WAC 173-360A-0660 Vapor monitoring. Owners and operators using vapor monitoring (testing or monitoring for vapors within the soil gas of the excavation zone) must comply with the requirements of this section. Except as otherwise provided in WAC 173-360A-0610(3) or 173-360A-0615(3), vapor monitoring may be either passive (monitoring for presence of regulated substance) or active (monitoring for presence of tracer compound).

(1) Site conditions.

(a) The materials used as backfill must be sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area.

(b) The stored regulated substance, or a tracer compound placed in the UST system, must be sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the UST system.

(c) The measurement of vapors by the monitoring device must not be rendered inoperative by the groundwater, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty days.

(d) The level of background contamination in the excavation zone must not interfere with the method used to detect releases from the UST system.

(2) **Site evaluations.** In the UST excavation zone, the site must be evaluated to ensure compliance with the requirements in subsection (1) of this section and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank or piping being monitored that routinely contains product.

(a) **Performance.** Site evaluations must be performed by or under the direct supervision of a service provider certified in accordance with Part 9 of this chapter.

(b) **Reporting.** Site evaluations must be reported to the department within thirty days of the installation of the vapor monitoring system. The report must be submitted with the checklist required for the installation (WAC 173-360A-0300 (5)(b)). The report must be completed by the service provider. The report must identify the service provider and their certification type and number.

(3) Monitoring wells.

(a) Monitoring wells must be clearly marked and secured to avoid unauthorized access and tampering.

(b) Monitoring wells must be constructed, maintained, and decommissioned in accordance with chapter 173-160 WAC.

(4) **Vapor monitors**.

(a) Vapor monitors must be designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the UST system, a component or components of that substance, or a tracer compound placed in the UST system.

(b) Vapor monitors must also be operated in accordance with the manufacturer's instructions and any conditions or limitations specified in the certification of the equipment.

[Statutory Authority: Chapter 90.76 RCW. WSR 18-15-083 (Order 16-02), § 173-360A-0660, filed 7/18/18, effective 10/1/18.]