

**State of California
AIR RESOURCES BOARD**

Executive Order G-70-162-A

**Certification of Steel Tank Institute
Fireguard Aboveground Tank Filling/Dispensing
Vapor Recovery System**

WHEREAS, pursuant to Health and Safety Code sections 39600, 39601 and 41954, the Air Resources Board (the "Board") has adopted title 17, California Code of Regulations, section 94015, which provides that gasoline vapor recovery systems at novel facilities shall be certified in accordance with the Board's "Certification Procedure for Vapor Recovery Systems of Novel Facilities" adopted April 12, 1996 (the "Certification Procedure CP-205");

WHEREAS, the Steel Tank Institute has applied for certification of its Fireguard aboveground storage tank vapor recovery system (the "System") for use in balance Phase I and Phase II operations;

WHEREAS, the Certification Procedure CP-205 section 7 provides that evidence of certification shall be an Executive Order signed by the Executive Officer; and

WHEREAS, the System has been evaluated pursuant to the Certification Procedure CP-205, and the Certification Report documents successful performance of the system according to the performance standards, performance specifications, and Test Procedure TP-205;

WHEREAS, on April 15, 1994 the Air Resources Board Executive Officer, pursuant to California Health and Safety Code sections 39515 and 39516, delegated to the Chief, Compliance Division full authority to approve and grant Executive Orders certifying integral Phase I and Phase II aboveground systems in accordance with Health and Safety Code section 41954; and

WHEREAS, I, James J. Morgester, Chief of the Compliance Division of the California Air Resources Board, have determined that the Steel Tank Institute Fireguard aboveground storage tank vapor recovery system, when used with ARB certified Phase I two-point balance vapor recovery components and Phase II balance vapor recovery components, conforms with all the requirements set forth in Certification Procedure CP-205;

NOW, THEREFORE, IT IS ORDERED that the System is hereby certified to meet the applicable certification performance standards.

IT IS FURTHER ORDERED that the use of Air Resources Board certified Phase I two-point balance system vapor recovery components and Phase II balance system vapor recovery components shall be a condition of the certification. Air Resources Board certified Phase I components are listed in Exhibits 1 through 3 of Executive Order G-70-97-A, Exhibits 1 and 2 of Executive Order G-70-102-A, and Exhibits 1 and 2 of Executive Order G-70-142-A. Air Resources Board certified

balance system Phase II components are listed in Executive Order G-70-52-AM and other G-70 series executive orders.

IT IS FURTHER ORDERED that any emergency vent installed on the tank be vapor tight at the operating pressure of the tank when tested in accordance with ARB test procedures for determining a "vapor leak" as specified in the Board's "Definitions for Certification Procedures and Test Procedures for Vapor Recovery Systems" adopted April 12, 1996 (the "Vapor Recovery Definitions D-200").

IT IS FURTHER ORDERED that the Phase I two-point balance system components and piping configuration used to connect the cargo truck bulk delivery line and the vapor line to the storage tank fill line and vapor recovery line shall be consistent with Air Resources Board Executive Order G-70-97 series, G-70-102 series or G-70-142 series and that remote fill and vapor recovery lines be installed whenever direct fill and vapor recovery connections would require the fuel delivery operator to climb onto the tank to make the connections. Remote connections are not required when the connections points are within reach of the operator nor when a suitable access platform and stairs are provided as part of the installation. Such access shall be Cal/OSHA approved. Additionally, any liquid leak upon disconnecting the Phase I liquid product line and vapor line shall be no more than 10 ml per disconnect computed from the average drainage from three consecutive disconnect operations.

IT IS FURTHER ORDERED that any liquid level gauge installed on the tank shall be of a type provided with a metal casing or provided with a glass insert if of a type with a plastic gauge top.

IT IS FURTHER ORDERED that in order to prevent spitback or condensate from blocking the vapor path between the vehicle fill pipe and the storage tank headspace, the routing of the coaxial hose shall be consistent with the configurations shown in Exhibits 4 through 11 a in Air Resources Board Executive Order G-70-52-AM. The highest point in the vapor return path must be above the top of the storage tank and there shall be no liquid trap in the vapor path between the highest point in the vapor return path and the storage tank vapor headspace during fuel dispensing unless a liquid trap and evacuation system are included in the system. There shall be no liquid trap in the vapor path between the vehicle fill pipe and the highest point in the vapor return path during fuel dispensing unless the coaxial hose is equipped with a liquid removal system with the liquid pickup located at the liquid trap.

IT IS FURTHER ORDERED that an Air Resources Board certified P/V valve shall be installed on the tank vent and that the valve have a rated pressure relief setting of 3 +/- 0.5 inches of water column gauge. The installed P/V valve shall extend to a minimum height of 12 feet above grade.

If IS FURTHER ORDERED that the systems certified by this order may be used on single or split product tanks between 560 and 12,000 gallons total capacity which utilize the same configuration and design as shown in Exhibits 1 and 2.

IT IS FURTHER ORDERED that the general exterior of the storage tank be painted white.

IT IS FURTHER ORDERED that a minimum of 3 inches of lightweight concrete insulating material be installed between the interior holding tank and the exterior containment tank for all configurations of the storage tanks as shown in Exhibits 1 and 2. A reduction to a minimum of 2 inches of insulating material along the tops of the tanks is allowed.

IT IS FURTHER ORDERED that when bulk deliveries are being made by a cargo truck, rather than a bobtail truck, the truck pumping system be operated at a steady rate to limit the amount of vapor growth associated with a varied pumping rate. When clearing fuel from the pumping system, following fuel delivery, the operator shall likewise maintain a steady pumping rate.

IT IS FURTHER ORDERED that the complete system shall pass a static pressure decay test at least once in each 12 month period. The test shall be conducted in accordance with the Board's "Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks" adopted April 12, 1996 (the "Vapor Recovery Test Procedure TP-201.3B"). Alternate test procedures may be used if determined by the Executive Officer to yield comparable results.

IT IS FURTHER ORDERED that the tank and associated piping and other equipment not specifically listed as approved Phase I equipment in Exhibits 1 through 3 of Executive Order G-70-97-A, Executive Order G-70-102 series or G-70-142 series nor specifically listed as approved Phase II equipment in Executive Order G-70 series shall comply with the rules and regulations of the local fire officials with jurisdiction over the location where the system is installed.

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

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 any alteration of the equipment, parts, design, or operation of the configurations certified hereby, is prohibited, and deemed inconsistent with this certification, unless such alteration has been approved by the Executive Officer or his or her designee.

Executed at Sacramento, California this 2nd day of March 1998.



James J. Morgester, Chief
Compliance Division