

Vapor Monitoring – Reportable Amounts / Restrictions for use

The maximum amount of vapors that can be recorded by standard monthly monitoring equipment today is:

- Gasoline (11,000 ppm hexane vapors)
- Diesel / Oil (300 – 500 ppm hexane vapors)

As such, MDEQ formally sets the required reportable amounts as follows:

- Gasoline - 5,000 ppm hexane vapors.
- Diesel / Oil – 100 ppm hexane vapors.
- And any month where there is a spike in vapors recorded. **Note:** due to the low detectable amounts for diesel / oil the spike will **NOT** be as significant as with gasoline. (Ex. A 50 ppm increase for diesel / oil should be considered a spike **IF** it is not a normal fluctuation observed in previous months.

***These reportable amounts may not trigger remediation efforts by MDEQ, however they will result in a records request by MDEQ to monitor the facilities vapor readings for a minimum of 6 months.

The Issue:

It has come to MDEQs attention that due to the low volatility of diesel / oil, almost any amount of gasoline **WILL** mask leak detection efforts on the Diesel / oil UST component. (Ex. If you have 1,000 ppm vapors in a monitoring well a diesel / oil leak will not be detected. It is masked by the already present gasoline vapors.)

In other cases, gasoline vapors exceeding 11,000 ppm present the same issue where a future release of gasoline will not be detected due to the upper limit already being reached.

MDEQ Position:

There is not an easy solution to this. If the gasoline vapors do not subside below 300 ppm for diesel or 11,000 ppm for gasoline within 6 months **AND** verified by MDEQ staff, another form of leak detection will be required to be installed and / or implemented within 90 days.

It is recommended the that the following methods be used (as applicable):

- 1.) Interstitial monitoring (if tank or piping is double walled and meets tightness requirements)
- 2.) Automatic Tank Gauging (preferred) (if tank is single walled)
- 3.) Annual Line Tightness Testing (piping only)
- 4.) Statistical Inventory Reconciliation (covers both tank and piping)
- 5.) Relocation of wells. (Has to be in backfill material) (May or may not solve the issue)

*Consult with your certified contractor to determine the best method to utilize.

**MDEQ strongly urges accurate and extensive vapor monitoring at locations where this issue may arise following MDEQ publication "Guidance for Monthly Vapor Monitoring for Leak Detection".

****Overtime should vapors subside to a level where vapor monitoring is a viable option six (6) months of vapor monitoring records AND verification by MDEQ staff will be required before MDEQ approves of the change of leak detection method back to vapor monitoring.**