



High Risk Underground Oil Storage Facilities

What You Need to Know

High risk underground oil storage (HRUOS) facilities include those with a large cumulative storage capacity and/or substantial monthly throughput of petroleum and therefore inherently convey a greater risk of harm to public health, safety, and the environment in the event that a spill, release, or discharge of oil should occur. HRUOS facilities may be located anywhere in the state. The Maryland Department of the Environment's (MDE's) Oil Control Program (OCP) through the Code of Maryland Regulations (COMAR) 26.10.07, requires HRUOS facilities to take certain additional steps to mitigate these potential harms.

Facility Owner Questionnaire

- Does your facility have a total underground oil storage capacity of 80,000 gallons or greater (excluding onsite consumptive use heating oil)? **AND**

Does your facility have one or more underground storage tank (UST) systems constructed with at least one single-walled UST **OR** single-walled product piping?

- Does your facility have a combined (all UST systems) monthly oil throughput of 750,000 gallons or more when averaged over a rolling 12-month period? **OR**

Does your facility have a combined (all UST systems) monthly oil throughput of 1,000,000 gallons or more in a single month?

If you answered yes to these questions, your facility may be subject to additional requirements related to HRUOS facilities. Please continue reading for additional definitions and requirements.

COMAR 26.10.07 Definitions

- An oil storage facility is defined as an HRUOS facility if the facility has:
 - One or more UST systems constructed with a single-walled UST or single-walled product piping, and a total underground oil storage capacity for the facility that is 80,000 gallons or greater. The total storage capacity calculation does not include heating oil storage for onsite consumptive use; **OR**
 - A combined monthly oil throughput for all products stored in UST systems of 750,000 gallons or more when averaged over a rolling 12-month period or 1,000,000 gallons or more in any single month.



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- “Levels of concern” means: benzene at 5 parts per billion (ppb), toluene at 1,000 ppb, ethylbenzene at 700 ppb, total xylenes at 10,000 ppb, and methyl tert-butyl ether (MTBE) at 20 ppb.

Throughput Review Procedures

To determine if a facility meets the definition of an HRUOS, the facility owner shall conduct a throughput review at least once every three years during a certified inspection of the UST system(s) or if directed by MDE, using a form provided by MDE, and submitted to MDE as part of the UST System Compliance Report.

As an owner of a HRUOS facility, how do I comply with the HRUOS requirements?

The owner of a HRUOS facility must select, and upon receipt of MDE approval, implement one of the following three monitoring methods. **If your facility has any single-walled UST system components, you are limited to monitoring method #1.**

1. Groundwater Monitoring Method:

- Install a minimum of three properly constructed groundwater monitoring wells outside of the UST excavation zone, in approved locations that will allow for the determination of groundwater flow and in areas that are most likely to detect a spill, release, or discharge from the UST system (UST and piping).
- Within 60 days of installing the groundwater monitoring wells, and unless otherwise directed, annually thereafter, sample each groundwater monitoring well and analyze the samples for:
 - Full-suite volatile organic compounds (VOCs), including naphthalene and fuel oxygenates, in accordance with EPA Method 8260; and
 - For total petroleum hydrocarbons – diesel and gasoline range organics (TPH-DRO and TPH-GRO) in accordance with EPA Method 8015.
- Sample each site supply well, if present, and analyze the samples for full-suite VOCs, including naphthalene and fuel oxygenates, in accordance with EPA Method 524.2.
- Within 60 days of sample collection, submit a complete laboratory report that includes a copy of the laboratory sample acceptance form, sample chain-of-custody, laboratory analytical results, and a site map identifying each site supply well and groundwater monitoring well located at the oil storage facility.



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- If a concentration of benzene, toluene, ethylbenzene, total xylenes, or MTBE is detected at a level that is greater than or equal to the established “levels of concern”:
 - **Report the sampling results to MDE within 24 hours,**
 - In coordination with MDE, initiate an on- and off-site investigation within 48 hours in accordance with COMAR 26.10.08.02-.04, and
 - Develop a corrective action plan under the direction of MDE.

2. Enhanced Testing Method:

- This method may only be implemented if all UST systems at the facility are double-walled and the piping systems are installed in accordance with COMAR 26.10.03.02A.
- The facility owner shall:
 - perform interstitial monitoring of the UST and piping plus at least one additional method of UST release detection approved by MDE;
 - perform annual precision tightness testing for the primary piping and piping interstice; equip all containment sumps, except the vent riser sump, with sensors programmed for positive UST system dispensing/pumping shut down;
 - perform UST precision tightness testing every 3 years in a manner that minimizes isolation of UST system components; and
 - perform precision tightness testing of the UST interstice every 3 years, with the exception of brine-filled interstices.

3. Alternative Monitoring Method:

- The facility owner may propose an alternative monitoring method, that is designed to detect a spill, release, or discharge from the UST system in a manner that is no less protective of human health and the environment than a monitoring method listed in options #1 or #2 above.
- The alternative method is subject to MDE approval.



Maryland
Department of
the Environment

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Questions

If you have additional questions regarding HRGUAs or WHPAs, please contact OCP at 410-537-3442 or 1-800-633-6101 x3442.

To report a spill, release, or discharge call 1-866-633-4686. Available 24 hours a day.

Limitations

This fact sheet is provided for informational purposes. This document is not intended, nor should it be interpreted to be a regulation, as defined in Section 10-101, State Government Article. The MDE encourages you to read and understand the regulations that govern the operation of underground storage systems found in Code of Maryland Regulations 26.10 “Oil Pollution Control and Storage Tank Management.”