## MINNESOTA RULES

## 7011.1615 CONTINUOUS EMISSION MONITORING.

Subpart 1. **Instrumentalities.** The owner or operator of a sulfuric acid production unit shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording emissions of sulfur dioxide.

Subp. 2. Calibration. The pollutant gas used to prepare calibration gas mixtures and for calibration check shall be sulfur dioxide.

Subp. 3. Method 8. When conducting monitoring system performance evaluations only the sulfur dioxide portion of the Method 8 results shall be used.

Subp. 4. Span set. The span shall be set at 1,000 ppm of sulfur dioxide.

Subp. 5. Conversion factor. The owner or operator of a sulfuric acid production unit shall establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/short ton). The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999-AP-13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k \left[ \frac{1,000 - 0.015r}{r - s} \right]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/short ton per ppm).

k = constant derived from material balance. For determining CF in metric units, k = 0.0653. For determining CF in English units, k = 0.1306.

r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection.

s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under subpart 1.

Subp. 6. **Record of conversion factors.** The owner or operator of a sulfuric acid production unit shall record all conversion factors and values under subpart 5, i.e., CF, r, and s.

Subp. 7. **Record of production data.** The owner or operator of a sulfuric acid production unit shall record daily the production rate and hours of operation.

Subp. 8. **Periods of excess emissions.** For the purpose of reports under part 7017.1110, subpart 2, periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under these parts.

7011.1615

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