

State Water Resources Control Board

March 30, 2023

Mr. Jose Rodriguez
Director of Technical Sales
EMCO Wheaton Retail Corp.
1004 West Covina Parkway, #413
West Covina, California 91790

REQUEST BY EMCO WHEATON RETAIL CORP FOR CERTIFICATION OF A1005 ABOVEGROUND REMOTE FILL VAULT IN EXECUTIVE ORDER VR-105

Dear Mr. Rodriguez:

Section 25290.1.2(a) of the Health and Safety Code (H&SC) requires the California Air Resources Board (CARB) and State Water Resources Control Board (State Water Board) to certify, to the best of their knowledge and using existing resources, that equipment meeting the CARB's Enhanced Vapor Recovery (EVR) requirements also meets underground storage tank (UST) statutory requirements located in H&SC, division 20, chapter 6.7, section 25280 et seq (H&SC Chapter 6.7).

On September 19, 2022, the State Water Board received an information packet from EMCO Wheaton Retail Corp (EMCO Wheaton) detailing the proposed A1005 Aboveground Remote Fill Vault (A1005) to add to Executive Order (EO) VR-105. The A1005 provides secondary containment for Phase 1 system components that are approved in EO VR-105. Based on the enclosed signed statement from the California Registered Professional Engineer who reviewed the proposed design and the information that you provided, the State Water Board found no evidence that the EMCO Wheaton A1005 conflicts with H&SC Chapter 6.7.

Although the EMCO Wheaton A1005 does not conflict with H&SC Chapter 6.7, the following additional limitations apply:

- (1) All remote fill installations must include a tank top access port or other method that allows product level gauging prior to delivery. Owners, operators, or their agents are required to ensure that the space available in the UST is greater than the volume of product to be transferred to the UST prior to each delivery.¹

¹ California Code of Regulations, title 23, section 2712(k).

Therefore, the gauging method (tank top access, electronic gauge, etc.) should be configured to allow easy access by the tank operator and delivery drivers.

- (2) The tank top access port must be labeled to indicate that it cannot be used to fill the tank.
- (3) Remote fill piping must be double-walled when connected to any of the following:
 - A UST system installed on or after July 1, 2003;²
 - A UST system where the overfill prevention valve activates at a level greater than 95 percent;³ and
 - A UST system where secondary containment of tank fill riser piping is otherwise required by state law or local ordinance.⁴
- (4) When remote fill piping is required to be double-walled, the requirement applies to all remote fill piping components including horizontal-to-vertical transitions and the short vertical piping sections at the tank top and remote fill locations. To achieve this, single-walled piping components at the tank top and remote fill locations must be contained in sumps.

Additionally, California Code of Regulations, title 23 (UST Regulations), section 2635(b) requires spill containers meet all the following:

- (1) If made of metal, the exterior wall shall be protected from galvanic corrosion;
- (2) Have a minimum capacity of five gallons (19 liters); and
- (3) Have a drain valve which allows drainage of the collected spill into the primary container or provide a means to keep the spill container empty.

Per UST Regulations, section 2636(a)(1), fill piping may be single-walled only if designed not to contain standing product, and must be equipped with overfill prevention equipment described in UST Regulations, section 2635(c)(1)(B) or (C). These sections require overfill prevention equipment to restrict flow at least 30 minutes before the tank overfills, provided that this occurs before the tank is filled to 95 percent capacity or provide positive shut-off when the tank is filled to no more than 95 percent capacity, respectively. Overfill prevention equipment installed on systems with single-walled fill piping using the A1005 must restrict flow or provide positive shut-off at 93 percent, so that any remaining fluid in the fill pipe can drain, up to 2 percent of the tank volume. Table 1 below illustrates maximum lengths of single-walled fill pipe that can be used when the system is designed to restrict or shut off flow at 93 percent tank capacity.

² H&SC, sections 25290.1 and 25290.2.

³ California Code of Regulations, title 23, section 2635(c)(1)(B), (C), and 2636(a)(1).

⁴ H&SC, section 25299.2.

Nominal Tank Size (gallons)	Max. Length 4" Single-walled Piping (feet)
1,000	30
5,000	150
10,000	300
15,000	450
20,000	600

Additionally, the overfill prevention method described in UST Regulations, section 2635(c)(1)(D) cannot be implemented with this system. If positive shut-off is provided before the tank top fittings are wetted, any remaining fluid in the fill piping would drain into the tank and exceed this fill capacity, violating section 2635(c)(1)(D).

Pursuant to H&SC section 25290.1.2(a) the State Water Board finds, that to the best of its knowledge, the EMCO Wheaton A1005 Aboveground Remote Fill Vault meets the requirements of H&SC Chapter 6.7. This determination assumes the system is installed in accordance with applicable CARB Executive Orders, manufacturer's instructions, and the limitations outlined in this letter.

If you have questions, please contact Mr. Austin Lemire-Baeten at (916) 327-5612 or Austin.Lemire-Baeten@waterboards.ca.gov.

Sincerely,



Karen Mogus
Division of Water Quality
Deputy Director
State Water Resources Control Board
Karen.Mogus@waterboards.ca.gov

Enclosure: Certification Statement for EMCO Wheaton A1005 components

cc: *(via email only)*

Annalisa Kihara
Division of Water Quality
Assistant Deputy Director
State Water Resources Control Board
Annalisa.Kihara@waterboards.ca.gov

Cheryl Prowell
UST and Site Cleanup Programs
Section Supervisor
State Water Resources Control Board
Cheryl.Prowell@waterboards.ca.gov

Tom Henderson
UST Leak Prevention and
Office of Tank Tester Licensing Manager
State Water Resources Control Board
Tom.Henderson@waterboards.ca.gov

George Lew, Chief
Engineering and Certification Branch
Air Resources Board
George.Lew@arb.ca.gov

Julie M. Osborn, Attorney IV
Office of Chief Counsel
State Water Resource Control Board
Julie.Osborn@waterboards.ca.gov

Austin Lemire-Baeten, WRCE
UST Leak Prevention Unit
State Water Resources Control Board
Austin.Lemire-Baeten@waterboards.ca.gov