



# ONTARIO FIRE DEPARTMENT FIRE PROTECTION STANDARD

## Veeder Root Carbon Canister Vapor Polisher

STANDARD #E-008

EFFECTIVE 2-26-09

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### **PURPOSE:**

To provide consistent guidelines regarding the installation requirements for Veeder Root Carbon Vapor Polisher.

### **AUTHORITY:**

This standard was developed in accordance with 2016 CFC Chapters 23 and 57; California Code of Regulations Title 19 Division 1 Chapter 11.5 Article 5; and NFPA 30.

### **INFORMATION:**

While the system is marketed as a Carbon Filter, it is listed and functions as a **Vapor Recovery System** by vapor absorption through a carbon filtering process as defined in NFPA 30 definition for Vapor Recovery Systems; The method of installation on Vent Stacks approved by C.A.R.B, the State Fire Marshal, and the Manufacturer *fulfills* many of the set-back restrictions applied to other Vapor Recovery Systems.

The Ontario Fire department's Bureau of Fire Prevention is satisfied that the System set-back requirements from Dispensing operations, Tank filling operations, Combustible materials storage bins, and Public ways as stated in **NFPA 30A-4-5.6**, **NFPA 30-table 5-3.1.1**, **CFC-2306.7.9.2.2**, and **CFC table-5705.3.4 (2)** are met by the Canister's installation on *existing* or *new* code compliant Vent Risers, which eliminates the hazards associated with those operations.

### **REQUIREMENTS:**

The *Carbon Canister Vapor Polisher* (CCVP) shall be installed on Code Compliant Vent Risers in accordance with current **NFPA Chapters 30/ 30A**, **articles 70, 504 & 514 of the NEC**, **CFC-section 2306.79.1 thru 2306.7.9.1.5**, **section 5704**, and the following **City of Ontario** plan submittal requirements:

1. A construction permit and approved plans shall be obtained from the Ontario Building Department prior to the start of construction and must be maintained onsite at all times with a copy of the approved plans while improvements are being made. This permit process will include the reviews of the Ontario Fire Department in addition to any other City of Ontario departments deemed appropriate. Contact the Ontario Building Department at (909) 395-2023 for permit information.

2. All contractors must provide Veeder- Root Level-I certificate, ICC EVR phase-II certificate, and possess the appropriate State and City contractor's licenses.
3. The Canister **must** be monitored by a Veeder Root TLS-350 plus or 350R control panel with version 29 or higher software, this shall be noted on the plans.
4. The plans must show that the veeder-root's monitoring system has a 7 input smart sensor module with printout capability.
5. The Canister shall not be mounted directly to a non-supported vent riser, plans shall show and state the riser's support system is capable of supporting the Canister's weight.
6. A *flexible connection* may be required at the inlet piping's connection to the vent riser.
7. If an *Independent Offset Support System* is used, plans shall show the Canister's support system with engineered footing calculations to support the Canister's weight.
8. Bollards shall be provided 18" from the support risers as needed for crash protection.
9. The Canister shall not be attached directly to any building walls or roofs, including Vent Risers that are not in compliance with property lines or public way setbacks of 5'.
10. The Canister shall be located a minimum of 5' from buildings and adjacent property lines that can be built upon; per **NFPA 30 table-5-3.1.1, and CFC table 5705.3.4(2)**.
11. Canisters installed directly over a building's roof {excluding overhangs and canopies} shall be provided with a one-hour fire resistive separation.
12. The Canister may be installed (**with no building setbacks**) adjacent to a 4-hour fire rated building wall (IE- concrete masonry) with no openings in accordance with **NFPA 5-3.1.2**.
13. The Canister's vapor valve shall be located a minimum of 5' from openings in buildings in accordance with **CFC 5704.2.7.5.2**.
14. The Canister's vapor valve shall terminate a minimum of 12' above grade and 18" above roofs or parapets, per **CFC section 5706.8.1 and NFPA 30A 4-5.9**.
15. The Canister's vapor valve shall not terminate beneath eaves, overhangs or canopies and shall comply with all Class-I Div-I, Div-II clearance requirements.
16. The Canister shall be attached to the vent riser using the Veeder Root supplied mounting hardware.
17. The centerline of the Canister mounting bracket's lowest U-bolt shall be a minimum of 110" above grade in order to provide the minimum 12' canister outlet height.
18. The Canister's *mounting bracket model* shall be sized for the appropriate vent risers size; Model -002 for 2" vent pipe and Model-003 for 3" vent pipe.
19. The Canister shall bear the "warning markings" as required by the State Fire Marshal's certification letter dated October 16, 2008.

**The installation shall also comply with all Veeder Root installation requirements.**

For additional information, you may contact the Ontario Fire Department, Fire Prevention Bureau at (909) 395-2029.