

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-70-202

Relating to Site-Specific Certification of the Oldcastle Aboveground Below-Grade Fuel Vault with Gilbarco VaporVac Phase II Recovery System and Trenched Vapor Return Piping

WHEREAS, the California Air Resources Board (“CARB”) has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during motor vehicle fueling operations in its **CP-205 Certification Procedure for Vapor Recovery Systems of Novel Facilities (Certification Procedure)** adopted April 12, 1996 and as last amended March 17, 1999, incorporated by reference into Title 17, California Code of Regulations, Section 94015;

WHEREAS, CARB has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, test procedures for determining the compliance of vapor recovery systems with emission standards in its “Certification and Test Procedures for Vapor Recovery Systems,” TP-205.1 and TP-205.2, respectively, (the Test Procedures”) adopted April 12, 1996 and as amended March 17, 1999, incorporated by reference into Title 17, California Code of Regulations, Section 94015;

WHEREAS, Oldcastle Precast, Inc. (“Oldcastle”), for the locations shown in Exhibit 1, has applied for site-specific certification of its aboveground below-grade fuel vault vapor recovery system, which consists of an Oldcastle vaulted tank installation that uses the Gilbarco VaporVac Phase II Vapor Recovery System and CARB certified Phase I vapor recovery system (the “Oldcastle System”);

WHEREAS, the Gilbarco VaporVac Phase II Vapor Recovery System is certified per Executive Order G-70-150-AE;

WHEREAS, the Oldcastle System, when used with the Gilbarco VaporVac Phase II Recovery System, has been evaluated pursuant to Certification Procedure CP-205, and the Certification Report documents successful performance of the system according to the performance standards, performance specifications and the Test Procedures;

WHEREAS, Section 7 of the Certification Procedures provides that the Executive Officer shall issue an order of certification if he or she determines that the vapor recovery system conforms to all of the requirements set forth in Sections 1 through 6 of the Certification Procedures;

WHEREAS, on July 24, 2001, in Executive Order G-01-032, the Air Resources Board Executive Officer delegated to the Chief, Monitoring and Laboratory Division full authority to approve and grant Executive Orders certifying Phase I and Phase II vapor

recovery systems for aboveground tank systems in accordance with “CP-201 Certification Procedure for Vapor Recovery Systems of Dispensing Facilities” and “CP-205 Certification of Vapor Recovery Systems for Novel Facilities”, incorporated by reference into Title 17, California Code of Regulations sections 94011 and 94015, respectively; and

WHEREAS, I, William V. Loscutoff, Chief of the Monitoring and Laboratory Division of the California Air Resources Board, have determined that the Oldcastle Aboveground Below-Grade Fuel Vault System, when used with the Gilbarco VaporVac Phase II Recovery System per E.O. G-70-150-AE, conforms with all the requirements set forth in Certification Procedure CP-205 and results in a vapor recovery system that is at least 95 percent effective when installed to meet the provisions of this Executive Order.

NOW, THEREFORE, IT IS ORDERED that the Oldcastle System is hereby certified to meet the applicable certification performance standards. **The system is certified per Non-Enhanced Vapor Recovery (EVR) standards, specifications, and requirements. Compatibility of this system with the onboard vapor recovery systems “ORVR” has not been evaluated to determine the emissions impact. Fugitive emissions which may occur when the above ground below grade storage tanks are under positive pressure have not been quantified and were not included in the calculation of system effectiveness.**

NOW, THEREFORE, IT IS ORDERED that the Oldcastle System is **certified for use only at the sites listed in Exhibit 1**. Exhibit 2 shows sectional views of the Oldcastle FuelVault. Tank and vapor piping detail are shown in the site drawings filed at the district.

IT IS FURTHER ORDERED that compliance with the requirements, standards, and specifications relating to the certification of the Gilbarco VaporVac Phase II Recovery System per Executive Order G-70-150-AE shall be a condition of this certification. Exhibit 1 in Executive Order G-70-150-AE contains a list of Phase I and Phase II equipment certified for use with the VaporVac system. Exhibit 2 in Executive Order G-70-150-AE contains installation and performance specifications for the equipment listed in Exhibit 1.

IT IS FURTHER ORDERED that the following requirements are made a condition of certification. The Oldcastle System shall demonstrate ongoing compliance with the vapor integrity requirements of TP-201.3 (“Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities”, adopted April 12, 1996 and last amended March 17, 1999). The Oldcastle System shall demonstrate ongoing compliance with the Air to Liquid Volume Ratio test as specified in TP-201.5 (adopted April 12, 1996 and last amended February 1, 2001). The owner or operator of the installation shall conduct, and pass, the TP-201.3 and TP-201.5 tests at least once in each 12-month period. Shorter time periods may be specified in accordance with adopted district rules and regulations. Notification of testing and submittal of test results shall be done in accordance with local district rules and pursuant to the policies established by that district.

IT IS FURTHER ORDERED that the dispensing rate for the Oldcastle System shall not exceed ten gallons per minute (10.0 gpm) at any time. This is consistent with the flowrate limitation imposed by the United States Environmental Protection Agency as specified in the Federal Register, Volume 58, Number 55, page 16019. Exhibit 3 contains a procedure for verifying dispensing rate.

IT IS FURTHER ORDERED that any emergency vent installed on the tank be of a type with a seal and there shall be no indication of vapor leaks at a pressure of 2.0 inches H₂O when tested in accordance with ARB test procedures for determining a vapor leak as specified in the Board's Definitions for Vapor Recovery Procedures adopted April 12, 1996 (Vapor Recovery Definitions D-200), as amended February 1, 2001.

IT IS FURTHER ORDERED that compliance with all applicable certification requirements and rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, 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 Oldcastle System, as installed, shall comply with the procedures and performance standards the test installation was required to meet during certification testing.

IT IS FURTHER ORDERED that the Oldcastle FuelVault shall be installed in accordance with the manufacturer's recommended installation instructions and shall use the manufacturer's recommended operation and maintenance instructions as approved by CARB in the Oldcastle FuelVault LCV Owners Manual, dated October 26, 2001. Revisions to the Oldcastle FuelVault LCV Owners Manual shall be approved by CARB. The Executive Officer may add or delete instructions from the Owners Manual and distribute revised copies in accordance with CP-201.

IT IS FURTHER ORDERED that the Oldcastle System and/or component manufacturer shall provide a CARB approved copy of its operations and maintenance manual to each facility in which the system is installed. The manufacturer shall provide instructions in the proper use of the system, repair, and maintenance schedules and locations where system and/or component replacements can be readily obtained.

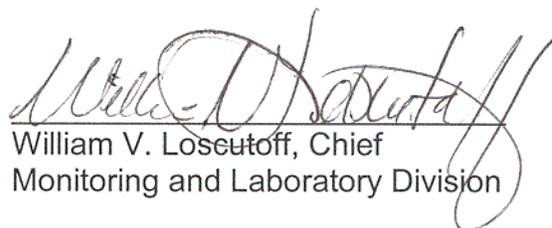
IT IS FURTHER ORDERED that a copy of this Executive Order shall be maintained at each facility in which the Oldcastle System is installed.

IT IS FURTHER ORDERED that the Oldcastle System and/or components contained herein shall be warranted for at least one year from the date of installation to the ultimate purchaser and each subsequent purchaser within the warranty period. The warranty shall specify that the vapor recovery system is designed, built and equipped so as to conform, at the time of original installation or sale, with the applicable regulations and is free from defects in materials and workmanship which would cause the vapor recovery system to fail to conform with applicable regulations. The manufacturer shall provide copies of the manufacturer's warranty for the system and/or components.

IT IS FURTHER ORDERED that any alteration of the equipment, parts design, or operation of the Oldcastle Systems certified hereby is prohibited unless such alteration has been approved by the Executive Officer or his or her designee. Any unapproved alteration shall void the certification for the specific installation where such alteration occurred.

IT IS FURTHER ORDERED that the certification of the Oldcastle Aboveground Below-Grade Fuel Vault Vapor Recovery System is valid through April 30, 2006.

Executed at Sacramento, California this 22 day of April 2002.



William V. Loscutoff, Chief
Monitoring and Laboratory Division

Attachments:

Exhibit 1 Sites Certified to use Oldcastle Vapor Recovery System

Exhibit 2 Sectional Views of Oldcastle Fuel Vault

Exhibit 3 Ten Gallon Per Minute Limitation Compliance Verification Procedure

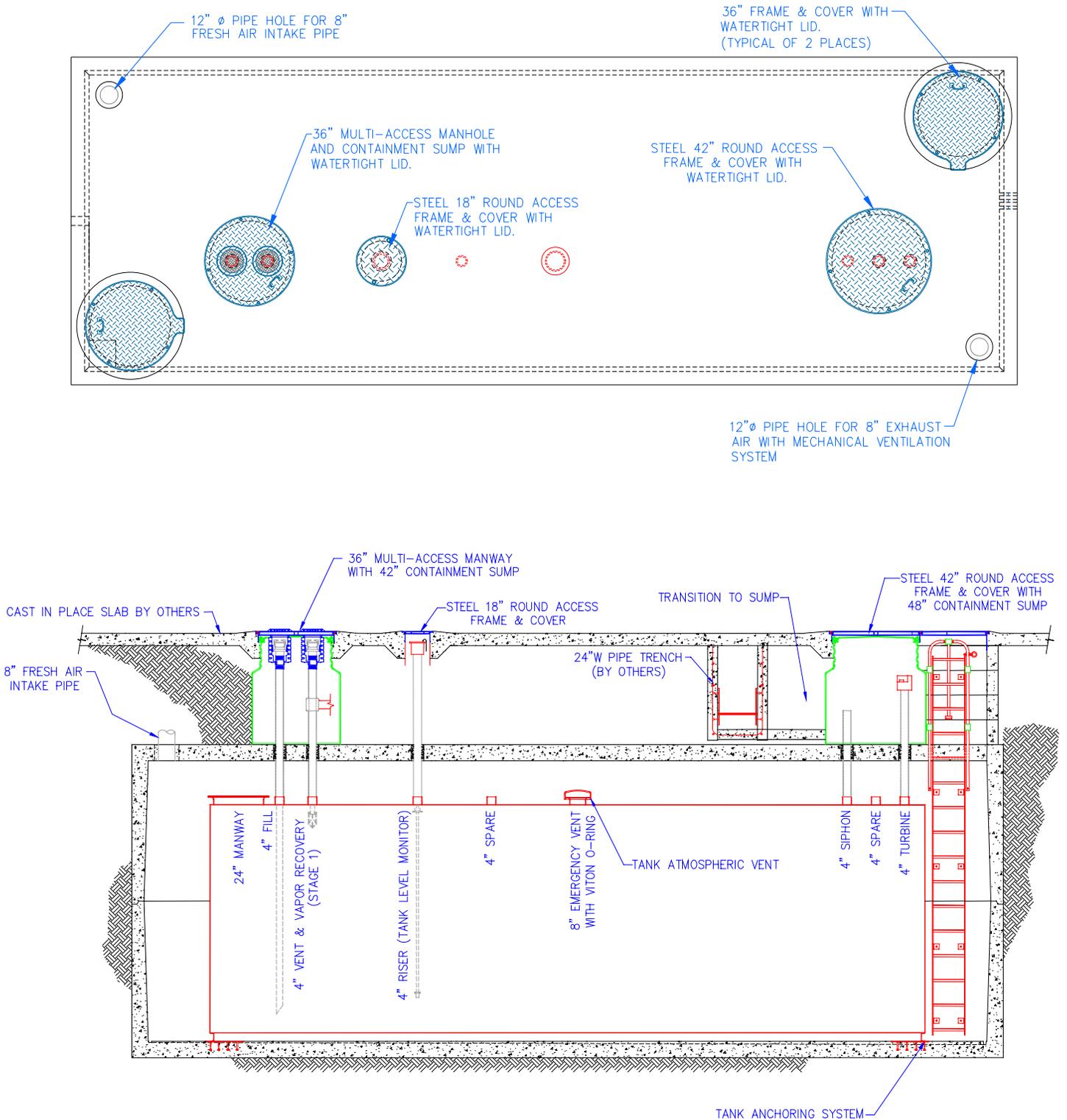
Executive Order G-70-202

Exhibit 1

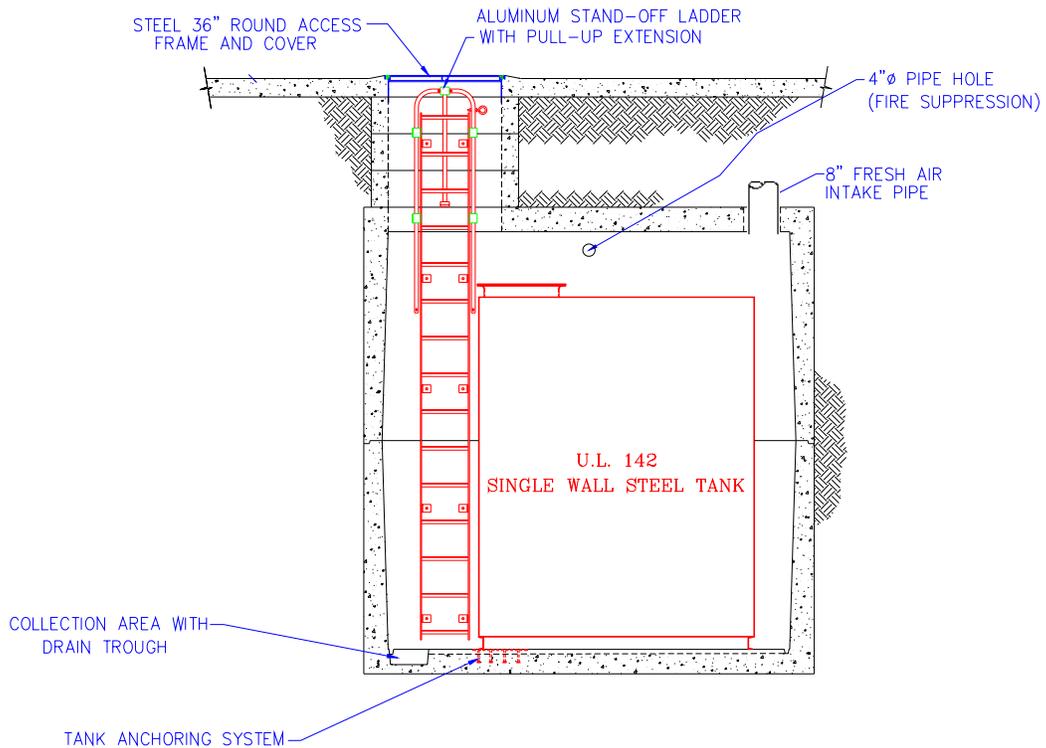
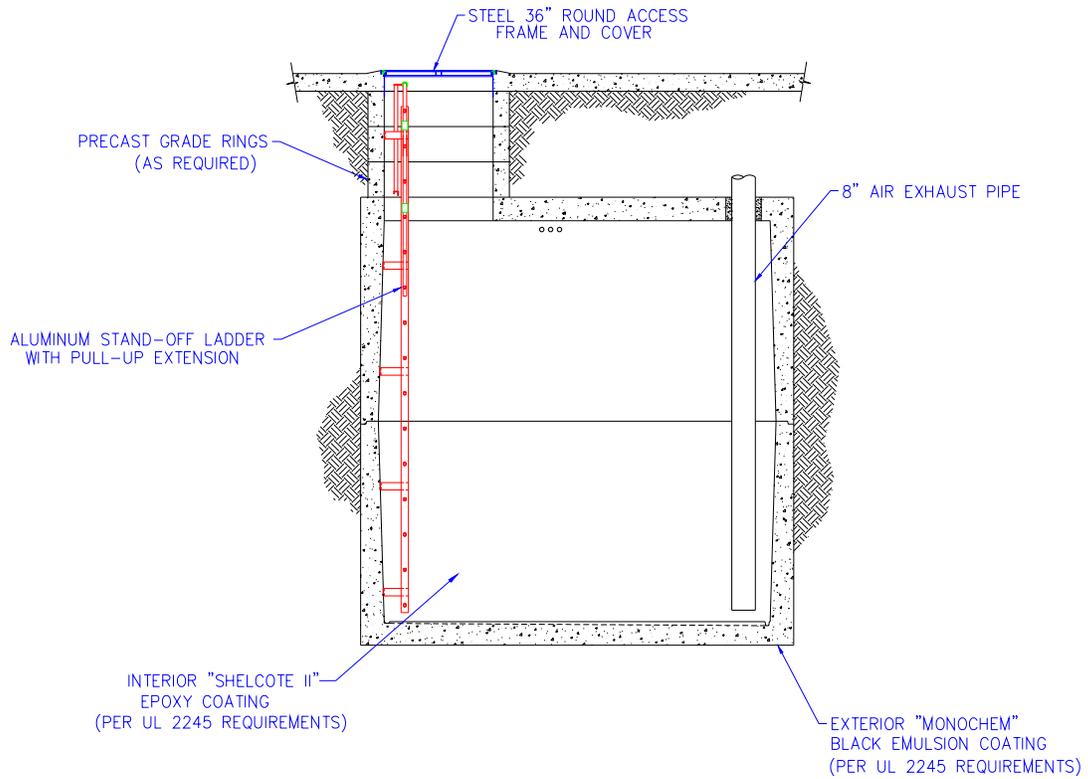
**Sites Certified to use Oldcastle Vapor Recovery System
(Gilbarco VaporVac System with Trenched Vapor Return Piping)**

<u>Site Location</u>	<u>System Parameters</u>
1. 915 South Grove Avenue Ontario, CA 91761	Gasoline Storage Tanks: Unleaded - 2 @ 12,000 gallons ea. Split Tank – 1 @ 12,000 gallons Supreme - 8,000 gallons Diesel - 4,000 gallons Phase I System: Two-Point Phase II System: Vacuum Assist
2. 2456 South Vineyard Ontario, CA 91761	Gasoline Storage Tanks: Unleaded - 2 @ 12,000 gallons ea. Supreme - 1 @ 12,000 gallons Phase I System: Two-Point Phase II System: Vacuum Assist

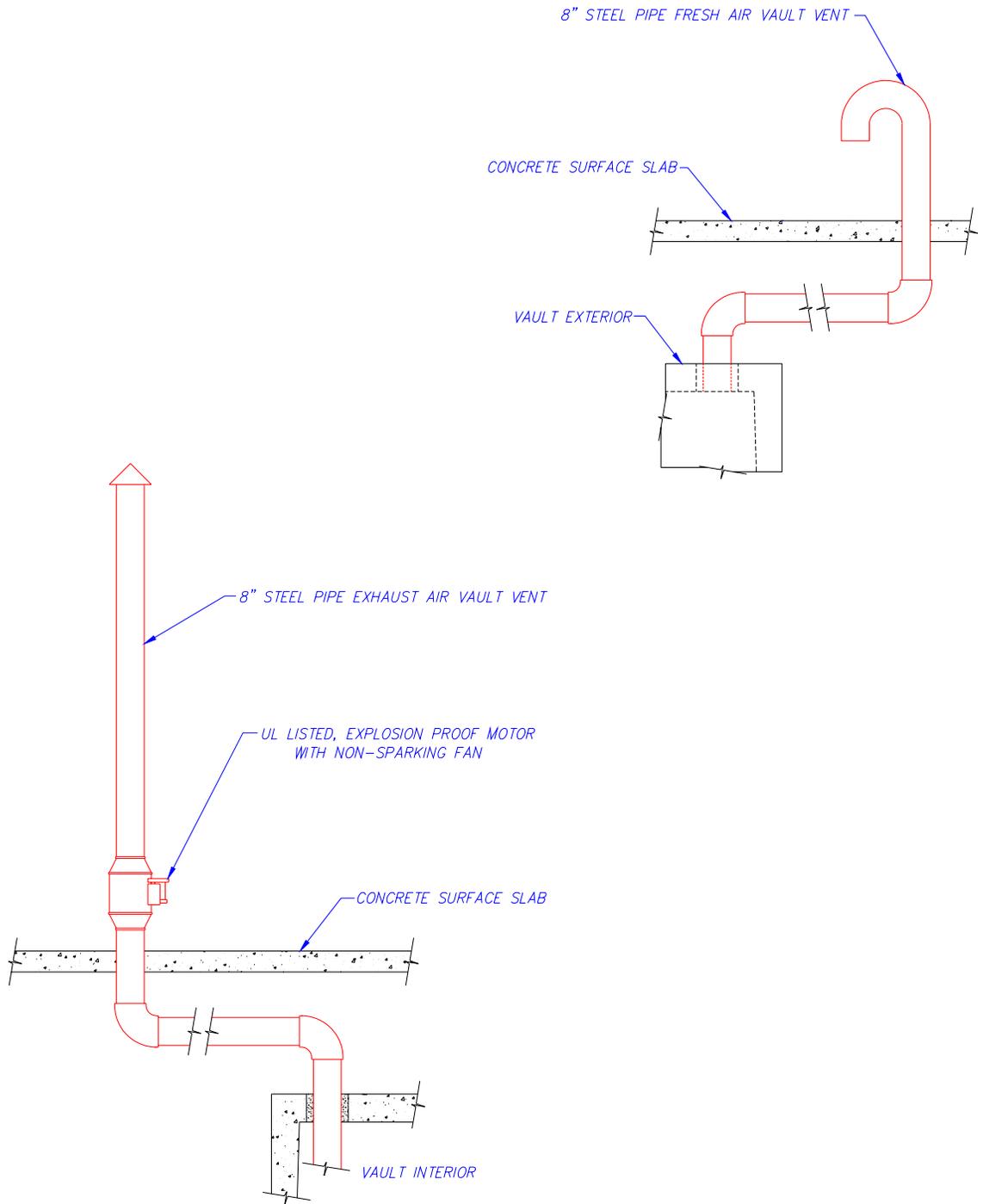
Executive Order G-70-202 Exhibit 2 Sectional Views of Oldcastle FuelVault (Top & Side View)



Executive Order G-70-202
Exhibit 2 (continued)
Sectional Views of Oldcastle FuelVault (End Views)



Executive Order G-70-202
Exhibit 2 (continued)
Sectional Views of Oldcastle FuelVault (Ventilation)



**Executive Order G-70-202
Exhibit 3**

Ten Gallon Per Minute Limitation Compliance Verification Procedure

Compliance with the 10 gallon per minute flowrate limitation shall be determined with the following methodology. It is recommended that the maximum dispensing rate through each nozzle/hose assembly be verified. Maximum dispensing rates are achieved with no other dispensing occurring from the same submersible turbine pump. Dispensing rates determined while conducting TP-201.5 are acceptable for verifying compliance with the 10 gallon per minute flowrate limitation.

1) The facility uses identical models of hoses, nozzles, and breakaways:

Dispense gas into a vehicle or approved container. Dispensing shall be conducted in the “hand-held, wide-open” mode. Using a stopwatch accurate to at least 0.2 seconds, begin timing the dispensing rate after at least one gallon has been dispensed. This one gallon buffer is necessary due to the “slow-start” nature of some dispensers. Determine the time required to dispense 2, 3, 4, or 5 gallons of gasoline. The facility shall be deemed in compliance with the 10 gallon per minute limitations if the elapsed time meets, or exceeds, the times shown in Table 1. If the dispensing rate exceeds the allowable limit, a CARB-certified flow limiting device shall be installed.

2) The facility uses different models of hoses, nozzles, or breakaways:

Due to potential differences in pressure drops through the various components, each of the nozzle/hose assemblies shall be tested for maximum dispensing rates. Using the same criteria as above, determine the maximum dispensing rate through each nozzle/hose assembly. If the maximum dispensing rate exceeds the 10 gpm limit, a CARB-certified flow limiting device shall be installed.

**Table 1
Verification of 10 gpm**

Product Dispensed (gallons)	Minimum Allowable Time (seconds)
2.0	11.8
3.0	17.7
4.0	23.6
5.0	29.5

Note: The times have been corrected to allow for the accuracy of the measurement.