RECEIVED

JUL 1 0 1997

BUREAU OF AIR REGULATION

TO: Al Linero

FROM: J. Kissel

DATE: July 8, 1997

SUBJECT: IMC-Agrico - DAP 2 Plant 1050059-020-AC p50-F1-241

In the Title V permitting process, IMC has made a couple of requests* which would change some fundamental PSD-related requirements of a Tallahassee-issued AC. Thus it appears appropriate for us to request guidance from you on how to proceed. Please respond to me (SC 542-6100, x107) or Roger Cawkwell (SC 542-6100, x117).

Attachments:

*Items 6 & 7 of 7/2/97 Koogler memo Permit AC53-118671 (note Condition 8)

Permit file 1050059, e.u. 045 & 046 c:



KA 124-94-04 July 2, 1997

Mr. P. Roger Cawkwell Florida Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, FL 33619-8318

Subject:

Polk County-AP

IMC-Agrico Company (New Wales)
Additional Information for
Title V Permit Application
File No. 1050059-014-AV

Dear Mr. Cawkwell:

This is a follow up to our April 22, 1997 letter regarding additional information on the above referenced application.

As discussed with you last week, we have decided against submitting copies of all the existing air operation permits with suggested changes in wording. It would be more productive to address the few generic issues which appear in the various permits. The following comments address issues to be considered in drafting the Title V permit.

- 1. Can the visible emissions test frequency for emissions units be changed to annual to correspond with the frequency of compliance test for other pollutants?
- 2. Can the names of equipment manufacturers be removed from the permit descriptions and specific conditions?
- 3. We suggest the following wording for testing requirements:

"Testing must be conducted within 90·100% of the maximum permitted capacity stated in the above specific condition. A compliance test submitted at a rate less than 90% of the maximum permitted rate will automatically constitute an amended permit rate at the lesser rate plus 10%. Within 30 days of exceeding the amended permit rate, a new compliance test will be conducted at the higher rate. The test results shall be submitted to FDEP's Southwest District Office within 45 days of testing. Acceptance of the test by the Department will automatically constitute an amended permit at the higher tested rate plus 10%, but in no case shall the maximum permitted capacity, stated in the above specific condition, be exceeded. The permitted rate will automatically be amended to the maximum rate upon submittal, and acceptance by FDEP, of any compliance test between 90·100% of the maximum rate."

It should be noted that the 30-day provision in the above wording allows for not only test preparations and scheduling, but also the 15-day prior notification of the test to FDEP.

The above provision for reinstating the maximum permitted rate is required to avoid unnecessary additional testing for an emissions unit that demonstrates compliance at a rate between 90-100% of the maximum permitted rate but a rate less than a previously established amended permitted rate which is between 90-100% of the maximum permitted rate.

- 4. It is anticipated that the wording developed by FDEP, and addressed in our letter dated April 22, 1997, will be utilized in instances where a visible emissions test will be conducted in lieu of a particulate matter test.
- 5. After considerable deliberation in a recent permitting effort (FDEP permit 1050059-013-AC), the FDEP decided to require monitoring of the scrubber pressure drop and the scrubbing medium flow rate. It is requested that these monitoring requirements, and not other extraneous monitoring requirements, be applied in a uniform manner for all scrubbers used in pollution control applications.
- 6. It is requested that all references to monoammonium and diammonium phosphate be changed to ammoniated phosphates. This will make the reference consistent with the EPA Source Classification Code (SCC) system, as required by the air permit application forms.
- 7. It is anticipated that the requirement for an ambient air monitoring station for particulate matter (DAP 2 West Train permit, AO53-215387) will be deleted.

If you have any further questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B/Koogler, Ph.D., P.E.

JBK.par encl.

c: C. Dave Turley, IMC-Agrico



STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE:
International Minerals & Chemical Corporation
New Wales Operations
Post Office Box 1035

Mulberry, Florida 33860

Permit Number: AC 53-118671 Expiration Date: December 31, 1987 County: Polk

Latitude/Longitude: 27° 49' 56.4"N 82° 02' 59.9"W

Project: No. 2 DAP Plant Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the modification of two 125 TPH trains (140 TPH total allowed) diammonium phosphate plant with a common cooler unit to be located at the permittee's existing phosphate fertilizer complex in the west part of Polk County near the intersection of State Highway 640 and County Line Road. The UTM coordinates of the proposed plant are zone 17, 396.6 km E and 3078.9 km N.

Construction shall be in accordance with the attached permit application, plans, documents and drawings except as noted in the Specific Conditions.

Attachments:

- 1. Application for the No. 2 DAP plant signed by Mr. Brafford on March 31, 1986.
- 2. October 18, 1985, letter by Dr. Koogler.
- 3. July 3, 1985, letter by Dr. Koogler.
- 4. August 19, 1985, letter by Dr. Koogler.
- 5. April 2, 1986, letter by Dr. Koogler.
- 6. May 9, 1986, letter by Dr. Koogler.
- November 10, 1986, letter by Dr. Koogler.
- 8. December 18, 1986, letter by Dr. Koogler.
- 9. Waiver of 90 Day Time Limit dated February 26, 1987.
- 10. March 26, 1987, letter by Dr. Koogler.
- 11. April 6, 1987, letter by Mr. Bruce P. Miller.
- 12. April 7, 1987, letter by Mr. James Q. Duane.

Permit Number: AC 53-118671 Expiration Date: December 31, 1987

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

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GENERAL CONDITIONS:

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6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

. . .

- 7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permit;
 - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:
 - a. a description of and cause of non-compliance; and
 - b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

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- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
- 10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
- 11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.
- 12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
- 13. This permit also constitutes:
 - (x) Determination of Best Available Control Technology (BACT)
 - (x) Determination of Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards.
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

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GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

. . . .

- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling, or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
- 15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Maximum production for both plants shall not exceed a total of 140 TPH DAP and each plant will not operate over 7,920 hours per year. The cooler will be allowed to operate 8,760 hours per year.

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SPECIFIC CONDITIONS:

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2. The maximum allowable discharge from the plants will be:

	Max. Emission Rate	Total Max Emission
Pollutant	for each Plant	for both Plants
Particulate	0.5 lbs/ton P ₂ O ₅	28.2 lbs/hr and 112 TPY
Visible Emissions	20% opacity	20% opacity
Fluoride	0.060 lbs/ton P ₂ O ₅	4.2 lbs/hr & 16.6 TPY
Sulfur Dioxide	0.7 lbs/ton P ₂ O ₅	44 lbs/hr & 174 TPY
	0.60 lbs/10 ⁶ Btu	25.2 lbs/hr & 110.4 TPY
	discharge of particulate fr	
the cooler will be	0.01 $grain/dscf$ and 4.5 $1bs$	s/hr which is 17.8 TPY.

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- 3. Fugitive particulate and fluoride emissions from process, conveying and storage equipment will be controlled by sealing and/or venting all fumes from the equipment to pollution abatement equipment.
- 4. No. 6 fuel oil for the dryer shall not contain more than 2.5% sulfur. Total heat input to both trains shall not exceed 42 \times 106 Btu/hr which is approximately 280 GPH of No. 6 fuel oil.
- 5. The permittee shall install, calibrate, maintain, operate, and record data from flow monitoring devices that can be used to determine total P₂O₅ input to each plant.
- 6. The permittee will measure and record the pressure drop across each scrubber system. Pressure drop across the venturi scrubber must be at least 12" $\rm H_{2}O$ during plant operations. These records will be maintained for 2 years and available for inspection by regulatory agency personnel on request.
- 7. The company shall comply with all requirements of 40 CFR 60, Subpart V, Standards of Performances for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants.
- 8. The permittee's ambient air station measuring TSP will be operated on a 6 day schedule established by DER and the data reported to the DER office in Tampa on a quarterly basis.
- 9. Each plant (train) shall be sampled, while operating near 125 TPH DAP production on oil with approximately 2.5% sulfur content, for particulate matter, sulfur dioxide, nitrogen oxides, visible emissions, and fluorides by the reference methods described in 40 CFR 60, Appendix

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SPECIFIC CONDITIONS:

A, or other methods as approved by the department. Compliance tests shall be conducted prior to the expiration date of this construction permit or within 45 days after placing a plant in operation. P_2O_5 input, pH of the scrubber solution, and pressure drop across the scrubbers will be as normally operated and reported, along with the data and results, to the department. The department (SW District) shall be notified 15 days prior to any compliance test.

- 10. An application for permit to operate the No. 2 DAP plant shall be submitted to the department (SW District) within 45 days of the compliance tests. In the event the application for permit to operate does not include test data on both trains of the No. 2 DAP plant, the permittee shall request the District amend any permit to operate that may be issued for this plant within 45 days of placing the other train in operation.
- 11. Any permit to operate issued for the No. 2 DAP plant sharl require annual tests for particulate matter and fluoride, and on renewal of the permit to operate (every 5 years), tests for sulfur dioxide and nitrogen oxides.

Issued this 21 day of April 1987

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

pages attached