



## SCRUBBER REEMISSION ADDITIVE TECHNOLOGY

#### PRODUCT DESCRIPTION

Scrubber Additive SA2 prevents scrubber reemission of mercury and provides heavy metals remediation as part of the  $ME_2C^{\otimes}$  "Total Mercury Control" Program. This sulfur-based reagent quickly precipitates dissolved mercury from the absorber solution efficiently preventing reemission (up to 99% Hg precipitation).



SA2 is available in tank truck quantities for bulk storage (as shown above) and in 265-gal totes.

#### **BENEFITS**

- Low dosage rates: ~1-4 gallons/hour
- Provides multiple bonding sites that tightly secure Hg molecules
- Large formation of polysulfide particles which are easily removed with absorber solids
- Gypsum quality maintained
- Additional soluble ionic metals captured include: Lead, Copper, Thallium, Cobalt, Cadmium, Nickel, Zinc, Iron, Silver, Tin
- Lowers effluent metals, aids in addressing TCLP requirements
- Application equipment is simple to operate, low cost and easily maintained

### **PROPERTIES**

 Aqueous solution (sodium polythiocarbonate): 28%

Chemical formula: CS<sub>5</sub>Na

Non-corrosive, non-hazardous

Freeze point: 30°FBoiling Point: 212°F

### **APPLICATION**

- Coal-fired plants equipped with wet scrubbers for SO<sub>2</sub> control
- Mercury in flue gas must be highly oxidized, over 90% (See "Related Products" for Hg oxidation).
- SA2 can be added directly to scrubber slurry at multiple locations
- Desired Operational Control Ranges:

ORP: 200-300 mV

Sulfite Level: 1% of solution

Chloride/Halogens: ~5,000+ ppm

 Low-load Scrubber Operation: Ability to control oxidation air (SO<sub>2</sub>/O<sub>2</sub> ratio) is critical

# **RELATED PRODUCTS**

Additive Technology Product Family:

SF10 – Solid additive for Hg oxidation

SF20 - Liquid additive for Hg oxidation