

WAC 173-351-450 Alternate groundwater monitoring programs. (1)

The owner or operator may propose changes and/or alternate groundwater monitoring programs for detection monitoring after the second year of groundwater monitoring under WAC 173-351-430(3), or the assessment monitoring program of WAC 173-351-440 as follows:

(a) An alternate groundwater monitoring frequency for sampling and analysis of Appendix I and II constituents;

(b) A deletion of Appendix I, II, and III constituents or alternate groundwater monitoring constituents;

(c) An appropriate subset of wells to be sampled and analyzed for Appendix III under WAC 173-351-440(2).

(2) All proposed changes in groundwater monitoring frequency must be no less than semiannually for detection monitoring and no less than quarterly for assessment monitoring. The owner or operator must apply for a permit modification under WAC 173-351-720(6) or must apply during the renewal process of WAC 173-351-720(5) for changes in groundwater monitoring frequency making a demonstration based on the following information:

(a) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include all of the following:

(i) Hydraulic conductivity; and

(ii) Groundwater flow rates.

(b) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring wells (minimum distance of travel); and

(c) Contaminant fate and transport characteristics.

(3) The owner or operator must apply for a permit modification under WAC 173-351-720(6) or must apply during the renewal process of WAC 173-351-720(5) for all proposed deletions or changes to groundwater monitoring constituents of Appendix I, II, and III based on all of the following information:

Verification that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit, by:

(a) Leachate monitoring results consisting of those parameters listed in Appendix I and II for deletions or changes to detection monitoring and Appendix III for assessment monitoring. All leachate monitoring must be quarterly unless otherwise approved by the jurisdictional health department and the department;

(b) The types, quantities, and concentrations of constituents in wastes managed at the MSWLF unit;

(c) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the MSWLF unit;

(d) The detectability of indicator parameters, waste constituents, and reaction products in the groundwater; and

(e) The concentration or values and coefficients of variation of monitoring parameters or constituents in the groundwater background.

(4) Multiunit groundwater monitoring systems.

An owner or operator may propose during the permitting process of WAC 173-351-700 or through the permit modification process of WAC 173-351-720(6) a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each MSWLF unit, including MSWLF units which were closed in accordance with chapter 173-351, 173-304, or 173-301 WAC. The multiunit system must meet all of the requirements of WAC 173-351-400 through WAC 173-351-490 and will be as protective of human health and environment as individual groundwater monitoring systems for each MSWLF unit. Permit approval for multiunit

groundwater monitoring systems and programs will be based on the ability to provide early warning detection of any contaminant releases including:

- (a) Number, spacing, and orientation of the MSWLF units;
- (b) Hydrogeologic setting;
- (c) Site history;
- (d) Engineering design of the MSWLF units;
- (e) Type of waste accepted at the MSWLF units; and
- (f) Leachate analysis as referenced in subsection (3)(a) of this section for MSWLF units with leachate collection systems.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), and 70.95.260(1), (6). WSR 12-23-009 (Order 07-15), § 173-351-450, filed 11/8/12, effective 12/9/12. Statutory Authority: Chapter 70.95 RCW and 40 C.F.R. 258. WSR 93-22-016, § 173-351-450, filed 10/26/93, effective 11/26/93.]