

## ARB METHOD 16: Semicontinuous Determination of Sulfur Emissions from Stationary Sources

The method described below uses the principle of gas chromatographic separation and flame photometric detection. Since there are many systems or sets of operating conditions that represent usable methods of determining sulfur emissions, all systems which employ this principle, but differ only in details of equipment and operation, may be used as alternative methods, provided that the criteria set below are met.

### Principle

A gas sample is extracted from the emission source and diluted with clean, dry air. An aliquot of the diluted sample is then analyzed for hydrogen sulfide (H<sub>2</sub>S), methyl mercaptan (MeSH), dimethyl sulfide (DMS) and dimethyl disulfide (DMDS) by gas chromatographic (GC) separation and flame photometric detection (FPD). These four compounds are known collectively as total reduced sulfur (TRS).

### Applicability

This method is applicable for determination of TRS compounds from recovery furnaces, lime kilns, and smelt dissolving tanks at kraft pulp mills.

### Contacts

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