State of California
AIR RESOURCES BOARD

Executive Order G-70-138

Phase II Vapor Recovery Systems Installed
on Gasoline Bulk Plants/Dispensing Facilities
with Aboveground Tanks

WHEREAS, the Air Resources Board (the "Board") has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, certification procedures for systems designed for the control of gasoline vapor emissions from motor vehicle fueling operations ("Phase II vapor recovery systems") in its "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations" as last amended December 4, 1981 (the "Certification Procedures"), incorporated by reference in Section 94001 of Title 17, California Code of Regulations;

WHEREAS, the Board has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, test procedures for determining compliance of Phase II vapor recovery systems with emission standards in its "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations" as last amended September 1, 1982 (the "Test Procedures"), incorporated by reference in Section 94000 of Title 17, California Code of Regulations;

WHEREAS, Section VIII-A of the Certification Procedures provides that the Executive Officer shall issue an order of certification if he or she determines that a vapor recovery system conforms to all of the requirements set forth in Sections I through VII; and

WHEREAS, I find that the Systems on Exhibit 1 conform with all of the requirements set forth in Sections I through VII of the Certification Procedures;

NOW, THEREFORE, BE IT ORDERED that the Systems on Exhibit 1 are hereby certified for Phase II vapor recovery.

IT IS FURTHER ORDERED that compliance with the rules and regulations of the local air pollution control district with jurisdiction where the installed system is located, shall be made a condition of this certification.

IT IS FURTHER ORDERED that the tank(s) and associated piping and other equipment not specifically listed as approved Phase II equipment in appropriate Executive Order G-70 series shall comply with the rules and regulations of the local fire officials with jurisdiction where the installed system is located.

IT IS FURTHER ORDERED that compliance with all applicable certification requirements and rules and regulations of the Division of Measurement Standards, the Office of the State Fire Marshal, and the Division of Occupational Safety and Health of the Department of Industrial Relations shall be made a condition of this certification.

IT IS FURTHER ORDERED that the certified Phase II vapor recovery systems shall, at a minimum, be maintained in accordance with the maintenance schedule shown in Exhibit 2 attached. These minimum maintenance requirements shall be included in the Permit to Operate issued by the district in which the system is installed.

IT IS FURTHER ORDERED that any alteration of the equipment, parts, design, or operation of the Systems certified hereby, is prohibited, and deemed inconsistent with this certification, unless such alteration has been approved by the undersigned or the Executive Officer's designee.

Executed this 14 day of January 1992, at Sacramento, California.

James D. Boyd
Executive Officer

EXHIBIT 1

State of California
AIR RESOURCES BOARD

Executive Order G-70-138

CERTIFIED PHASE II VAPOR RECOVERY SYSTEMS INSTALLED ON GASOLINE BULK PLANTS/DISPENSING FACILITIES WITH ABOVEGROUND STORAGE TANKS:

Company	Vapor Recovery System
George Lowery Mobile Oil Co. 1249 Woodland St., Modesto	Hirt Vacuum Assist
Vieira Petroleum Co. 341 S. First St., Patterson	Hirt Vacuum Assist
McCormix Corporation 22 N. Salipuedas, Santa Barbara	Hirt Vacuum Assist
G. N. Renn, Inc. 833 Old County Road, San Carlos	Hirt Vacuum Assist
Chevron U. S. A. 841 Standard Ave., Richmond	Hirt Vacuum Assist
Tosco Refining Company Avon Refinery, Martinez	Hirt Vacuum Assist

Exhibit 2

Executive Order G-70-138

Minimum Maintenance Requirements for the
Hirt VCS-200 Phase II Vapor Recovery System

1. The owner/operator shall check and replace any defective nozzle bellows and/or vapor recovery hoses on a weekly basis.

2. The owner/operator shall demonstrate once in any twelve month period the vapor recovery system's capacity to clear a liquid blockage. 100 milliliters of gasoline shall be introduced to the dispensing nozzle's vapor return line (through the bellows) and 10 gallons of gasoline shall then be dispensed from the nozzle. No more than 2 milliliters of liquid gasoline shall drain from the nozzle boot after dispensing.

3. The owner/operator shall demonstrate at least once in any twelve month period, and upon any modifications, repairs, or adjustments made therein, that the storage tank(s), the remote and/or nozzle vapor recovery check valves, associated vapor return piping and fittings are free from vapor leaks. At a minimum, the system should be able to maintain a positive pressure of 2.5 inches of water column for approximately 20 minutes when pressurized with nitrogen and while the Hirt system is turned off and phase I and II loading is suspended.

4. At least once in any twelve month period, the owner/operator shall conduct the following maintenance:

a. Check the vacuum turbine's ability to evacuate the vapor recovery system and maintain proper vacuum. While preparing to dispense fuel to motor vehicles (pump energized, but no dispensing), the system shall achieve a vacuum of at least 0.4 inches of water column. Otherwise, the system shall maintain a vacuum of at least 0.1 inches of water column. The system vacuum shall be verified at the dispensing pump which has the longest vapor path to the thermal oxidizer. This dispensing pump shall be fitted with a permanent pressure gauge in order to verify system vacuum. If needed, the owner/operator shall calibrate the Hirt pressure switches in accordance with Hirt instructions to meet the above specifications.

b. Check pilot light and main burner for proper operation. Upon activation of the vacuum turbine, the pilot solenoid should open and allow raw vapors to exit through the pilot light. Simultaneously, the ignitor module should cause an electric spark to be arched near the pilot light head and ignite the pilot flame. Thereafter, the electric spark should stop and the burner solenoid should open and allow vapors to exit through the burner where they are combusted. After the burner flame is ignited, a thermal switch should close the pilot solenoid and thereby extinguish the pilot flame. The pilot flame should ignite within one to five seconds. (Ignition is readily noted by the termination of the audible "clicking" sound of the electronic ignitor and observation of the pilot flame itself). Delayed ignition or burner cycling on and off indicates needed adjustment or system maintenance.

5. If the facility dispenses an average of 20,000 gallons or more of gasoline per month, the owner/operator shall replace or rebuild the turbine five years or less after installation, or when repairs are needed to maintain performance equal to that achieved by the system during the certification test. If the facility dispenses an average of less than 20,000 gallons of gasoline per month, the owner or operator shall replace or rebuild the turbine ten years or less after installation, or when repairs are needed. Turbines shall be replaced or rebuilt in accordance with Hirt instructions.

6. The owner/operator shall record and maintain records of all system maintenance for a minimum of two years and shall make such records available to the District, ARB, or EPA inspectors upon demand.