit is subject to the monitoring requirements of Subpart AA.

**Subsection C. AP Plants**

✓ Page 10 of 12, items 1 and 2. It is requested that the production rates be expressed in tons per day (TPD), i.e., 1,560 TPD for the South AP and 1,920 TPD for the North AP, as requested in the application.

✓ Page 10 of 12, item 3. Change “rotary dryer” to “rotary dryers”, since each plant has a dryer. To reduce recordkeeping requirements, we request that the heat input limits be specified as a “daily average”.

✓ Page 10 of 12, item 5. The NO<sub>x</sub> limit for the North AP should read “0.148 lb/MMBtu” instead of “0.0150 lb/MMBtu”. Although a NO<sub>x</sub> limit is being imposed on the AP Plants as BACT, it is requested that no stack testing for NO<sub>x</sub> be required. The NO<sub>x</sub> limits are based solely on AP-42 emission factors, and there is no NO<sub>x</sub> control equipment on the AP dryers to reduce NO<sub>x</sub> emissions. Cargill is not modifying the existing dryers, burners or heat input rates. Previous NO<sub>x</sub> testing on the North AP Plant showed NO<sub>x</sub> emissions of less than 0.5 lb/hr. Additional stack testing would not serve a useful purpose. The way the draft permit reads, stack testing for NO<sub>x</sub> would be required annually (refer to Condition 3 of Subsection A).

✓ Page 10 of 12, item 6. The reference to the current Title V permit as the basis of the 10% opacity limit is not correct. The current Title V permit limits opacity to 20%.

✓ Page 11 of 12, items 11 and 12. An Administrative Order has been issued by DEP for the Green Bay facility which approves an alternative monitoring method for compliance with the Subpart 63 MACT standards. Therefore, Conditions 11 and 12 are in conflict with the Order. It is recommended that these conditions be modified to just state that this emission unit is subject to the monitoring requirements of Subpart BB.

**APPENDIX BD- BACT DETERMINATION**

✓ Gaseous Fluoride – The Department has imposed a fluoride limit for the Phosphoric Acid Plant of 0.009 lb/ton of P<sub>2</sub>O<sub>5</sub> feed. The Department justifies this emission limit in part based on historic test data from the existing Phosphoric Acid Plants, as presented in the application. The discussion acknowledges that the phenomena accounting for these lower test values have not been fully explained, but the Department believes that they may be the result of a combination of factors including low reactor surface evacuation rates and favorable pond water characteristics rather than high scrubber efficiencies.

Cargill also believes that favorable pond water conditions may be the primary influence upon fluoride emissions. That being the case, Cargill does not believe that a limit of 0.009 lb/ton will be achievable on a consistent basis, year-to-year, because of potential fluctuations in pond water conditions as well as Phosphoric Acid Plant and scrubber operating fluctuations. The Department's evaluation apparently only considered the last three years of fluoride test data, although the last four years of data were submitted in the application. This additional year of data is critical to the analysis since it showed fluoride emissions of 0.0096 lb/ton, which is higher than the Department's proposed limit. This test in 2000 coincides with the two lowest rainfall years out of the last 6 years. Rainfall in 1991 and 2000 at Bartow was 42 and 36 inches respectively. These lower rainfall amounts would result in higher pond water fluoride concentrations, thereby causing higher scrubber fluoride emissions.

In situations where the scrubbers are operating at or near equilibrium conditions, the temperature and fluoride concentration on the pond water are critical in determining the resulting fluoride emissions. The attached table shows the potential effect upon fluoride emissions due to variations in pond water conditions. The table shows that at pond water fluoride concentrations of 8,000 ppm, fluoride emissions from the Phosphoric Acid Plants could exceed the 0.009 lb/ton limit in the draft

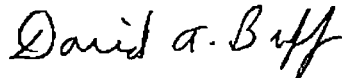
permit, due solely to the pond water fluoride content (i.e., no contribution considered from fluorides in the Phosphoric Acid Plant exhaust gases).

As a result, Cargill cannot accept the 0.009 lb/ton limit in the draft permit, and asks that the Department reconsider the BACT limit and set it at 0.012 lb/ton, consistent with other recent BACT determinations.

If you have any questions regarding these comments, please feel free to contact me at (352) 336-5600, or David Jellerson at (813) 671-6297.

Sincerely,

GOLDER ASSOCIATES INC.



David A. Buff, P.E., Q.E.P.  
Principal Engineer  
Florida P.E. # 19011  
SEAL

Enclosure

cc: T. Abel  
D. Buff

Y:\Projects\2003\0337506 Cargill - Green Bay\44.1\020204\020204.doc

Table 1. Calculation of Fluoride Emissions Due To Pond Water for Phosphoric Acid Plants at Cargill Green Bay

Scrubber	Scrubber Exit Conditions		Pond Water Conditions (ppm F)	F Equilibrium Concentration (mg/ACF)	Fluoride Emissions (lb/hr)	Fluoride lb/ton P <sub>2</sub> O <sub>5</sub> @ 128 TPH
	Air Flow (acfm)	Temp. (deg. F)				
PAP No. 1 - North	29,100	110	5,660	0.027	0.104	
PAP No. 1 - South	29,100	110	5,660	0.027	0.104	
PAP No. 2	24,300	110	5,660	0.027	<u>0.087</u>	
				Total=	0.294	0.0023
PAP No. 1 - North	29,100	110	7,100	0.064	0.246	
PAP No. 1 - South	29,100	110	7,100	0.064	0.246	
PAP No. 2	24,300	110	7,100	0.064	<u>0.206</u>	
				Total=	0.698	0.0055
PAP No. 1 - North	29,100	110	8,000	0.090	0.346	
PAP No. 1 - South	29,100	110	8,000	0.090	0.346	
PAP No. 2	24,300	110	8,000	0.090	<u>0.289</u>	
				Total=	0.981	0.0077
PAP No. 1 - North	29,100	120	5,660	0.036	0.138	
PAP No. 1 - South	29,100	120	5,660	0.036	0.138	
PAP No. 2	24,300	120	5,660	0.036	<u>0.116</u>	
				Total=	0.393	0.0031
PAP No. 1 - North	29,100	120	7,100	0.082	0.315	
PAP No. 1 - South	29,100	120	7,100	0.082	0.315	
PAP No. 2	24,300	120	7,100	0.082	<u>0.263</u>	
				Total=	0.894	0.0070
PAP No. 1 - North	29,100	120	8,000	0.115	0.442	
PAP No. 1 - South	29,100	120	8,000	0.115	0.442	
PAP No. 2	24,300	120	8,000	0.115	<u>0.369</u>	
				Total=	1.254	0.0098

## Notes:

mg/ACF = milligrams per actual cubic feet

## Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Cargill Fertilizer, Inc.  
Bartow Facility

FINAL Permit No.: 1050046-003-AV  
Facility ID No.: 1050046

---

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

### E.U.

#### ID No.

#### Brief Description of Emissions Units and/or Activity

##### Fertilizer Plants

- 053 Screens, lump crushers, chain mills, grinding mills, conveyor belts
- 053 Reclaim Elevator, seed hopper and elevator
- 053 Pond water sumps
- 053 Ammonia chillers
- 053 Product Recovery Units
- 053 Phosphoric acid truck unloading
- 053 Process storage tanks and product storage buildings/area
- 053 Cooling towers and process water pond

##### Shipping Plants

- 053 Covered conveyor, surge bin, product screens, scale belt, chute to rail car

##### Molten Sulfur Handling

- 053 Truck/rail unloading area
- 053 Molten sulfur storage tank fires

##### Sulfuric Acid Plants

- 053 Hot water reuse tank
- 053 Economizers
- 053 Water reuse, uncontaminated water storage, condensate tanks for Evaporators
- 053 Auxiliary power diesel generators
- 053 Auxiliary power generator diesel tank
- 053 Storage tanks
- 053 Sulfuric acid truck loading

##### Phosphoric Acid Plants

- 053 Fluosilicic acid truck loading
- 053 Wet rock hoppers and grinding mills
- 053 Flash cooler hotwells
- 053 Process and product storage tanks

<u>E.U.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
<u>ID No.</u>	
-053	3, 4, 5 Filters (unevacuated area)
-053	Unpermitted crossflow packed scrubbers
-053	Flash coolers, vacuum pumps, seal pumps, seal tanks
-053	Lamellas
-053	Phosphoric acid truck unloading/loading -- North Unit and South Units
	<b><u>Wet Rock Handling</u></b>
-053	Train/truck unloading, hoppers, conveyors, wet rock stacking on pile
	<b><u>Ammonia Handling</u></b>
-053	Pipeline, truck unloading, bullets, pop off valves, and flare
	<b><u>Facilitywide</u></b>
-053	Safety kleen solvent cleaners
-053	Supersucker
-053	Sand blasters, welding equipment, compressors, wood shop, metal shop
-053	Refrigerators < 50 lbs of refrigerant
-053	Storage tanks and dispensers
-053	Wastewater plants (2), drinking water treatment area
-053	Laboratory and vents, pressure relief valves
-053	Lime silo with baghouse
-053	Turbogenerators (TG1 + TG2)
-053	Laboratory vacuum pump, space heaters
-053	#1 Deepwell diesel tank and backup engine
-053	Locomotive engines
-053	South stack diesel tank
-053	Minor fugitive leaks from process equipment
-053	Steam relief valves--plantwide

[electronic file name: 1050046u.doc]

PAP No. 1 – North:

<u>Test Date</u>	<u>Runs</u>	<u>Average Process Rate</u>	<u>Average lb F/hr</u>	<u>Average lb F/ton P<sub>2</sub>O<sub>5</sub></u>	<u>Z (Norm. Dev.)</u>
8/15/2003	3	26.0	0.0820	0.0031	-0.250
3/15/2002	3	23.0	0.1017	0.0044	1.375
4/27/2001	3	27.0	0.0676	0.0025	-1.000
Average	9	25.33	0.0838	0.0033	
Std. Dev.				0.0008	

PAP No.2

7/31/2003	3			0.0009	-1.0
5/13/2002	3			0.0012	-0.4
4/19/2001	3			0.0020	+1.20
Average	9			0.0014	
Std. Dev.				0.0005	

**Miscellaneous -**

A note has been added to the Technical Evaluation and Preliminary Determination's Facility Description that the Green Superphosphoric Acid Plant is currently shut down.

The applicant's letter dated October 1, 2003 has been added to the list of relevant documents.

A typo has been corrected for the North AP NO<sub>x</sub> limit. The limit is 0.148 lb/MMBtu.

The rule reference for the AP Visible Emission limit was changed to Rule 62-212.400, F.A.C.



**Reynolds, John**

---

**From:** Heron, Teresa  
**Sent:** Wednesday, December 17, 2003 2:44 PM  
**To:** Reynolds, John  
**Subject:** PSd-334

John:

I changed the limits # in the permit and add the regulations regarding the Subpart AA and BB (in red) in Section II Common Conditions. Please fix the Section II header because it currently states "specific conditions" it should say Common Conditions. Specific Conditions is Section III only.

I also "cut & paste" the section that AI has added to all of these permits about the major source for HAPS..... It is in red. Is this applicable here?

Please check all of the above, delete, add or whatever. I assume now this permit is yours since it is a North Permit. This permit is written solely by Syed.

Thanks,  
Teresa Heron, Engineer  
New Source Review Section  
Bureau of Air Regulation  
Phone 850/921-9529  
teresa.heron@dep.state.fl.us



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

May 29, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. E. O. Morris, Vice President  
Cargill Fertilizer, Inc.  
8813 Highway 41 South  
Riverview, Florida 33569

Re: DEP File No. 1050053-033-AC (PSD-FL-334)  
Greenbay Facility – Modification of Phosphoric Acid and MAP/DAP Plants

Dear Mr. Morris:

The Department has received the application on April 30, 2003 for the Greenbay facility expansion in Polk County. Based on our initial review of the proposed project, we have determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation:

1. Please provide in detail with drawings the different scrubber systems being used and the proposed new scrubbers, if any, for the three Phosphoric acid plants and the two MAP/DAP plants. The information should include but not be limited to sufficient engineering description of the new and existing scrubbers including their calculated design efficiencies for PM/PM<sub>10</sub> and fluoride removal and provide mechanical sketches of their design.
2. The application in Section 2.1.1 requests to classify storage, clarification, aging and blending tanks as unregulated sources. Please provide information on the construction permit that required these sources to be regulated sources. The Department is not sure if the applicant is requesting an operating permit revision to be processed concurrently with this construction permit or if there were requirements in some construction permit that needs to be modified. If a construction permit needs to be modified, please provide details of the construction permit.
3. The application in Section 2.1.2 requests a combined production rate of 128 TPH P<sub>2</sub>O<sub>5</sub> for the three Phosphoric Acid Plants. Please provide information with some documentation on the individual design capacity of each plant.
4. Please provide the reasons for not modifying the scrubbers for Phosphoric Acid Plant (PAP) No. 1 South and PAP No. 2 to include cross-flow packed scrubbers. The reasons should include but not be limited to doing mass transfer calculations for the present set-up and the mass transfer calculations with the cross-flow packed scrubbers. The calculations should be sufficiently detailed to show control system flow rates (gas and liquid streams), pond water fluoride concentrations, fluoride gas phase equilibrium concentrations and temperatures.
5. The application contains only a summary of fluoride stack test data for the three Phosphoric Acid Plants. Please submit the detailed test reports for the 2001 and 2002 annual fluoride

*"More Protection, Less Process"*

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stack tests containing data on production rates, stack flows, scrubber conditions, etc. for each test run. Also, include additional three years of stack test data summary, if available, for fluoride emissions. Table 5-3 shows higher fluoride emissions for the year 2000 compared to the other two years. Please explain the reasons for such high fluoride emission rates during 2000. Were there any modifications done to the plants after 2000?

6. The application in Section 2.2.2 refers to upgrading of the present scrubber system for the South DAP Plant. Please describe in detail the upgrading being done to the R/G venturi/cyclonic scrubber, R/G tailgas scrubber (vaporizer), Dryer venturi/cyclonic scrubber, Screens/mills (S/M) venturi/cyclonic scrubber, and Cooler venturi/cyclonic scrubber. Also, explain the necessary equipment and operational changes required to produce MAP at a DAP plant.
7. Please explain the reasons for removing the cross-flow scrubber used for the dryer and S/M gas flow in the South DAP Plant and the North MAP/DAP Plant. The reasons should include but not be limited to comparing mass transfer calculations for the present set-up and the mass transfer calculations with the cross-flow packed scrubbers removed. The calculations should be sufficiently detailed to show control system flow rates (gas and liquid streams), pond water fluoride concentrations, fluoride gas phase equilibrium concentrations and temperatures.
8. The application in Section 2.2.3 paragraph 2 refers to the proposed modification to the R/G scrubbing system for the South DAP Plant includes installation of a phosphoric acid venturi/cyclonic scrubber, which will primarily remove particulate. Figure 2-4 shows the present set-up of the South DAP Plant, which already shows the unit to be in existence. Please explain the discrepancy.
9. The application in Section 3.5.3.1 refers to the exemption from complying with the New Source Performance Standards (NSPS) for the existing PAPs and the North and South MAP/DAP Plants due to the National Emission Standards for Hazardous Air Pollutants (NESHAP). 40 CFR 63.610 Subpart AA and 40 CFR 63.631 Subpart BB provides those exemptions once the requirements of certain sections are met in those rules. Please provide documentation to the Department that the requirements of Sections 63.604, 63.605, 63.606 Subpart AA and Sections 63.624, 63.625, 63.626 Subpart BB have been demonstrated.
10. Please submit engineering design data for the venturi/cyclonic scrubbers currently utilized for fluoride control. The data should include at a minimum the design capability; the stated efficiency of the control equipment and the performance curves for the venturi scrubbers.

Additional modeling information was received on May 20, 2003. Therefore, after it is reviewed DEP may have questions on modeling. Any additional comments from EPA and the U.S. Fish and Wildlife Service will be forwarded to you after we receive them.

The Department will resume processing this application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

Mr. E.O. Morris  
Page 3 of 3  
May 29, 2003

A new certification statement by the authorized representative or responsible official must accompany any material changes to the application. Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

We will be happy to meet and discuss the details with you and your staff. Mr. Syed Arif, P.E. is responsible for the technical review of the application. He may be contacted at 850/921-9528. You may discuss the modeling requirements with Mr. Cleve Holladay at 850/921-8689.

Sincerely,



for

A. A. Linero, P.E., Administrator  
Bureau of Air Regulation

AAL/sa

cc: Jerry Kissel, DEP-SWD  
Jeaneanne Gettle, EPA  
John Bunyak, NPS

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. E. O. Morris  
 Vice President  
 Cargill Fertilizer, Inc.  
 8813 Highway 41 South  
 Riverview, FL 33569

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

0-2

C. Signature

 X *Ray Burt*
 Agent  
 Addressee

 D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type

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- Registered
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- C.O.D.

4. Restricted Delivery? (Extra Fee)

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PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

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Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$</b>

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Sent To

E. O. Morris

Street, Apt. No.,  
or P.O. Box

8813 Hwy. 41 S.

City, State, ZIP+4

Riverview, FL 33569

PS Form 3800, January 2001

See Reverse for Instructions

# AFFIDAVIT OF PUBLICATION

## THE LEDGER

### Lakeland, Polk County, Florida

**RECEIVED**

JAN 28 2004

BUREAU OF AIR REGULATION

Case No .....

STATE OF FLORIDA)  
COUNTY OF POLK)

Before the undersigned authority personally appeared Morgan Miller, who on oath says that he is Classified Sales Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a **Notice of Intent to Issue Permit**

**PSD Air Construction Permit**

in the matter of.....

in the.....

Court, was published in said newspaper in the issues of.....

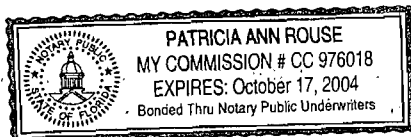
1-3; 2004

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed.....  
*Morgan Miller*  
Morgan Miller  
Classified Sales Manager  
Who is personally known to me.

Sworn to and subscribed before me this 5<sup>TH</sup>.....

day of January..... A.D. 20 04  
*Patricia Ann Rouse*  
Notary Public



(Seal)

My Commission Expires Oct 17, 2004

**Attach Notice Here**

**PUBLIC NOTICE OF INTENT TO ISSUE PSD AIR CONSTRUCTION PERMIT**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEP File No. 1050053-033-AC (PSD-FL-334)  
Green Bay Facility  
Cargill Fertilizer, Incorporated  
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue a Prevention of Significant Deterioration (PSD) air construction permit to Cargill Fertilizer, Inc. to modify several existing emission units at its Green Bay Phosphate Fertilizer Facility located in Bartow, Florida. A Best Available Control Technology (BACT) determination was required for nitrogen oxides (NO<sub>x</sub>), fluorides (F), particulate matter (PM) and particulate matter less than or equal to 10 micrometers (PM<sub>10</sub>) pursuant to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD). The applicant's name and address are Cargill Fertilizer, Inc., 8813 U.S. Highway 41 South, Riverview, Florida 33559.

Cargill applied on April 30, 2003 (complete on October 2, 2003) to modify its Phosphoric Acid Plants (PAP), South Diammonium Phosphate (DAP) Fertilizer Plant, and its North Monoammonium Phosphate (MAP)/DAP Plant. The PAP plant is being modified to improve process efficiency, plant stability, and evaporation capacity. The South DAP and North MAP/DAP are being modified to improve product quality and production capabilities. As a result of these changes, significant emission increases will occur for PM/PM<sub>10</sub>, F and NO<sub>x</sub>. The annual increases, adjusted for contemporaneous emission changes over the last five years, are approximately: 36 tons per year (TPY) Sulfur Dioxide (SO<sub>2</sub>), 93 TPY NO<sub>x</sub>, 40 TPY Carbon Monoxide (CO), 63 TPY PM, 66 TPY PM<sub>10</sub>, 5 TPY Volatile Organic Compounds, 4 TPY Total Reducer Sulfur, 0.4 TPY Sulfuric Acid Mist, and 33 TPY F.

The Department proposes the following as BACT for this project:

**Phosphoric Acid Production System (PAP No. 1 North & South Train and PAP No. 2)**

POLLUTANT	EMISSION LIMIT	LIMIT BASIS	CONTROL TECHNOLOGY
F	1.15 lb/hr 5.03 ton/yr	0.009 lb F/ton P <sub>2</sub> O <sub>5</sub> input	(2) Cyclonic Jet Scrubbers-North 1 (2) Cyclonic Jet Scrubbers-South 1 Poly-Con Wet Scrubber-PAP No. 2

**South Ammoniated Phosphate (AP) Plant**

PM/PM <sub>10</sub>	11.1 lb/hr, 48.4 TPY	0.170 lb/ton P <sub>2</sub> O <sub>5</sub> input	Two-stage scrubbers using acid/pond water
VE	10% opacity	Prior Permits	
F	2.6 lb/hr, 11.4 TPY	0.040 lb/ton P <sub>2</sub> O <sub>5</sub> input	Two-stage scrubbers using acid/pond water
NO <sub>x</sub>	12.6 lb/hr, 55.2 TPY	0.210 lb/MMBtu	Low-N fuel, good combustion

**North Ammoniated Phosphate (AP) Plant**

PM/PM <sub>10</sub>	13.6 lb/hr, 59.6 TPY	0.170 lb/ton P <sub>2</sub> O <sub>5</sub> input	Two-stage scrubber using acid/pond water
VE	10% opacity	Prior permits	
F	3.2 lb/hr, 14.0 TPY	0.040 lb/ton P <sub>2</sub> O <sub>5</sub> input	Two-stage scrubbers using acid/pond water
NO <sub>x</sub>	7.4 lb/hr, 32.4 TPY	0.0150 lb/MMBtu	Low N fuel, good combustion

An air quality impact analysis was conducted. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. The maximum predicted PM<sub>10</sub> and NO<sub>x</sub> PSD Class II increments in the vicinity of the project consumed by all sources in the area, including this project, will be as indicated below:

Averaging Time	Allowable Increment (ug/m <sup>3</sup> )	Increment Consumed (ug/m <sup>3</sup> )	Percent Consumed
PM <sub>10</sub>			
24-hour	30	13	43
Annual	17	<0	0
NO <sub>x</sub>			
Annual	25	2	8

There were no significant impacts predicted for the PSD Class I Chassahowitzka National Wilderness Area located 110 km to the northwest. Based on the required increment analyses, the Department has reasonable assurance that the proposed project will not cause or significantly contribute to a violation of any PSD increment in the Class I or Class II areas.

The permitting authority has determined that a PSD Air Construction Permit is required. The Department will issue the Final PSD Air Construction Permit in accordance with the conditions of the Draft PSD Air Construction Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE PSD AIR CONSTRUCTION PERMIT." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only of the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection Bureau of Air Regulation Suite 4, 111 S. Magnolia Drive Tallahassee, Florida 32301 Telephone: 850/488-0114 Fax: 850/922-6979	Dept. of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, North Permitting Section at 111 South Magnolia Drive, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

J712 - 1-3; 2004

**Golder Associates Inc.**

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



February 6, 2004

0337506

Florida Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road, MS 5500  
Tallahassee, FL 32399-2400

**RECEIVED**

**FEB 09 2004**

Attention: Mr. Syed Arif, P. E.

**BUREAU OF AIR REGULATION**

RE: CARGILL FERTILIZER INC., GREEN BAY FACILITY  
DEP FILE NO. 1050053-033-AC/PSD-FL-334  
MODIFICATION OF PHOSPHORIC ACID PLANTS AND MAP/DAP PLANTS

Dear Mr. Arif:

Cargill Fertilizer Inc. (Cargill) through its consultant, Golder Associates Inc. (Golder), submitted a response to the Department's request for additional information on October 1, 2003, concerning the application to modify the Green Bay facility. An error was discovered on Table 5-7 that was attached to the letter. The particulate matter and fluoride emission test results for monoammonium phosphate (MAP) production on October 26, 1999 and October 27, 1999 are incorrect. The table has been revised and is attached.

Please call if you have any questions concerning this additional information.

Sincerely,  
GOLDER ASSOCIATES INC.

*David A. Buff*  
David A. Buff, P.E., Q.E.P.  
Principal Engineer  
Florida P. E. #19011  
SEAL

DB/FWB/jej

Enclosures

cc: T. Abel, Cargill  
F. Bergen, Golder  
D. Jellerson, Cargill

Y:\Projects\2003\0337506 Cargill - Green Bay\4\4.1\020604\L020604.doc

Table 5-7. Summary of Recent North MAP/DAP Fertilizer Plant Emission Tests at Cargill Green Bay (revised 2/6/04)

Date	Average Production Rate <sup>a</sup> (tons/hr)	Average Process Rate <sup>b</sup> (tons/hr)	PM <sup>c</sup>		Fluoride <sup>c</sup>	
			avg lb/hr	avg lb/ton P <sub>2</sub> O <sub>5</sub>	avg lb/hr	avg lb/ton P <sub>2</sub> O <sub>5</sub>
<b><u>MAP Production</u></b>						
8/1/02-8/2/02	160.4	81.8	10.19	0.125	0.81	0.0099
3/27/01-3/28/01	167.3	85.3	8.44	0.099	0.93	0.0108
3/16/00-3/17/00	148.6	75.8	16.99	0.224	1.21	0.0160
3/16/00-3/20/00	150.1	76.6	11.75	0.154	1.55	0.0203
10/26/99-10/27/99	139.7	71.3	9.10	0.128	1.80	0.0253
6/30/99-7/2/99	143.5	73.2	6.90	0.094	2.64	0.0361
4/12/99-4/14/99	158.0	80.6	6.77	0.084	1.97	0.0244
<b><u>DAP Production</u></b>						
5/1/02-5/2/02	94.8	43.6	14.02	0.322	1.06	0.0306
2/13/01-2/14/01	106.0	48.8	7.24	0.148	1.02	0.0209
4/6/00-4/7/00	97.9	45.1	3.03	0.067	0.28	0.0061
3/17/99-3/18/99	94.9	43.7	2.02	0.046	0.71	0.0162
1/20/99-1/21/99	94.0	43.3	5.12	0.118	0.56	0.0129
1/26/98-1/29/98	99.3	45.7	7.90	0.173	0.83	0.0181

<sup>a</sup> As MAP or DAP. Based on 51% P<sub>2</sub>O<sub>5</sub> for MAP and 46% P<sub>2</sub>O<sub>5</sub> for DAP.

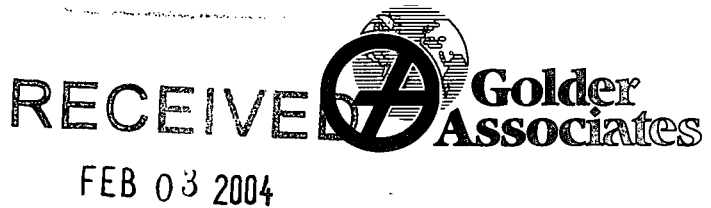
<sup>b</sup> As P<sub>2</sub>O<sub>5</sub>.

<sup>c</sup> Represents both stacks combined.



**Golder Associates Inc.**

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



February 2, 2004

**BUREAU OF AIR REGULATION**

0337506

Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 5505  
Tallahassee, Florida 32399-2400

Attention: Jim Pennington, P.E., Permitting Administrator, North Section

RE: DRAFT PERMIT NO. 1050053-033-AC  
DRAFT PERMIT COMMENTS  
CARGILL FERTILIZER, INC., GREEN BAY FACILITY

Dear Mr. Pennington:

Cargill Fertilizer, Inc. (Cargill) is in receipt of the draft air construction permit (Permit No. 1050053-033-AC/PSD-FL-334) for the Green Bay Phosphate Fertilizer Facility located in Polk County. Cargill and its consultant, Golder Associates Inc. (Golder), have reviewed the draft permit. The comments on the draft permit are listed below by the original permit condition number.

General comments are as follows:

1. In the application, on pages 2-2 and 2-3, Cargill requested that the phosphoric acid storage, clarification, aging and blending tanks be classified as unregulated sources. In response to the Department's request for additional information (RAI) dated May 23, 2003, Cargill provided additional information on these emission units, including historic permits, in a letter dated October 1, 2003, from Golder to the Department. However, the draft permit does not clearly address these emission units. In the October 1, 2003, response letter, it was Golder's belief that EU014 (clarification tank and aging tank) could be revised through the Title V process, but that EU 037 (four phosphoric acid blend tanks) would have to be revised through an air construction permit. We request that the Department address both of these emission units in the permit and/or in the TE&PD, as appropriate (see specific comments on draft permit below).
2. In the application, on page 2-12, Cargill requested that the fluoride emission limit for the MAP/DAP Storage and Shipping Buildings (EU 020) be removed because this limit was imposed due to granular triple superphosphate (GTSP) manufacturing and storage. Since Cargill will not manufacture GTSP at the Green Bay facility, this limit should be removed. In addition, it was requested that the allowable PM emission limit apply to the "shipping" operation only (i.e., the PM limit should not include the storage buildings). We request that the Department address this emission unit in the permit and/or in the TE&PD.

Specific comments on the Technical Evaluation and Preliminary Determination (TE&PD), draft permit and Best Available Control Technology Determination (BACT) are as follows:

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

**Pg. 3 of 12. Facility Description** – Note that the Green Superphosphoric Acid plant has been shutdown.

**Pg. 7 of 12, Federal and State Emission Standards** – As discussed on page 3-11 of the application, we do not believe that the NSPS will apply to the Phosphoric Acid Plants or to the Ammoniated Phosphate

Plants at Green Bay due to the proposed project. In addition, according 40 CFR 63.610 and 63.631, sources subject to Part 63 Subparts AA or BB are exempt from the NSPS Subparts T, U, V, W and X.

**Pg. 11 of 12. AAQS Analysis** – Background PM10 concentrations of 21 ug/m<sup>3</sup> (annual) and 50 ug/m<sup>3</sup> (24-hour average), were used in the submitted air modeling analysis. The annual background was based on the lower measured values since the modeled sources would have impacted this monitor. The 24-hour value was based on the 6<sup>th</sup>-highest measured value, consistent with the form of the AAQS. The TE&PD states that the background concentrations are 27 and 78 ug/m<sup>3</sup>, respectively. This results in higher predicted ambient impacts for the project.

**Pg. 12 of 12 - Additional Impact Analysis** – change “Cargill Bartow facility” to “Cargill Green Bay facility”.

### **DRAFT PERMIT**

**Pg. 2 of 12 - Regulatory Classification** – change “Cargill Bartow Facility” to “Cargill Green Bay Facility”.

**Relevant Documents** – Add the applicant’s letter dated October 1, 2003 to the list of documents on file.

**Pg. 3 of 12, item 5, Expiration** – In the application, Cargill requested a project completion date of June 1, 2007. We therefore request a permit expiration date of June 1, 2007. This will allow sufficient time to complete actual construction and then perform all the compliance testing, prepare and submit a Title V revision application, and then obtain a revised Title V permit.

**Pg. 4 of 12, item 11, Quarterly Reports** – This condition references 40 CFR Part 60, which are the new source performance standards (NSPS) regulations. As discussed on page 3-11 of the application, we do not believe that the NSPS will apply to the Phosphoric Acid Plants or to the Ammoniated Phosphate Plants at Green Bay due to the proposed project.

### **Subsection A. Common Conditions**

**Emission Unit Description-** The Phosphoric Acid Tanks should be designated as insignificant or unregulated emissions units, and not as part of the regulated phosphoric acid plants.

### **Subsection B. Phosphoric Acid Production System**

**Page 7 of 12, item 3.** To clarify that the phosphoric acid tanks are not subject to any fluoride emission limits, reword as follows. As discussed under comments to the BACT Determination (see below), also include the requested fluoride emission limit of 0.012 lb/ton.

“The combined fluoride emissions from the three Phosphoric Acid Plants’ scrubber stacks (controlling the reactors, filters and filtrate tanks) shall not exceed 0.012 lb/ton of equivalent P<sub>2</sub>O<sub>5</sub> feed, 1.53 lb/hr, and 6.70 TPY.”

**Page 7 of 12, item 5.** To be consistent with condition 1, reword the fourth sentence as:

“The current maximum operating capacity limit is 128 TPH P<sub>2</sub>O<sub>5</sub>.”

**Page 7 of 12, items 7 and 8.** An Administrative Order has been issued by DEP for the Green Bay facility which approves an alternative monitoring method for compliance with the Subpart 63 MACT standards. Therefore, Conditions 7 and 8 are in conflict with the Order. It is recommended that these conditions be modified to just state that this emission unit is subject to the monitoring requirements of Subpart AA.

### **Subsection C. AP Plants**

**Page 10 of 12, items 1 and 2.** It is requested that the production rates be expressed in tons per day (TPD), i.e., 1,560 TPD for the South AP and 1,920 TPD for the North AP, as requested in the application.

**Page 10 of 12, item 3.** Change “rotary dryer” to “rotary dryers”, since each plant has a dryer. To reduce recordkeeping requirements, we request that the heat input limits be specified as a “daily average”.

**Page 10 of 12, item 5.** The NO<sub>x</sub> limit for the North AP should read “0.148 lb/MMBtu” instead of “0.0150 lb/MMBtu”. Although a NO<sub>x</sub> limit is being imposed on the AP Plants as BACT, it is requested that no stack testing for NO<sub>x</sub> be required. The NO<sub>x</sub> limits are based solely on AP-42 emission factors, and there is no NO<sub>x</sub> control equipment on the AP dryers to reduce NO<sub>x</sub> emissions. Cargill is not modifying the existing dryers, burners or heat input rates. Previous NO<sub>x</sub> testing on the North AP Plant showed NO<sub>x</sub> emissions of less than 0.5 lb/hr. Additional stack testing would not serve a useful purpose. The way the draft permit reads, stack testing for NO<sub>x</sub> would be required annually (refer to Condition 3 of Subsection A).

**Page 10 of 12, item 6.** The reference to the current Title V permit as the basis of the 10% opacity limit is not correct. The current Title V permit limits opacity to 20%.

**Page 11 of 12, items 11 and 12.** An Administrative Order has been issued by DEP for the Green Bay facility which approves an alternative monitoring method for compliance with the Subpart 63 MACT standards. Therefore, Conditions 11 and 12 are in conflict with the Order. It is recommended that these conditions be modified to just state that this emission unit is subject to the monitoring requirements of Subpart BB.

### **APPENDIX BD- BACT DETERMINATION**

**Gaseous Fluoride** – The Department has imposed a fluoride limit for the Phosphoric Acid Plant of 0.009 lb/ton of P<sub>2</sub>O<sub>5</sub> feed. The Department justifies this emission limit in part based on historic test data from the existing Phosphoric Acid Plants, as presented in the application. The discussion acknowledges that the phenomena accounting for these lower test values have not been fully explained, but the Department believes that they may be the result of a combination of factors including low reactor surface evacuation rates and favorable pond water characteristics rather than high scrubber efficiencies.

Cargill also believes that favorable pond water conditions may be the primary influence upon fluoride emissions. That being the case, Cargill does not believe that a limit of 0.009 lb/ton will be achievable on a consistent basis, year-to-year, because of potential fluctuations in pond water conditions as well as Phosphoric Acid Plant and scrubber operating fluctuations. The Department’s evaluation apparently only considered the last three years of fluoride test data, although the last four years of data were submitted in the application. This additional year of data is critical to the analysis since it showed fluoride emissions of 0.0096 lb/ton, which is higher than the Department’s proposed limit. This test in 2000 coincides with the two lowest rainfall years out of the last 6 years. Rainfall in 1991 and 2000 at Bartow was 42 and 36 inches respectively. These lower rainfall amounts would result in higher pond water fluoride concentrations, thereby causing higher scrubber fluoride emissions.

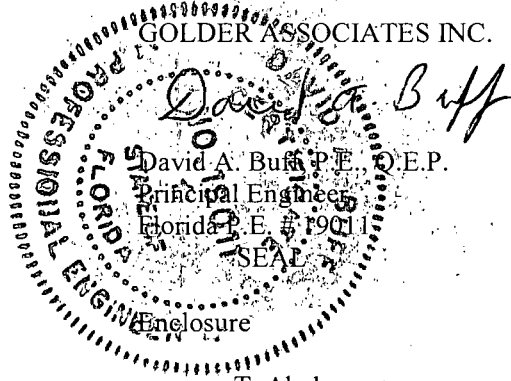
In situations where the scrubbers are operating at or near equilibrium conditions, the temperature and fluoride concentration on the pond water are critical in determining the resulting fluoride emissions. The attached table shows the potential effect upon fluoride emissions due to variations in pond water conditions. The table shows that at pond water fluoride concentrations of 8,000 ppm, fluoride emissions from the Phosphoric Acid Plants could exceed the 0.009 lb/ton limit in the draft

permit, due solely to the pond water fluoride content (i.e., no contribution considered from fluorides in the Phosphoric Acid Plant exhaust gases).

As a result, Cargill cannot accept the 0.009 lb/ton limit in the draft permit, and asks that the Department reconsider the BACT limit and set it at 0.012 lb/ton, consistent with other recent BACT determinations.

If you have any questions regarding these comments, please feel free to contact me at (352) 336-5600, or David Jellerson at (813) 671-6297.

Sincerely,



Enclosure

cc: T. Abel  
D. Buff

Y:\Projects\2003\0337506 Cargill - Green Bay\4\4.1\020204\020204.doc

- J. Reynolds*
- C. Holladay*
- G. Kissel, SWD*
- H. Worley, EPA*
- G. Bumpal, NPS*

Table 1. Calculation of Fluoride Emissions Due To Pond Water for Phosphoric Acid Plants at Cargill Green Bay

Scrubber	Scrubber Exit Conditions		Pond Water Conditions (ppm F)	F Equilibrium Concentration (mg/ACF)	Fluoride Emissions (lb/hr)	Fluoride lb/ton P <sub>2</sub> O <sub>5</sub> @ 128 TPH
	Air Flow (acfm)	Temp. (deg. F)				
PAP No. 1 - North	29,100	110	5,660	0.027	0.104	
PAP No. 1 - South	29,100	110	5,660	0.027	0.104	
PAP No. 2	24,300	110	5,660	0.027	<u>0.087</u>	
				Total=	0.294	0.0023
PAP No. 1 - North	29,100	110	7,100	0.064	0.246	
PAP No. 1 - South	29,100	110	7,100	0.064	0.246	
PAP No. 2	24,300	110	7,100	0.064	<u>0.206</u>	
				Total=	0.698	0.0055
PAP No. 1 - North	29,100	110	8,000	0.090	0.346	
PAP No. 1 - South	29,100	110	8,000	0.090	0.346	
PAP No. 2	24,300	110	8,000	0.090	<u>0.289</u>	
				Total=	0.981	0.0077
.....						
PAP No. 1 - North	29,100	120	5,660	0.036	0.138	
PAP No. 1 - South	29,100	120	5,660	0.036	0.138	
PAP No. 2	24,300	120	5,660	0.036	<u>0.116</u>	
				Total=	0.393	0.0031
PAP No. 1 - North	29,100	120	7,100	0.082	0.315	
PAP No. 1 - South	29,100	120	7,100	0.082	0.315	
PAP No. 2	24,300	120	7,100	0.082	<u>0.263</u>	
				Total=	0.894	0.0070
PAP No. 1 - North	29,100	120	8,000	0.115	0.442	
PAP No. 1 - South	29,100	120	8,000	0.115	0.442	
PAP No. 2	24,300	120	8,000	0.115	<u>0.369</u>	
				Total=	1.254	0.0098

Notes:

mg/ACF = milligrams per actual cubic feet



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JAN 28 2004

BUREAU OF AIR REGULATION

January 13, 2004

CERTIFIED MAIL: 7002 0510 0000 8688 8133

Mr. Jim Pennington, P.E.  
Dept. of Environmental Protection  
Bureau of Air Regulation  
Suite 4, 111 S. Magnolia Drive  
Tallahassee, Florida, 32301

Re: Affidavit of Publication  
Notice of Permit Revision 1050053-033-AC (PSD-FL-334)

Dear Mr. Jim Pennington,

Please find enclosed the original Affidavit of Publication for the Notice of Draft Permit 1050053-033- AC (PSD-FL-334). The public notice was published in The Ledger newspaper on January 3, 2004. The Ledger serves Lakeland and Polk County, Florida.

Should you have any questions, or require additional information, please feel free to give me a call at (863) 519-1371.

Sincerely,

Taylor D. Abel, P.E.  
EHS Superintendent

cc: file 60.04.01

D. Jellerson

P. Bose

*J. Reynolds*

*J. Kisor*

*S. Harley, EPA*

*J. Bennett, NPS*



RECEIVED

JAN 09 2004

BUREAU OF AIR REGULATION

January 8, 2004

**VIA COURIER & FAX: 850.487.4938**

Office of General Counsel  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station #35  
Tallahassee, Florida 32399-3000

RE: Cargill Fertilizer, Inc.: Draft Permit No. 1050053-033-AC; PSD-FL-334  
Green Bay Phosphate Fertilizer Facility  
***Request for an Extension of the Time in Which to File Petition for Hearing,  
Mediation or Alternate Remedies, or in the alternative, Petition for an  
Administrative Hearing***

Office of General Counsel:

Cargill Fertilizer, Inc. ("Cargill") requests from the Florida Department of Environmental Protection ("FDEP") an extension of the time in which to file a petition for an administrative hearing, mediation or alternate remedies with respect to the above referenced permit ("Permit").

Cargill received the "Intent to Issue" for the modifications to the Green Bay Phosphate Fertilizer Facility and the "Public Notice of Intent to Issue" from the FDEP on December 29, 2003. Cargill seeks this extension to resolve with FDEP various issues pertaining to the terms of the Permit.

While Cargill is confident such issues can be resolved without the need for a formal proceeding, in order to fully protect and reserve its right to a hearing, mediation or other remedy, Cargill requests an extension. My client, David Jellerson, spoke with the FDEP New Source Review Permitting Administrator, Jim Pennington who was agreeable to an extension.

Therefore, Cargill hereby requests a 60-day extension, or such other extension period FDEP deems adequate to provide Cargill and FDEP a reasonable opportunity to resolve any issues with respect to the Permit, and further requests the FDEP suspend its intent to issue accordingly.

In the event FDEP declines to grant Cargill's extension request, Cargill hereby petitions for an administrative hearing and provides FDEP the following pertinent information:

**James K. Voyles**  
Attorney  
(952) 742-2589

Mailing Address:  
P.O. Box 5624  
Minneapolis, MN 55440-5624

Location/Shipping Address:  
15407 McGinty Road West  
Wayzata, MN 55391-5624

Facsimile:  
(952) 742-6349  
or (952) 742-7503

- (a) *The name, address, and telephone number of petitioner; the FDEP's identification number for the Agency action and the county in which the subject matter or activity is located:*

Cargill Fertilizer, Inc.  
Green Bay Facility  
8813 U.S. Highway 41, S.  
Riverview, FL 33569

Permit No. 1050053-033-AC; PSD-FL-334  
Polk County

- (b) *A statement of how and when each petitioner received notice of the Agency action*

Cargill received notice via U.S. Mail on December 29, 2003.

- (c) *A statement of how each petitioner's substantial interests are affected by the Agency action.*

Cargill's facility is the subject of the Permit.

- (d) *A statement of the material facts disputed by petitioner, if any*

Cargill is unsure if there are any material facts in dispute at this time. The Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

- (e) *A statement of facts which petitioner contends warrant reversal or modification of the Agency action.*

Cargill is unsure if there are any material facts warranting reversal or modification at this time. Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

- (f) *A statement of which rules or statutes petitioner contends require reversal or modification of the Agency action*

Cargill is unsure if there are any rules or statutes requiring reversal or modification at this time. Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.



January 8, 2004

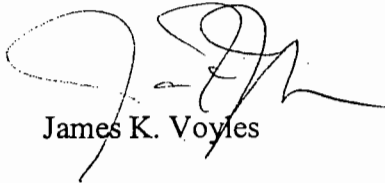
Page 3

- (g) *A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Agency action.*

Cargill is unsure if Departmental action is required at this time Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

Cargill thanks you for your consideration and continued cooperation. Please contact me with any questions or concerns.

Very truly yours,



James K. Voyles

JKV:rl  
329710

cc: Mr. Jim Pennington  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

David Jellerson/Fert/Riverview, FL  
Taylor Abel/Fert/Green Bay, FL



Jim  
John  
Vicki  
Lisa

RECEIVED

APR 05 2004

April 2, 2004

BUREAU OF AIR REGULATION

**VIA OVERNIGHT DELIVERY  
VIA FACSIMILE: 850.245.2303**

Office of General Counsel Florida Department  
of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station #35  
Tallahassee, Florida 32399-3000

Office of General Counsel:

RE: Cargill Fertilizer, Inc.: Draft Permit No. 1050053-033-AC; PSD-FL-334  
Green Bay Phosphate Fertilizer Facility  
*Request for an Additional Extension of the Time in Which to File Petition for  
Hearing, Mediation or Alternate Remedies, or in the alternative, Petition for an  
Administrative Hearing*

Office of General Counsel:

Cargill Fertilizer, Inc. ("Cargill") requests from the Florida Department of Environmental Protection ("FDEP") an additional extension of the time in which to file a petition for an administrative hearing, mediation or alternate remedies with respect to the above referenced permit ("Permit").

Cargill received the original "Intent to Issue" for the modifications to the Green Bay Phosphate Fertilizer Facility and the "Public Notice of Intent to Issue" from the FDEP on December 29, 2003. Cargill initially requested an extension of time on January 8, 2004, to which no direct response was received. However, on March 4, 2004, Cargill received a revised version of the Permit via e-mail. Cargill seeks this additional extension to resolve with FDEP various issues pertaining to the terms of the revised version of the Permit.

While Cargill is confident such issues can be resolved without the need for a formal proceeding, in order to fully protect and reserve its right to a hearing, mediation or other remedy, Cargill requests an extension. My client, David Jellerson, has discussed this additional extension with the FDEP New Source Review Permitting Administrator, Jim Pennington.

**James K. Voyles**  
Attorney  
(952) 742-2589

Mailing Address:  
P.O. Box 5624  
Minneapolis, MN 55440-5624

Location/Shipping Address:  
15407 McGinty Road West  
Wayzata, MN 55391-5624

Facsimile:  
(952) 742-6349  
or (952) 742-7503

Therefore, Cargill hereby requests an additional extension until May 14, 2004, or such other extension period FDEP deems adequate to provide Cargill and FDEP a reasonable opportunity to resolve any issues with respect to the Permit, and further requests the FDEP suspend its intent to issue accordingly.

In the event FDEP declines to grant Cargill's extension request, Cargill hereby petitions for an administrative hearing and provides FDEP the following pertinent information:

- (a) *The name, address, and telephone number of petitioner; the FDEP's identification number for the Agency action and the county in which the subject matter or activity is located:*

Cargill Fertilizer, Inc.  
Green Bay Facility  
8813 U.S. Highway 41, S.  
Riverview, FL 33569

Permit No. 1050053-033-AC; PSD-FL-334  
Polk County

- (b) *A statement of how and when each petitioner received notice of Agency action.*

Cargill received notice via U.S. Mail on December 29, 2003.

- (c) *A statement of how each petitioner's substantial interests are affected by the Agency action.*

Cargill's facility is the subject of the Permit.

- (d) *A statement of the material facts disputed by petitioner, if any.*

Cargill is unsure if there are any material facts in dispute at this time. The Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

- (e) *A statement of facts which petitioner contends warrant reversal or modification of the Agency action.*

Cargill is unsure if there are any material facts warranting reversal or modification at this time. Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the

Office of General Counsel

April 2, 2004

Page 3

extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

- (f) *A statement of which rules or statutes petitioner contends require reversal or modification of the Agency action.*

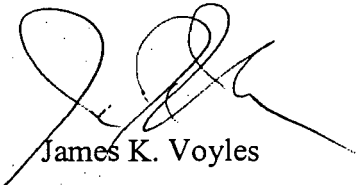
Cargill is unsure if there are any rules or statutes requiring reversal or modification at this time. Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

- (g) *A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Agency action.*

Cargill is unsure if Departmental action is required at this time. Draft permit contains conditions which appear to be inconsistent with the intended project and the application. Therefore, Cargill desires the extension to resolve these issues and to determine if material facts are in dispute and wishes to work with FDEP on the Permit's conditions accordingly.

Cargill thanks you for your consideration and continued cooperation. Please contact me with any questions or concerns.

Very truly yours,



James K. Voyles

JKV:rl  
340731

cc: Mr. Jim Pennington  
Florida Dept. of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

David Jellerson/Fert/Riverview, FL  
Taylor Abel/Fert/Green Bay, FL

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Mr. E. O. Morris  
 Vice President  
 Cargill Fertilizer, Inc.  
 8813 Highway 41 South  
 Riverview, FL 33569

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