State of California

AIR RESOURCES BOARD

Resolution 75-59

October 27, 1975

WHEREAS, Section 39052.11 of the Health and Safety Code directs the Air Resources
Board to encourage the air pollution control districts to require that monitoring
devices be installed on each stationary source of air contaminants which emits
into the atmosphere 100 tons or more each year of nonmethane hydrocarbons, oxides
of nitrogen, oxides of sulfur, reduced sulfur compounds, or particulate matter,
or 1,000 tons or more each year of carbon monoxide by determining the availability,
technological feasibility, and economic reasonableness of monitoring devices for
such stationary sources; and

WHEREAS, Section 39052.12 of the Health and Safety Code specifies the Board may
make the determination by any technologically based classification, including
requirements on an industrywide basis, by individual stationary source, by air
basin, by air pollution control district, or based on any other reasonable
classification; and

WHEREAS, as directed by Section 39052.12 of the Health and Safety Code, the Board
had completed an initial review by June 1, 1975 of the availability, technological
feasibility, and economic reasonableness of monitoring devices for sources that
emit into the atmosphere 100 tons a year or more and in some cases lesser amounts;
and

WHEREAS, the Board has completed its evaluation by industry of the availability,
technological feasibility, and economic reasonableness of requiring monitoring
devices on fossil fueled steam generators, nitric and sulfuric acid plants,
sulfur recovery plants, CO boilers of the regenerators of fluid catalytic
cracking units and fluid cokers;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board has determined that
monitoring systems are available, technologically feasible, and economically
reasonable to measure and record continuously the emission concentrations of:

a. NO_x and CO_2 or O_2 from steam generators with a heat input of 250 million
    British Thermal Units or more per hour and with a use factor of at least
    30% and that such monitors can operate in conformance with the performance
    specifications shown in the attached Table 1.

b. NO_x from all new nitric acid plants, and that such monitors can operate in
    conformance with the performance specifications shown in the attached
    Table 1.

c. SO_2 from sulfuric acid plants, sulfur recovery plants, CO boilers of regenerators of fluid catalytic cracking units, new fluid cokers and existing fluid cokers with a feed rate greater than 10,000 barrels per day, and that such monitors can operate in conformance with the performance specifications shown in the attached Table 1.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to request each air basin coordinating council to revise its basinwide coordinated air pollution control plan and each basinwide air pollution control district to adopt, if not already adopted, regulations that require the installation of continuous monitoring devices for the pollutants and sources designated heretofore.

TABLE I

PERFORMANCE SPECIFICATIONS

1. Monitoring System for SO_2 and NO_x

Parameter	Specification
Accuracy*	$\leq$ 20% of the mean value of the reference method test data
Calibration Error*	< 5% of each (50%, 90%) Calibration gas mixture value
Zero Drift (2-hour)*	2% of span
Zero Drift (24-hour)*	2% of span
Calibration Drift (2-hour)*	2% of span
Calibration Drift (24-hour)*	2.5% of span
Response Time	15 minutes maximum
Operational Period	168 hours minimum

*Expressed as sum of absolute mean value plus 95 percent confidence interval of a series of tests.

2. Monitoring System for O_2 or CO_2

Parameter	Specification
Zero drift (2 hours)*	$\leq$ 0.4% O_2 or CO_2.
Zero drift (24-hour)*	$\leq$ 0.5% O_2 or CO_2.
Calibration drift (2 hours)*	$\leq$ 0.4% O_2 or CO_2.
Calibration drift (24-hour)*	$\leq$ 0.5% O_2 or CO_2.
Operational period	168 hours minimum.
Response time	10 minutes

*Expressed as sum of absolute mean value plus 95 percent confidence interval of a series of tests.