State of California
AIR RESOURCES BOARD

Resolution 86-60

June 19, 1986

Agenda Item No.: 86-7-2

WHEREAS, Health and Safety Code Section 42701 requires the Air Resources Board (the "Board") to determine the availability, technological feasibility, and economic reasonableness of monitoring devices to measure and record continuously emissions from larger stationary sources, 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, pursuant to the Board's direction following consideration of a 1984 petition from Citizens for a Better Environment ("CBE"), the staff has evaluated the availability, technological feasibility and economic reasonableness of continuous emission monitors for oil refinery flares;

WHEREAS, based on its evaluation the staff has recommended that the Board determine that devices which monitor the on/off status of refinery flares are technologically feasible, available, and economically reasonable;

WHEREAS, the Board staff has further recommended that the Board:

Encourage local air pollution control districts in which refinery flares are located to adopt rules requiring refiners to install refinery flare on/off monitors;

Direct the staff to work, as necessary, with industry and the districts to develop rules requiring the use of these devices with workable but standardized definitions of "on" and "off";

Encourage the districts to require, pursuant to Health and Safety Code Section 42303, refiners to provide grab sample composition analyses of flare feed stream gases;

Direct the staff, after sufficient on/off data and coordinated composition data have been collected, to evaluate such data and develop recommendations regarding the development of a Suggested Control Measure for the control of refinery flare emissions if the staff's evaluation indicates that such control is reasonable;

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

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

WHEREAS, Health and Safety Code Section 43203 authorizes a district air pollution control officer at any time to require from a permit holder information which will disclose the nature, extent, quantity, or degree of air contaminants which are discharged by the source for which the permit was granted;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available;

WHEREAS, the Board finds that:

Pressure sensors, optical radiation sensors, and hot wire thermistors have been used at refineries in California to monitor the on/off status of refinery flares to the satisfaction of refinery personnel;

Refinery flare on/off status monitors are presently available in California from commercial vendors and would cost approximately $800 to $2000 for each installation;

Emissions of oxides of nitrogen and oxides of sulfur from refinery flares are currently not being routinely monitored in California, and the magnitude of flare emissions has not been determined accurately because of the technical problems associated with flare emission monitoring;

Records of the frequency and duration of flare operations made by flare on/off monitoring devices, coupled with composition data from analysis of grab samples of refinery flare gas streams, can be combined with existing information about refinery processes and flares to yield improved emissions estimates;

Standardized definitions of "on" and "off" for refinery flare on/off status monitors would enhance the usefulness of the data from such monitors;

The actions recommended by the staff will have no adverse environmental impact;

WHEREAS, the Board has conducted a public meeting to consider the staff recommendations and has received and considered written and oral presentations from any members of the public wishing to comment.

NOW, THEREFORE, BE IT RESOLVED that the Board determines that monitoring devices are technologically feasible, available, and economically reasonable to identify and record continuously the on/off status of refinery flares for the purpose of determining refinery flare emissions.

BE IT FURTHER RESOLVED that the Board encourages local air pollution control districts in which refinery flares are located to adopt rules requiring refiners to install refinery flare on/off monitors.

BE IT FURTHER RESOLVED that the Board directs the staff to work, as necessary, with industry and the districts to develop rules requiring the use of these devices with workable but standardized definitions of "on" and "off."

BE IT FURTHER RESOLVED that the Board encourages districts to require, pursuant to Health and Safety Code Section 42303, refiners to provide grab sample composition analyses of flare feed stream gases.

BE IT FURTHER RESOLVED that the Board directs the staff to report to the Board in six months on the progress of the districts in developing and adopting rules requiring refiners to use on/off status flare monitors and to submit grab sample composition analyses of flare feed stream gases, and directs the staff to report thereafter as appropriate on the implementation and results of flare monitoring requirements.

BE IT FURTHER RESOLVED that the Board directs the staff, after sufficient on/off data and coordinated composition data have been collected, to evaluate such data and develop recommendations regarding the development of a Suggested Control Measure for the control of refinery flare emissions if the staff's evaluation indicates that such control is reasonable.

I hereby certify that the above is a true and correct copy of Resolution 86-60, as adopted by the Air Resources Board.

Harold Holmes

Harold Holmes, Board Secretary