

State of California
AIR RESOURCES BOARD

Resolution 84-40

July 26, 1984

Agenda Item No.: 84-11-1

WHEREAS, Citizens for a Better Environment ("CBE") has petitioned the Air Resources Board (the "Board") to:

- (1) determine and specify the availability, technological feasibility, and economic reasonableness of devices to monitor continuously the emissions of oxides of sulfur ("SOx"), reduced sulfur compounds, and oxides of nitrogen ("NOx") from oil refinery flares;
- (2) identify and determine the relative contribution to acid deposition of various sources of acid deposition precursor emissions, including refinery flares, pursuant to the Kapiloff Acid Deposition Act (Health and Safety Code Sections 39900-39915); and
- (3) adopt regulations requiring refiners in the Bay Area Air Quality Management District (the "BAAQMD") and the South Coast Air Quality Management District (the "SCAQMD") to install monitors to determine the concentration and amount of sulfur dioxide ("SO₂") and NOx emitted from refinery flares, or in the alternative to adopt an order requiring the SCAQMD and the BAAQMD to adopt such regulations;

WHEREAS, Health and Safety Code Section 42701 requires the Board to determine the availability, technological feasibility and economic reasonableness of continuous monitors, and Section 42702 requires the Board to specify the types of stationary sources, the processes, and the contaminants for which a monitoring device is available, technologically feasible, and economically reasonable;

WHEREAS, the Kapiloff Acid Deposition Act directs the Board to establish a comprehensive research and monitoring program to study, among any other things, the formation and effects of acid deposition;

WHEREAS, CBE asserts that the regulations it requests the Board to adopt are necessary for the compilation of an accurate emissions inventory;

WHEREAS, Health and Safety Code Section 39607(b) directs the Board to inventory sources of air pollution within the state and to determine the kinds and quantity of air pollutants, using to the fullest extent data of local agencies and other state agencies;

WHEREAS, pursuant to Health and Safety Code Sections 39002 and 40000, local air pollution control districts have the primary responsibility for control of air pollution from nonvehicular sources;

WHEREAS, the Board may adopt rules on behalf of a district pursuant to Health and Safety Code Sections 39002 or 41504 only if the Board determines that the district has failed to meet its legal responsibilities or that the regulations of the district will not likely achieve and maintain the state ambient air quality standards;

WHEREAS, Health and Safety Code Section 41511 authorizes the Board, for the purpose of carrying out its duties, to adopt rules requiring the owner or operator of any emission source to take such action as the Board finds to be reasonable for determining the amount of emissions from the source;

WHEREAS, the Board has conducted a public meeting to consider the CBE petition and has received and considered written and oral presentations from the Board staff and testimony from representatives of CBE and any other member of the public wishing to comment;

WHEREAS, the Board finds that:

Pursuant to Health and Safety Code Sections 42701 and 42702, in 1975 the Board made determinations that specified continuous emission monitors were available, technologically feasible and economically reasonable for measuring stack gases, including SO₂ and NO_x, from certain emission sources other than refinery flares;

The Board staff has continued to evaluate the feasibility of monitoring devices for emissions from stationary sources, including flares;

Emissions of SO₂ from refinery flares may theoretically be monitored by the application of currently developed devices to measure the vented gas flow rate and to measure the sulfur content of the vented gas stream prior to reaching the burner;

Several technical issues would have to be resolved before the Board could determine that the two types of measurement devices are technically feasible for monitoring SO₂ emissions from refinery flares, and field testing would be appropriate before such a determination;

NO_x emissions from refinery flares are not amenable to monitoring by measurement of vent gas flow and composition, and the direct measurement of the composition of combustion gases from refinery flares presents tremendous technical difficulties;

Pursuant to the provisions of the Kapiloff Acid Deposition Act, the Board has designed and begun to implement a comprehensive five-year program addressing the subjects identified in the Act and it is not necessary or appropriate for the Board to take any additional actions as part of the program to determine the relative contribution of emissions from refinery flares to acid deposition;

The current emission inventories for refinery flares appear to lack the degree of accuracy demonstrated for emissions from many other sources;

Application of emission factors without individual monitoring of all flares may provide a reasonably accurate inventory for refinery flare emissions;

Since CBE has not previously petitioned the BAAQMD or the SCAQMD to consider adoption of rules, requiring refiners to monitor flare emissions and has not demonstrated that either district has formally considered and rejected adoption of such rules, it is inappropriate for the Board to grant CBE's request to adopt the rules on behalf of the districts;

In accordance with Health and Safety Code Section 39607(b) and the districts' primary responsibility for controlling emissions from nonvehicular sources, the Board has historically relied almost entirely on emissions inventory data developed by the districts in preparing its stationary point source emissions inventory; it is inappropriate for the Board to grant CBE's request to adopt on its own behalf rules requiring refinery flare monitoring without CBE first petitioning the districts to adopt such rules; and

The Board lacks statutory authority to order the SCAQMD and BAAQMD directly to adopt flare monitoring rules.

NOW, THEREFORE, BE IT RESOLVED that the Board grants CBE's request for a determination of the availability, technological feasibility and economic reasonableness of devices to monitor continuously the emissions of SO_x, reduced sulfur compounds and NO_x from oil refinery flares, and directs staff to evaluate such monitoring devices and to report to the Board every six months on the status of the evaluation until such time as sufficient information is developed for the Board to make such a determination.

BE IT FURTHER RESOLVED that the Board denies CBE's request for a determination and identification of the relative contribution to acid deposition of various sources of acid deposition precursor emissions, except to the extent these matters are within the scope of the five-year acid deposition research and monitoring program already begun by the Board.

BE IT FURTHER RESOLVED that the Board denies CBE's request to adopt rules, either on behalf of the BAAQMD or the SCAQMD or on the Board's own behalf, requiring refiners to monitor their emissions of SO₂ and NO_x from refinery flares, provided that CBE's request for adoption of rules may be renewed if CBE is unsuccessful in petitioning the districts.

BE IT FURTHER RESOLVED that the Board denies CBE's alternative request for adoption of an order requiring the BAAQMD and the SCAQMD to issue rules requiring refiners to monitor emissions of SO₂ from their flares.

I hereby certify that the above is a true and correct copy of Resolution 84-40 as adopted by the Air Resources Board.



Harold Holmes, Board Secretary

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Adoption of amendments to Sections 1956.7, 1965, and 2111, and proposed new Section 1956.8, Title 13, California Administrative Code, Regarding Certification of Heavy-Duty Engines and Vehicles

Agenda Item No.: 84-12-2

Public Hearing Date: June 21, 1984

Response Date: September 13, 1984

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant environmental issues pertaining to this item. The staff report identified no adverse environmental impacts.

Response: N/A

CERTIFIED:


Board Secretary

Date:

09-14-85