

Sampling Method 5035

North Carolina Hazardous Waste Section

Guidance Document

Introduction

On June 13, 1997, SW846 was revised to include changes in the soil collection and analysis procedures for volatile organic compounds. The updated procedures are contained in SW846 Method 5030B and Method 5035. EPA Region 4 released a memo on the determination of VOCs in soil. This memo includes background information on Method 5035 and recommendations for its application. In response to these revisions and the EPA Region 4 memo, the North Carolina Hazardous Waste Section developed this document to provide guidance for complying with the requirements under North Carolina regulations.

Method 5035

Method 5035, as described in SW846, includes the following information:

- The collection and analysis of low level VOC solid samples (soil, sediment and solid waste with VOC concentrations in the range of 0.5 to 200 $\mu\text{g}/\text{kg}$). The analysis consists of a closed-system purge-and-trap method.
- Procedures for collection and preparing solid samples containing high concentrations of VOCs and for oily wastes.

The revised methods require different sampling and analysis procedures for samples that have high concentration of VOCs versus those with low concentrations of VOCs. These sample collection techniques are more complicated for VOC analysis than those of the previous method, but the higher accuracy warrants their use instead of traditional methods. The previous method reports significantly lower concentrations of VOCs in soil.

Applicability

The North Carolina Hazardous Waste Section recommends that facilities performing RCRA activities determine VOCs in soil using sample collection procedures consistent with Method 5035. Soil VOC samples which are collected and analyzed by the HWS will be consistent with Method 5035. The HWS initiated the use of this soil method in June 1998.

Method 5035 will be required if a facility wants to conclude "no further action" at a solid waste management unit or to use risk-based cleanup levels. For site assessment purposes, at a minimum, facilities should sample the outermost sampling points (below detection levels) using Method 5035 to confirm that soil contamination has been delineated.

If you have any questions, please contact Ann Preston in the North Carolina Hazardous Waste Section at 919/733-2178 ext. 230 or e-mail her at ann.preston@ncmail.net.