

Best Available Copy

State of Florida

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

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

TO: Jake Varn

FROM: Steve Smallwood *MK for S.S.*

DATE: March 28, 1980

SUBJECT: Best Available Control Technology (BACT) Determination
Diammonium Phosphate Plant, New Wales Chemicals, Inc.
Polk County

RECEIVED
MAR 31 1980

Office of the Secretary

Facility: A 140 ton per hour diammonium phosphate (DAP) plant. The plant will produce DAP fertilizer from anhydrous ammonia, and phosphoric acid using No. 6 oil fired dryer, screens, mills, cooler, reactor and granulator. Estimated potential emission of pollutants subject to the BACT rule are:

Particulate 6,000 tons/year

Sulfur Dioxide 444 tons/year

BACT Determination Requested by the Applicant:

Pollutant	Maximum Allowable Emission
Fluorides	0.060 lbs/ton P ₂ O ₅ Feed

Date of Receipt of a Complete BACT Application:

February 13, 1980

Date of Publication in the Florida Administrative Weekly:

March 28, 1980

Date of Publication in a Newspaper of General Circulation:

April 2, 1980 Tampa Tribune

Study Group Members:

Thomas Davis, DER South Florida District, Ft. Myers;
 Pepe de Castro, DER Bureau of Wastewater Management & Grants,
 Tallahassee;
 Robert Garrett, DER Southwest District, Tampa;
 Willard Hanks, DER Bureau of Air Quality Management, Tallahassee;
 Joseph Griffiths, Hillsborough County Pollution Control, Tampa;
 Johnny Cole, DER St. Johns River Subdistrict, Jacksonville

Study Group Recommendations:

	<u>Particulate</u> <u>#/Ton P₂O₅ Feed</u>	<u>Sulfur Dioxide</u> <u>#/Ton P₂O₅ Feed</u>
Thomas Davis	0.50 (0.015 gr/scf)	0.70 (2.5% S in fuel)
Pepe de Castro	0.62 (0.02 gr/scf)	None given
Robert Garrett	0.33 (.15 lb/ton DAP)	None given
Joseph Griffiths	0.83 (0.03 gr/scf on scrubbers) (0.015 gr/scf on baghouse)	None given
Willard Hanks	0.43 (0.20 lbs/ton DAP)	0.65 (.3 lb/TDAP)

BACT Determination by the Florida Department of Environmental Regulation:

<u>Pollutant</u>	<u>Maximum Emission</u> <u>lb/ton P₂O₅ Feed</u>
Sulfur Dioxide	0.7

Particulate

NOTE: Particulate emission proportioned to 3 stacks as follows:

<u>Stack</u>	<u>Feed</u>	<u>Emissions</u>	<u>Equivalent</u>
Common Cooler	65.1 TP ₂ O ₅ /Hr.	4.5 lbs/hr.	-
East Train	32.6 "	14.1 "	0.433 lbs/tonP ₂ O ₅ Feed
West Train	32.6 "	14.1 "	0.433 "
Total for facilities		32.7 "	0.5 "

Jacob D. Varn
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Justification of DER Determination

Particulate Matter: The 0.5 lbs/ton P₂O₅ feed emission limitation selected is representative of Best Available Control Technology and can be met with the proposed design.

Sulfur Dioxide: On the basis of the information provided the 0.7 lb/ton P₂O₅ limit is attainable with the 2.5% S fuel proposed by the applicant.

Details of the Analysis May be Obtained by Contacting:

Victoria Martinez, BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32301

Recommendation from: Bureau of Air Quality Management

By: Martin Kahel for
Steve Smallwood

Date: March 31, 1980

Approved by: Jacob D. Varn
Jacob D. Varn

Date: 31ST MARCH 1980

SS:jr
attachment