30-Day Groundwater Monitoring Log for Underground Storage Tanks

Facility Name/Address: _____ **Facility DEQ ID:** _____ **Year:** _____

Fill in the date, inspector name, monitoring well IDs, and the device used to monitor each well. Continue recording your 30-day leak checks, including each date and the inspector's initials. If you manually check the well: record your observations (i.e., whether any evidence of fuel is found). If you monitor the well with an electronic sensor: record the sensor status (e.g., OK, Normal, Alarm) and, if possible, print a copy of the sensor status report.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Date													
Inspector													
Well ID *Ex: SW Tank Field, Reg Piping*	**Device** *Ex: Bailer, Dipstick, Sensor*												

Record any issues found (date & action taken):

If petroleum product is found in any monitoring well: Immediately contact your petroleum service company to identify the source of the leak and report a release to DEQ. To report, contact your DEQ regional office (https://www.deq.virginia.gov/get-involved/about-us/contact-us). If possible, please submit the Environmental Pollution Report (EPR) form found here via email.

Groundwater Monitoring for Underground Storage Tanks

Set-Up

1. Ensure you have a valid site assessment on file to confirm that groundwater monitoring is an acceptable method for your UST system. (All groundwater monitoring site assessments performed after January 1, 2018, must be signed by a professional engineer or geologist.)
    - GM cannot be used for products that easily dissolve in water, i.e., high-ethanol fuels (E85 and above).
2. Ensure your monitoring equipment (e.g., oil-water interface probe, bailer, dipstick with fuel-finding paste) meets the following criteria:
    a. Passed operability assessment within the past year
    b. Can reliably detect the presence of 1/8 inch of free product floating on top of the groundwater
3. On the 30-Day Groundwater Monitoring Log, record the monitoring well IDs and the monitoring device you will use to check each well.

Monthly Monitoring Process

If you find petroleum product in any of your groundwater samples: Immediately contact your petroleum service company to identify the source of the leak and report a release to DEQ. You may report releases by email or phone call to your DEQ Regional Office (https://www.deq.virginia.gov/get-involved/about-us/contact-us). If possible, please submit the Environmental Pollution Report (EPR) form at https://www.deq.virginia.gov/our-programs/land-waste/petroleum-tanks/cleanup-activities/tools-and-resources via email to your DEQ Regional Office.

Manual Monitoring (e.g., with bailer or dipstick)

1. Ensure your monitoring device/equipment is in good condition, allowing it to function as designed.
2. While removing each monitoring well cover, use caution to ensure that any standing water does not run into the well, as this may lead to false monitoring results. If there is a cap, ensure it fits tightly.
3. For each well, follow an appropriate procedure (based on your device) to collect and assess a groundwater sample for the presence of petroleum product.
    - Bailer: Slowly, gently lower the bailer into the well until it is fully immersed in the water column. Pull the bailer up out of the well to assess the sample for signs of petroleum contamination, which may include the presence of petroleum product floating on top of the water or other signs, such as a strong petroleum odor.
    - Dipstick: Coat the end of the dipstick with fuel-finding paste. Slowly, gently lower the dipstick until the fuel-finding paste has been immersed in the water column. Pull the dipstick up out of the well to assess for signs of petroleum contamination, which may include a positive result from the fuel-finding paste (e.g., color change) and other signs, such as a strong petroleum odor.
4. On the 30-Day Groundwater Monitoring Log, record the following in the corresponding month's column:
    - Inspection date
    - Inspector's initials/name
    - Observations for each well

Continuous Monitoring (e.g., with oil-water interface probe or sensor)

1. Ensure your monitoring equipment (e.g., oil-water interface probe) is currently functioning as designed.
2. For each well equipped with a probe/sensor, check the status in accordance with manufacturer's instructions.
    - Sensors/probes are often connected to an automatic tank gauge console, which can provide the status. Print and file this report each month, if possible.
3. On the 30-Day Groundwater Monitoring Log, record the following in the corresponding month's column:
    - Inspection date
    - Inspector's initials/name
    - Observations (probe/sensor status) for each well

Annual Device Testing

- **Manual**: Visually inspect (i.e., for cracks, holes, worn off measurements) and replace equipment that is no longer functional/operable. This inspection can be recorded on DEQ's *Annual Leak Detection Equipment Operability Check* form (Page 4: Groundwater/Vapor Monitoring and Handheld LD Equipment).
- **Continuous**: For oil/water interface probes, test according to manufacturer's instructions or industry standard; keep a record of the testing method and results. If the probes are connected to an Automatic Tank Gauge, then it must pass an annual operability test as well.