

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/

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SOURCE PERFORMANCE TEST
DIAMMONIUM PHOSPHATE PLANT NO. 2
TEXASGULF INC.
AURORA, NORTH CAROLINA
AUGUST 24, 1989

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Executive Summary

On August 24, 1989 sampling and analyses was conducted to determine the Total Fluoride emissions using EPA approved Method 13B; Determination of Total Fluoride Emissions from Stationary Sources: Specific Ion Electrode Method on Diammonium Phosphate Plant No. 2. The sample analyses were performed using an Orion 901 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. A hand drawn calibration curve is attached to certify the accuracy of the instrument.

Senior Environmental Technicians Ted Davis and Phillip Forest performed the sampling and Senior Technician Jerry Moore performed the analyses.

Mr. Don Wynne of the North Carolina Division of Environmental Management was present during testing as an official observer.

The results of these series of tests show the fluoride emission rate to be 0.009 pounds of Fluoride per ton of P2O5 input. The NSPS allowable emission rate for Diammonium Phosphate Plants is 0.06 pounds of fluoride per ton of P2O5 input. Diammonium Phosphate Plant No. 2 is operating within the specifications set forth by the Code of Federal Regulations. A total of 3 stack samples were taken.

Texasgulf Chemicals

Compliance Summary

Method 13-B

<u>Test</u>	<u>Lbs. F-/Ton P205 Input</u>	<u>Production Rate Tons/Day</u>
1	0.010	1762
2	0.008	1761
3	0.010	1791
Averages	0.009	1771

Test Summary - Diammonium Phosphate Plant No. 2

Method 13B Compliance	09/18/89		
	Run 1	Run 2	Run 3
Stack Volume Flow Rate, SCFM	117,391	117,276	117,730
Sample Volume, DSCF	34.34	33.96	34.27
Fluoride Concentration, mg/DSCF	0.03	0.02	0.03
Fluoride Emission Rate, Lbs./Ton P2O5 Input	0.010	0.008	0.010
Percent Isokinetic Sampling Rate, %	98.60	97.65	98.25
Avg Emission Rate, Lbs. Fluoride/Ton P2O5 Input			0.009