



VAPOR MONITORING

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY

Division of Waste Management – Underground Storage Tank Program

Telephone: 701-328-5166 • Fax: 701-328-5200 • Email: ndust@nd.gov

Website: <https://deq.nd.gov/wm>

Rev: 2/2025

When installed and operated properly, vapor monitoring meets the North Dakota leak detection requirements for underground storage tanks and piping. Vapor monitoring uses strategically placed monitoring wells in the backfill or surrounding soil around the tanks and piping to measure for the presence of petroleum fumes which may indicate a release.

Vapor monitoring senses or measures fumes from leaked product in the soil around the tank or piping. Monitoring can be performed manually every 30 days with a portable field instrument or with permanently installed equipment, which automatically and continuously monitors soil gas vapors and responds with a visual or audible alarm when a release is detected. Record the results of the 30 day tests and keep these records for at least one year.

On an annual basis, you must inspect the vapor monitoring equipment.

- If you use permanently installed electronic equipment for vapor monitoring, at a minimum, test the alarm, battery backup and verify the system configuration. For probes and sensors, you must inspect for residual buildup, ensure floats move freely, ensure the shaft is not damaged, ensure cables are free of kinks and breaks, and test alarm operability and communication with the controller.
- All hand-held equipment must be checked for functionality and operability.

If vapor monitoring detects a release, contact a service technician immediately to determine the source of the release and empty the product from the leaking tank and/or stop using the grade of fuel that is associated with the identified piping release. Report the confirmed release to the North Dakota Underground Storage Tank Program at 701-328-5166