

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.



P.O. Box 48 Aurora, North Carolina 27806

A Division of Texasgulf Inc.

Phosphate Operations
(919) 322-4111

May 27, 1987

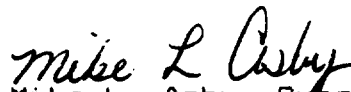
Mr. Ogden Gerald, Chief
Air Quality Section
N. C. Department of Natural Resources
& Community Development
Post Office Box 27687
Raleigh, North Carolina 27611

Dear Ogden,

Please find attached, two copies of the Compliance Testing conducted on the Granular Triple Super Phosphate Plant producing Monoammonium Phosphate on April 9, and 10, 1987. The Granular Triple Super Phosphate Plant was shown to be operating within the specifications set forth in Air Quality Permit 4175R3 while producing Monoammonium Phosphate.

If I may provide any additional information, please let me know.

Sincerely,


Mike L. Asby, Supervisor
Environmental Control

MLA/jc

cc: Mr. F. H. Robinson
Mr. T. J. Regan
Mr. M. T. Harris
Mr. W. A. Schimming
Mr. Arthur Smoot
00-11-000
11-01-004-

Source Compliance Test
Monoammonium Phosphate
In The
Granular Triple Super Phosphate Plant
Texasgulf Chemicals Company
Aurora, North Carolina
May 27, 1987

Prepared By:
Mike L. Asby
Environmental Control Supervisor

Texasgulf Chemicals

The Granular Triple Super Phosphate Plant was Compliance Tested on April 9 and 10, 1987. This testing was performed while the plant was producing Monoammonium Phosphate.

Before testing began, on both days, the source was checked for cyclonic flow. The angles of flow were measured with a universal protractor and found to be within the allowable range of 20 degrees absolute. It was determined that the source should be tested as non-cyclonic.

On April 9, the plant was tested for particulate emissions using EPA approved Method (5). Determination of Particulate Emissions from Stationary Sources. There were no modifications made to the method and the sampling was completed with no major problems. The determination of the particulate emissions was accomplished using a Mettler H35AR Electronic balance.

On April 10, the plant was tested for Fluoride emissions using EPA approved Method (3-B). Determination of Total Fluoride Emissions from Stationary Sources: Specific Ion Electrode Method. There were no modifications made to the method and the sampling was completed with no major problems. The sample analyses were performed using an Orion Specific Ion Electrode Analyzer. The instrument has the ability to compute a calibration slope from the calibration samples and display the output directly as parts per million fluoride. Hand-drawn calibration curves are attached to certify the accuracy of the instrument.

Mr. Arthur Smoot of the North Carolina Department of Environmental Management was present during the testing as an official observer.

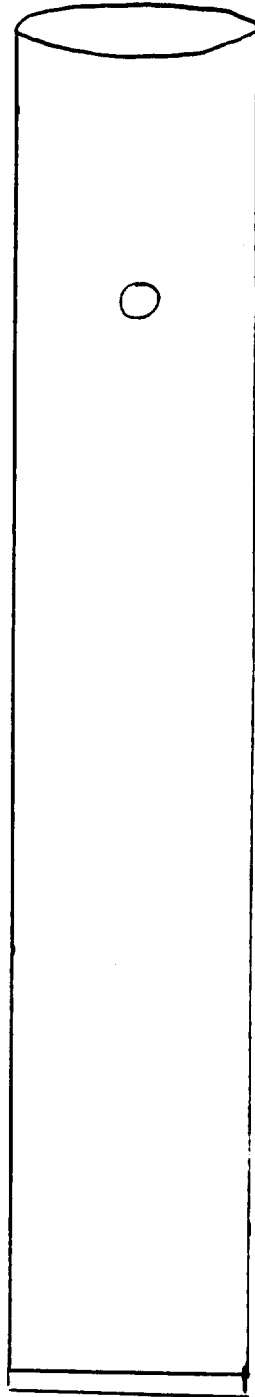
The results from the tests show the production of Mono-ammonium Phosphate in the Granular Triple Super Phosphate Plant to be within the specifications set forth by Air Quality Permit Number 4175R3.

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107"

Granular Triple Super Phosphate
Fume Scrubber Stack

Sampled by: Texasgulf



216"

864"

Texasgulf Chemicals

Compliance Summary

Method 5

| Test | Actual Part. lbs./hr. | Allowable Part. lbs./hr. | Production Rate Tons/Day |
|----------|--------------------------|-----------------------------|-----------------------------|
| 1 | 21.16 | 56.36 | 1574 |
| 2 | 16.82 | 56.36 | 1556 |
| 3 | 17.43 | 56.36 | 1587 |
| Averages | 18.47 | 56.36 | 1572 |

Method 13-B

| Test | Lbs F-/Tons P205 Input Fume Scrubber | P205 Input/ Production TPD |
|----------|---|-------------------------------|
| 1 | .002 | 1349 |
| 2 | .002 | 1300 |
| 3 | .003 | 1422 |
| Averages | .002 | 1357 |

Texasgulf Chemicals

Test Summary - Granular Triple Super Phosphate Plant
Monoammonium Phosphate Production

Method 5 Compliance April 09, 1987

| | Test 1 | Test 2 | Test 3 |
|--|---------|---------|---------|
| | ----- | ----- | ----- |
| Stack Volume Flow Rate, SCFM | 115,022 | 112,520 | 115,032 |
| Sample Volume, DSCF | 31.493 | 31.426 | 31.433 |
| Mg Particulate/DSCF | 1.112 | 0.906 | 0.912 |
| Particulate Emission Rate Lbs./Hr | 21.16 | 16.82 | 17.43 |
| Allowable Emission Rate Lbs./Hr | 56.36 | 56.36 | 56.36 |
| Percent Isokinetic Sampling Rate, % | 102.64 | 101.81 | 102.85 |
| Average Emission Rate, Lbs.Particulate/Hr. | | 18.47 | |

Test Summary - Granular Triple Super Phosphate Plant
Monoammonium Phosphate Production

Method 13-B Compliance April 10, 1987

| | Test 1 | Test 2 | Test 3 |
|---|---------|---------|---------|
| | ----- | ----- | ----- |
| Stack Volume Flow Rate, SCFM | 118,069 | 116,536 | 118,718 |
| Sample Volume, DSCF | 32.035 | 32.693 | 32.350 |
| Fluoride Concentration, mg/DSCF | 0.01 | 0.01 | 0.01 |
| Fluoride Emission Rate, Lbs./Ton P205 Input | 0.002 | 0.002 | 0.003 |
| Percent Isokinetic Sampling Rate, % | 100.76 | 99.93 | 101.35 |
| Average Emission Rate, Lbs. F-/Ton P205 Input | | 0.002 | |