

TITLE: What to do When There is No Laboratory Certified for the Analysis of a Specific Chemical of Concern or Analytical Method

DATE

EFFECTIVE: August 2003

HISTORY: Update of VA30007.09.025 - Revision was necessary to reflect changes in the rule citations that became effective in March 2009.

KEYWORDS: Chemicals of concern, non-certified laboratory data, analysis method

RULE/

AUTHORITY: OAC 3745-300-07(F)(6), (F)(3), (D)(2)(b), (I)(3)(b), and (I)(4)(b)
ORC 3746.10(B)(1)(a)

QUESTION: What options are available when there are no laboratories certified for the analysis of a specific chemical of concern (COC) or for the use of a specific analytical method?

BACKGROUND: ORC 3746.10(B)(1)(a) requires the use of a certified laboratory to perform any analyses that form the basis for the issuance of a no further action letter. In addition, the process for demonstrating compliance with applicable standards includes comparing concentrations of COCs determined in accordance with OAC 3745-300-07(F)(6) to applicable standards. See OAC 3745-300-07(I)(3)(b). OAC 3745-300-07(F)(6) directs the use of certified laboratory data to determine the concentrations of the COCs. OAC 3745-300-07(F)(3) (the determination of whether ground water must be protected) as well as OAC 3745-300-07(D)(2)(b) (Phase II Property Assessment sampling procedures) also require the use of certified laboratory data. OAC 3745-300-07(E)(1) addresses confirmation of non-certified laboratory data with data from a certified laboratory.

ANSWER: Because compliance with applicable standards must be demonstrated using data analyzed by a laboratory certified in the analysis used to generate the data, all hazardous substances and petroleum must be analyzed by a certified laboratory. If there are no laboratories certified to perform the analysis for an identified COC¹, then the COC cannot be demonstrated to meet applicable standards. See OAC 3745-300-07(I)(3)(b). Therefore, to demonstrate compliance with applicable standards for that COC, the volunteer may work with a laboratory to

¹ Ohio EPA can be contacted to determine whether there are any laboratories certified to perform a desired analytical method for the analysis of a specific COC.

apply for certification for the analysis of the COC by the desired analytical method in accordance with OAC 3745-300-04 (certified laboratory rule). As the laboratory must prepare and apply for certification, the process will likely add a significant amount of time to the voluntary action.

Another option available is to implement a remedial activity that renders complete exposure pathways “incomplete” as to all potential receptors and ensures that all points of compliance are met. See OAC 3745-300-07(l)(4)(b). OAC 3745-300-07(l)(4)(b) calls for use of remedial activities if compliance with applicable standards cannot be determined or is not determined for a complete exposure pathway. Examples of remedial activities that may render pathways incomplete and address all points of compliance include engineering controls (such as a paved surface barrier to mitigate direct contact with soil) or excavation and disposal of soil² known or suspected to be contaminated with hazardous substances or petroleum. Therefore, when compliance with applicable standards cannot be determined for a particular COC (e.g., due to a lack of certified laboratory data), remedial activities must be used to eliminate pathways involving the COC. This also applies to non-certified laboratory data below detection limits for those constituents that have been identified as potential COCs during the Phase I or Phase II Property Assessments.

SUMMARY:

If there is no laboratory certified for the analysis of a specific COC or for the use of a specific analytical method, a known or potential hazardous substance or petroleum release may be addressed either by:

- Working with a laboratory to apply for certification in the desired analysis and then using certified data from the laboratory to confirm that the COC concentration is below applicable standards (see OAC 3745-300-07(l)(3)); or
- Rendering all applicable pathways incomplete and ensuring that all points of compliance are met through the use of remedial activities (see OAC 3745-300-07(l)(4)).

² If excavation and disposal of soil is used as a remedial option, verification in accordance with OAC 3745-300-11(E) is still required. However, verification with data from a certified laboratory may not be necessary if the volunteer can demonstrate by other means that soil containing COCs has been completely removed from the property, thus rendering the pathway incomplete. This may include information about the size of the contaminated area, the depth and extent of the excavation, and subsequent thickness of clean fill used to replace the excavated soil.

OHIO EPA
CONTACT:

For any questions concerning this issue, please contact the VAP central office at (614) 644-2924.