

ARCHIVE: Archived due to the 2009 rule revision. Refer to VA30009.09.005 for the updated document.

TITLE: Determining Background for Sediments

DATE EFFECTIVE: January 2003

HISTORY: Update of VA30009.00.001 - Revision was necessary to reflect changes in rule citations that became effective on October 21, 2002. However, the archived TDC document remains accurate under the 1996 VAP rules.

KEYWORDS: Sampling, sediment assessment, sediment background, soil background

RULE/ AUTHORITY: OAC 3745-300-07(H) and 3745-300-09(F)

QUESTION: Are the soil background procedures applicable to sediment also?

ANSWER: The VAP rule pertaining to the sampling and calculation of background, OAC Rule 3745-300-07(H), does not specifically address background concentrations in sediments. This rule provision only provides detailed procedures for the derivation of background in soils and ground water.

However, Section 3746.06 of the ORC provides that if an applicable standard determined in accordance with the statute is below the background level, the voluntary action is only required to achieve the background level. The statute applies broadly to all media, including sediments. Because the VAP rules provide no specific procedures for determining background in sediments, a Certified Professional (CP) may use any reasonable or appropriate method for making such a determination.

The VAP has provided guidance under technical assistance regarding background concentrations in wetland sediments. In the case of this technical assistance site, the wetland sediments were comprised of a low, wet area without a discernable flow gradient. As a result, the background procedures for soils in Paragraph (H)(1) of Rule 3745-300-07 were deemed to be appropriate for determination of background concentrations in sediments.

Conversely, if the sediments are in a stream, the effect of gradient must be taken into consideration in determining where to take samples for the background levels. If it is reasonable to assume that gradient has caused contaminants to become mobile, sediment sampling for background levels should be taken in areas upgradient of an identified area or the point of any release. The VAP will consider other reasonable proposals provided by the CP or volunteer for determining background in sediments.

In lieu of a demonstration of compliance with background concentrations in sediments, a demonstration may be made that on-Property sediments are not contributing to the failure to meet applicable standards, e.g., on-Property concentrations are at or below concentrations of upgradient sediment contamination levels, in accordance with Paragraph (F)(4)(a) of Rule 3745-300-09.

SUMMARY:

The VAP rule pertaining to the sampling and calculation of background, OAC Rule 3745-300-07(H), does not specifically address background concentrations in sediments. However, Section 3746.06 of the ORC provides for the use of background in lieu of an applicable standard otherwise determined in accordance with the statute. This applies broadly to all media, including sediments. Since the VAP rules provide no specific procedures for determining background in sediments, a Certified Professional (CP) may use any reasonable or appropriate method for making such a determination.

**OHIO EPA
CONTACT:**

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