# OIL POLLUTION CONTROL REGULATIONS (250-RICR-140-25-2) Aboveground Storage Tank Regulatory Guide

https://dem.ri.gov

(401) 537-4533

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### ABOVEGROUND STORAGE TANK REGULATORY INFORMATION

This guide only gives an overview of the regulations. Please review the <u>Oil Pollution Control Regulations (250-RICR-140-25-2)</u> for further details. This guide also includes additional regulations for aboveground storage tanks that are not included in the Oil Pollution Control Regulations.

#### GENERAL REGULATORY INFORMATION

Oil & Waste Release Response- Part 2.12 (B-3)

Definitions - Part 2.4 (21)

Immediately report the incident to the RIDEM:

- During Normal Business Hours (Mon-Fri, 8:30-4:00) Call (401) 537-4533
- Anytime, Any Emergency Call (401) 222-3070 at the DEM Hot-line

Oil means petroleum, gasoline, tar, asphalt, or any product or mixture thereof, or any substance refined from petroleum or crude oil.

## ABOVEGROUND STORAGE TANK REGULATORY INFORMATION

Remote Fill – Part 2.9 (A)

- (2) All above ground storage tanks with a remote fill and a capacity greater than or equal to 500 gallons shall be equipped with a high-level warning alarm system.
- (3) All tanks with a capacity greater than five hundred (500) gallons shall be equipped with spill containment around fill areas.

## Applicability - Part 2.10 (A)

These requirements pertain to all above ground oil storage tank facilities with a combined storage capacity of over five hundred (500) gallons.

## Overfill Prevention - Part 2.10 (B)

- (2) Shutoff valves for remote pumping units at motor fuel dispensers; All dispensers of motor fuel under pressure from a remote pumping system, must be equipped with a shear valve (impact valve) located in the supply line at the inlet of the dispenser. This valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe.
- (3) Shutoff valves for gravity fed motor fuel dispensers; All tanks which cause a gravity head on a dispenser of motor fuels must be equipped with a device such as a solenoid valve which is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank in case of piping or dispenser hose failure.

#### (4) Gauges

- 1. All above ground oil tanks must be equipped with a gauge which accurately shows the level of product in the tank. The gauge must be accessible to the facility operator or oil carrier and be installed so it can be conveniently read.
- 2. The design capacity, working capacity, product type and identification number of the tank must be clearly marked on the tank and at the gauge.
- 3. A high-level warning alarm, a high-level liquid pump cutoff controller or equivalent device may be used in lieu of the gauge required above. Refer to regulations for further details.

### Secondary Containment - Part 2.10 (C)

- (1) A secondary containment system must be installed around any above ground oil storage tank. The containment system must be constructed such that spills of oil and chemical components of oil will not permeate, drain, infiltrate, or otherwise escape to the groundwater or surface water before cleanup can occur. The minimum capacity of the containment system shall be 110% of the volume of the tank OR 110% of the largest tank in a multiple tank containment system.
- (2) If soil is used for the secondary containment system, it must be of such character that any spill onto the soil will be readily recoverable and will result in a minimal amount of soil contamination.
- (3) Storm water which collects within the secondary containment system must be removed by a manually operated pump or siphon, or a gravity drain pipe which has manually controlled dike valves. Refer to regulations for further details.

# Facilities Inspection - Part 2.10 (D)

- (1) Monthly inspections; The owner or operator of any facility with ASTs regulated by DEM must inspect the facility monthly.
- (2) Ten (10) year inspections; In addition to monthly inspections required above, the owner or operator must perform a detailed inspection of AST with a capacity of ten thousand (10,000) gallons or greater.

#### Closure of tanks -

(1) Temporary closure; ASTs or facilities with ASTs which are temporarily closed for

#### Part 2.10 (E)

thirty (30) days or more must be closed as follows:

- 1. All product must be removed from AST(s) and the piping systems. Any waste product removed must be disposed of in accordance with all applicable State and Federal requirements.
- 2. All manways must be locked or bolted securely and fill lines, gauge openings or pump lines must be capped, plugged or blanked.
- (2) Permanent closure; Any AST or facility with ASTs which are closed for a period of one hundred eighty (180) days or more shall be considered permanently closed and shall comply with the following:
  - 1. Liquid and sludge must be removed from the AST(s) and connecting lines. Any waste products must be disposed of in accordance with all applicable State and Federal requirements.
  - 2. AST(s) must be rendered free of oil vapors.
- 3. All connecting lines must be disconnected or blanked. Manways must be securely fastened.
- 4. AST(s) must be stenciled with the date of permanent closure.

### Groundwater Monitoring Program - Part 2.10 (H)

All facilities with a combined storage capacity greater than or equal to fifty thousand (50,000) gallons, or any facility with a storage capacity greater than five thousand (5,000) gallons and located in a Wellhead Protection Area or any area with a groundwater classification of GAA, shall implement a GMP approved by DEM. The monitoring program shall consist of a sufficient number of wells to detect the release of hydrocarbon product from storage tanks, pumping facilities, manifolds and other appurtenances.

### New and Substantially Modified Facilities -Part 2.10 (I)

This section includes:

- (1) Design and construction standards
- (3) Cathodic protection for tank bottom
- (4) Painting of exterior tank surfaces
- (5) Impermeable barriers under tank bottom
- (6) Secondary Containment for new ASTs
- (7) Monitoring systems for new ASTs
- (8) Foundation design
- (10) Testing of new ASTs

Please refer to the regulations for specific details.

### Spill Prevention and Emergency Plans -Part 2.14 (A)

Spill prevention and emergency plans are applicable to any owner or operator of a reception facility, terminal, or facility with outdoor ASTs exceeding a combined storage capacity of five hundred (500) gallons. This is not applicable to facilities with ASTs storing oil for heating with a capacity of five hundred (500) gallons or less. Refer to regulations for specific details.

## **STAGE 1 VAPOR RECOVERY PROGRAM**

The Stage 1 Vapor Recovery program is regulated under the <u>Air Pollution Control Regulation No. 11 - Petroleum Liquids Marketing and Storage</u>. The Office of Air Resources manages the program and can be contacted at DEM.OARStagei@dem.ri.gov.

### Prohibitions - Part 11.7.2 (A, B, F)

Except as provided in § 11.7.1 of this Part, no person may transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage vessel unless the stationary storage vessel is equipped with a submerged fill pipe and the vapors displaced from the storage vessel during filling are processed by a CARB-Certified EVR Stage I vapor control system in accordance with § 11.7.2(B) of this Part.

The Stage I vapor control system required by § 11.7.2(A) of this Part shall be subject to the following conditions:

- 1. All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
- 2. The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 11.3(A)(29) of this Part.
- 3. The Stage I vapor control system shall be designed such that the pressure in the tank truck does not exceed eighteen (18) inches water pressure or 5.9 inches water vacuum during product transfer.
- 4. The vapor recovery and product adaptors and the method of connection with the delivery elbow shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
- 5. If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 11.3(A)(23) of this Part.
- 6. Liquid fill connections shall be equipped with vapor-tight caps.

The Stage I vapor control system required in § 11.7.2(A) of this Part shall be subject to the following conditions:

- All gasoline dispensing facilities shall be equipped with a California Air Resources Board (CARB) certified Enhanced Vapor Recovery (EVR) Stage I pressure-vacuum (PV) vent valve;
- 2. All gasoline dispensing facilities, except those facilities with coaxial tank systems, shall be equipped with CARB-certified EVR Stage I rotatable product and vapor adaptors;
- 3. All gasoline dispensing facilities that begin operation, replace, or install a fuel storage tank, must be equipped with a dual-point CARB-certified EVR Stage I vapor control system or a CARB-Certified EVR Stage I Component System upon facility start-up lowing that installation and shall not
  - a. Install a coaxial Stage I system, except that an existing coaxial system may be repaired and maintained with non-EVR components until the motor vehicle fuel tank is replaced.
- 4. Any component of a Stage I vapor control system that is replaced, shall be replaced with a CARB-certified EVR Stage I component;
- 5.On and after December 25, 2020, gasoline dispensing systems must be equipped with a CARB-Certified EVR Stage I system in accordance with any one of the Executive Orders incorporated in § 11.2(F) of this Part, or a CARB-Certified EVR Stage I Component System in accordance with the applicable Executive Orders incorporated in § 11.2(F) of this Part and manufacturers guidance;

6. Aboveground storage tanks at gasoline dispensing facilities are exempt from the requirement in § 11.7.2(F)(2) of this Part to install a rotatable product adaptor or another EVR Stage I component if such installation is not technically feasible. Documentation of such technical infeasibility shall be made available to the Director on request;

Please refer to the regulations for specific details.