WAC 173-351-440 Assessment monitoring program. (1) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in the Appendix I or in the alternative list approved in accordance with WAC 173-351-450, Alternative groundwater monitoring programs.

(2) Background data development for total metals must be done in accordance with WAC 173-351-430 (2)(b) for existing MSWLF units under assessment monitoring as of November 1, 2012.

(3) Within ninety days of triggering an assessment monitoring program, and annually thereafter, the owner or operator must sample and analyze the groundwater for all constituents identified in Appendix III. A minimum of one sample from each well (background and downgradient) must be collected and analyzed during each sampling event. For any constituent detected in wells as a result of the complete Appendix III analysis, a minimum of four independent samples must be collected from each well (background and downgradient) within a time period of one hundred eighty days, and analyzed to establish background for the constituents. Each independent sample must be collected no less than one month apart from the previous sampling event.

(4) After obtaining the results from initial or subsequent sampling events required in subsection (3) of this section, the owner or operator must:

(a) Within fourteen days, notify the jurisdictional health department of the increase, identifying the Appendix III constituent(s) that have been detected and place this notice in the operating record;

(b) Within ninety days, and on a quarterly basis thereafter, resample all wells, conduct analyses for all constituents in Appendix I and II and constituents in Appendix III that are detected in response to subsection (3) of this section. Record their concentrations in the facility operating record and notify the jurisdictional health department. At least one sample from each well (background and downgradient) must be collected and analyzed during these sampling events;

(c) Establish background concentrations for any constituents detected pursuant to subsection (3) of this section;

(d) Establish groundwater protection standards for all constituents detected pursuant to subsection (3) or (4) of this section. The groundwater protection standards must be established in accordance with subsection (8) of this section; and

(e) Continue performing geochemical evaluations in accordance with WAC 173-351-430(5) on a quarterly basis.

(5) If the concentrations of all Appendix III constituents are shown to be at or below background values, using the statistical procedures in WAC 173-351-420, for two consecutive sampling events, the owner or operator may return to detection monitoring after:

(a) Notifying the jurisdictional health department of this finding;

(b) Receiving approval in writing from the jurisdictional health department; and

(c) Placing the notice and the approval in (a) and (b) of this subsection in the operating record.

(6) If the concentrations of any Appendix III constituents are above background values, but all concentrations are below the groundwater protection standard established under subsection (8) of this section, using the statistical procedures in WAC 173-351-420, the owner or operator must continue assessment monitoring in accordance with this section. (7) If one or more Appendix III constituents are detected at statistically significant levels above the groundwater protection standard established under subsection (8) of this section in any sampling event, the owner or operator must, within fourteen days of this finding, notify the jurisdictional health department, the department and all appropriate local government officials of the increase and place a notice in the operating record identifying the Appendix III constituents that have exceeded the groundwater protection standard. The owner or operator also:

(a) Must characterize the chemical composition of the release, the contaminant fate and transport characteristics; the rate and extent of contamination in all groundwater flow paths by installing additional monitoring wells as necessary;

(b) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with subsection (3) of this section;

(c) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated offsite if indicated by sampling of wells in accordance with subsection (7) of this section; and

(d) Must initiate an assessment, selection, and implementation of remedial actions in accordance with chapter 173-340 WAC, the Model Toxics Control Act regulation and continue monitoring in accordance with the assessment monitoring program pursuant to this section; or

(e) May demonstrate that a source other than a MSWLF unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. A report documenting this demonstration must be prepared by a geologist or other licensed professional in accordance with the requirements of chapter 18.220 RCW, Geologists, approved by the jurisdictional health department, and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the Appendix III constituents are at or below background as specified in subsection (5) of this section. Until a successful demonstration is made, the owner or operator must comply with this subsection (7) including initiating an assessment of remedial actions.

(8) The owner or operator:

(a) Must establish a groundwater protection standard using the groundwater quality criteria of chapter 173-200 WAC; and

(b) For constituents for which the background level is higher than the protection standard identified under (a) of this subsection, must use the background concentration for the constituents established from wells in accordance with WAC 173-351-405 through 173-351-430.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), and 70.95.260 (1), (6). WSR 12-23-009 (Order 07-15), § 173-351-440, filed 11/8/12, effective 12/9/12. Statutory Authority: Chapter 70.95 RCW and 40 C.F.R. 258. WSR 93-22-016, § 173-351-440, filed 10/26/93, effective 11/26/93.]