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: Jacob D. Varn

FROM: Steve Smallwood

DATE: June 20, 1980

SUBJ: BACT - New Wales Chemicals, Inc.
Monammonium Phosphate Plant (MAP)

Facility: a 50 TPH MAP plant using a prill tower, rotary cooler and associated conveying equipment with emissions from the tower being controlled by a venturi scrubber and emissions from the cooler being controlled with bag collectors. Potential emissions from the MAP plant are estimated to be:

Particulate: 71.2 TPY

Fluoride: 3.6 TPY

Other sources at this plant make New Wales Chemicals, Inc. a major emitting facility for particulate, fluoride and sulfur dioxide.

BACT Determination Requested By The Applicant:

Particulate from bag collector	96 lbs./day	(0.08 lbs./ton product)
Particulate from scrubber	404 lbs./day	(0.337 lbs./ton product)
	TOTAL	0.417 lbs./ton product
Fluorides from scrubber	20 lbs./day	(0.017 lbs./ton product)

Date of Receipt of a Complete BACT Application:

May 28, 1980

Date of Publication in the Florida Administrative Weekly:

July 11, 1980

Study Member:

Willard Hanks, DER, BAQM

BACT Determination By The Florida Department of Environmental Regulation:

Source	Pollutant	Maximum Emissions
Cooler by Collector	Particulate	Visible Emission shall not exceed an average of 5% opacity during any 6 minute period or .02 grains/DSCF
Prill Tower Scrubber	Particulate	0.3 lbs./ton product and 15 lbs./hr.
Prill Tower Scrubber	Fluoride	0.83 lbs./hr.

Justification of DER Determination:

Cooler: Bag collectors are among the best control devices available for removing particulate matter from emissions. A properly designed and maintained bag collector will have a low rate of particulate emission (the applicate estimated 3.4 lbs./hr). A visible emission test to determine compliance is superior to particulate emission test in this situation as the low particulate discharge rates are difficult to measure accurately and a particulate test is more expensive and time consuming to perform when compared to a visible emission test.

Prill Tower: The proposed BACT standard, 0.3 lbs. particulate/ ton product and 15 lbs./hr., is adequate to protect the ambient air quality near this plant. This standard can be obtained with the control equipment proposed by the company.

The applicant's proposed 0.83 lbs. fluoride/hr. is acceptable as BACT for this source. Data in the files for New Wales show this fluoride emissions standard for the MAP plant can be met.

Details of the Determination May Be Obtained By Contacting:

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

Recommendations from: Bureau of Air Quality Management

By: Steve Smallwood

Date: 7-3-80

Approved by: Jacob D. Varn
Jacob D. Varn

Date: 9th July 1980

Attachment

SS:caa