

Ken



D.E.P.

MAY 7 1991

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

May 3, 1991

Mr. W.C. Thomas, P.E.
Florida Department of Environmental
Regulation
4520 Oak Fair Blvd.
Tampa Fl. 33610-7347

Dear Bill:

Enclosed please find the results of the compliance test on the
New Wales MAP Scrubber, Operating permit A053-124656

If you have any questions, please notify me.

Very truly yours,

J.M. Baretincic
J. M. Baretincic

JMB:ebt

Enclosure:

cc: J.A. Brafford - New Wales
A.L. Girardin - New Wales

I HAVE REVIEWED THIS REPORT AND IT (DOES
DOES NOT) INDICATE COMPLIANCE WITH THE
PERMIT FOR THIS SOURCE.

DATE 5/28/91 BY *Ken*



To the best of my knowledge, all applicable field and analytical procedures comply with FDER requirements and all test data and plant operating data are true and correct.

J. M. Baretincic

SIGNATURE, OWNER or AUTHORIZED REPRESENTATIVE

J. M. Baretincic - Director Environmental Services

NAME and TITLE

P.O. Box 1035

ADDRESS

Mulberry, F1 33860

CITY STATE ZIP

05-03-91 (813) 428-2531

DATE TELEPHONE NO.

SUMMARY OF EMISSION MEASUREMENTS
MAP
IMC FERTILIZER INC.
NEW WALES OPERATIONS
POLK COUNTY, FLORIDA

May, 3, 1991

INTRODUCTION

The New Wales Operations of IMC is a phosphate fertilizer facility located in western Polk county, Fl. This report details the water soluble fluoride and the particulate emission measurements conducted on the MAP plant scrubber on April 23 & 24, 1991. The purpose of the measurements was to show compliance with FDER standards.

During the period of testing, the plant was operating at a rate of 1200 tons/day. This production rate was determined from flow totalizers and from analyses. The permitted production rate of the MAP plant scrubber is 1200 tons/day. During the period of testing the plant was operating at 100% of its permitted capacity.

The allowable emission rate of gaseous and water soluble fluoride on the MAP plant scrubber was .83 lbs/hr. The allowable emission rate of particulate was 15.00 lbs/hr. During the period of testing, the emission rate for gaseous and water soluble fluoride was 0.15 lbs/hr and the emission rate for particulate was 0.68 lbs/hr.

A visible emission test was conducted on the MAP plant on April 24, 1991. It was determined that the MAP plant had an opacity of 0%.

LOCATION OF SAMPLING PORT

Two sampling ports for emission measurements are located in the 48 inch diameter stack 59 feet 9 inches below the top of the stack and 55 feet 9 inches above the point where the tail gases enter the stack. The ports are located in the stack wall 90 degrees to one another.

Using criteria established by EPA Test Method 1 (40 CFR 60, Appendix A) it was determined that a total of 12 sampling points would be required; six sampling points on each of the two perpendicular diameters. A diagram of the stack and table listing the distance from the stack wall to each sampling point is included in this report.

FIELD AND ANALYTICAL PROCEDURES

Emission measurements for particulate and fluoride were performed using EPA Reference method 5. All other test procedures were performed in accordance with the Florida Administrative Code, Chapter 17-2. The test was modified to determine fluoride emissions as has been done in the past. The front half catch consisting of the probe rinse and filtered particulate were combined with the impinger water and analyzed for fluoride

content. The recoverable fluoride in the particulate was then used to calculate fluoride emissions by relating it back to the standard volume of gas sampled.

Prior to performing the actual emission measurements, preliminary stack and stack gas measurements were made. These measurements included the average velocity head, wet and dry stack gas temperatures, and the dimensions of the stack at the point where the test were to be made. The moisture content of the stack gas was assumed to be 32% using the psychrometric chart.

The field and laboratory data sheets for the three test runs are included in this report.