TO: Internet Address: RCRA-docket@epamail.epa.gov

RE: RCRA Docket #: RCRA-2002-0025

Waste Management System; Testing and Monitoring Activities; Proposed Rule: Methods Innovation Rule; Proposed Rule

DATE:

RCRA DOCKET:

Please find enclosed the Ohio Environmental Protection Agency's comments on U.S. EPA's proposal to amend a variety of the hazardous waste testing and monitoring requirements. This proposal was issued October 30, 2002, in the *Federal Register* (Vol. 67, No. 210, pg. 66252).

Ohio EPA requests that these comments be made an official part of the record. If you have any questions or need additional clarification regarding the enclosed comments, please do not hesitate to contact Karen Hale, Division of Hazardous Waste Management, at (614) 644-2917 or karen.hale@epa.state.oh.us

Sincerely,

Christopher Jones
Director

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cc: Michael A. Savage, Chief, DHWM
Dave Sholtis, Assistant Chief, DHWM
Karen Hale, RIS, DHWM
Ed Tormey, Legal
DHWM CO/DO Supervisors/Managers

1. Section (III)(A): How to Determine If a Method Is Appropriate

Comment: In general, Ohio EPA believes that the hazardous waste rules should be restructured to allow the use of alternate appropriate analytical methods in lieu of the required use of methods contained in SW-846. However, we oppose the manner in which U.S. EPA proposes to implement this new approach. We strongly suggest that a definition of "appropriate method" be included in 40 CFR § 260.10 and an expanded and definitive discussion of the quality control information needed to demonstrate that a method is indeed appropriate be provided in the preamble of the final rule.

A definition of "appropriate method" should be added to 40 CFR § 260.10. We suggest the following language:

> "Appropriate method" means a method that uses techniques that are peer reviewed by experts, accepted by a voluntary standards setting organization or other well-known source; has documented reliability as demonstrated by applicable quality assurance and quality control concepts specific for the sample matrix, interferents, and detection limitations; and is demonstrated to be equivalent with the reference method.

The implementation of developing, evaluating and approving an appropriate method is presented in the preamble in the form of guidance. But the guidance is not fully developed in that it does not provide project managers or the overseeing agency a thorough and complete explanation as to what quality control information should be considered in order to demonstrate that a method is appropriate. The quality assurance and quality control (QA/QC) concepts of demonstrating an appropriate method need to be presented and explained in a definitive manner. The guidance should offer a suggested method and protocol to be followed by project planners.

U.S. EPA should plainly state in the preamble to the final rule what information the overseeing agency expects from project planners in order to evaluate and approve an alternate analytical method. At a minimum the preamble discussion should list the minimum QA/QC concepts a project manager should consider. Also, U.S. EPA should prepare separate guidance that fully explains the quality control concepts and how they work to demonstrate that a method is reliable and appropriate.

Additionally, once a method is accepted for one facility/waste stream, there may be an expectation by project planners that the method is appropriate for all related wastes. This is never the case since such an approach does not take into

consideration the project specific data quality objectives (DQO) or the potential for interferences that weren't established or uncovered in prior wastes.

We do not believe that our requests are outside the goals of reducing the burden on the regulated community and promoting the development of new analytical methods based on good science. Good science depends on good QA/QC concepts and a demonstration that a method is applicable and reliable. Clearly stating what information is needed to demonstrate method appropriateness and reliability is not an increase in burden; it is part of defining the methodologies of achieving good science.

We believe making the changes outlined above will reduce the number of potential disagreements between the overseeing agency and the regulated entity as to what constitutes an appropriate method. The changes will also help save time, effort and money expended by both parties in developing and approving a method. Furthermore, more definitive guidance and a definition will help to promote consistent method evaluations by the overseeing agencies.

2. Section (III)(C)(ii): Expected Impact on States

Comment: U.S. EPA, in part, is proposing these rule changes to reduce the burden on the regulated community. But, in reality what occurs is the imposition of a new burden on the overseeing agency. Whether Ohio EPA adopts these rule changes will be influenced by the anticipated impact the final rule will have on our resources.

U.S. EPA states in the preamble discussion that "SW-846 methods are reviewed by a technical workgroup composed of national expert-level chemists who provide peer input and determine whether method reliability is sufficiently documented." With this statement, U.S. EPA summarizes and acknowledges the time, effort, level of expertise and number of people it takes to evaluate whether an analytical method is reliable and appropriate.

In the past seven years, U.S. EPA has proposed and/or adopted rule changes that are tailored to reduce the burden on the regulated community (but potentially transfer the burden to the States); that increase the universe of wastes and generators that we oversee (e.g., new listings); or significantly increase the complexity of the hazardous waste program (e.g., conditional exclusions, contaminated media rule, comparable fuels rule, cement kiln dust, low level mixed wastes, K061 fertilizer rule and universal wastes).

All of the above is important because U.S. EPA, except for the RCRA Corrective Action supplemental funding, has not increased Ohio EPA's RCRA funding since the mid-nineteen nineties. The impacts of proposed rule changes to the States are not evaluated in any rulemakings as they are for the regulated community. We are receiving less support, both financial and technical, from U.S. EPA to implement the hazardous waste program even though the program is growing in scope and our responsibilities are increasing.

Ohio EPA will have a greater burden in approving sampling and analysis plans (due to non-standard method selection), and also in data review and validation. We will have to revise our Data Validation Checklists to reflect the different methods. Our Data Validation Checklists are based on U.S. EPA's National Function Guidelines (NFG). These additional methods will not have guidance such as the NFGs to use as a resource. Our ability to review/evaluate the validity of data produced using different methods may be diminished due to the lack of familiarity with the nuances and appropriateness of alternate methods.

Furthermore, Ohio EPA does not have the resources of personnel and expertise to evaluate whether alternate analytical methods are appropriate to evaluate hazardous wastes. U.S. EPA's expert chemists performed extensive reviews of the different methods in SW-846 to establish their deficiencies and limitations. We do not have analytical chemists on staff to perform these reviews, nor do we have the resources set aside for these specific activities.

To reduce the burden this rulemaking will have on Ohio EPA, we need the following from U.S. EPA: 1.) A definition of "appropriate method"; 2.) Definitive guidance on developing method-specific QA/QC concepts with respect to demonstrating an appropriate method; 3.) Training seminars on evaluating methods for the overseeing agencies; 4.) Development of a national database of appropriate methods (evaluated either by U.S. EPA or a State) that includes analytes, constituents, and matrices and which will be updated as additional methods are determined appropriate for particular uses; and, 5.) A technical hotline service - where the overseeing agency can call to receive assistance from someone who is knowledgeable, fast, and competent. The person must be able to help us through our problem to reach a real time conclusion and not just provide us with existing memorandums that hopefully will answer our question.

3. Section (III)(C): Split Sampling

Comment: All entities involved will potentially have problems with split samples analyzed using different methods. If one entity has results above the regulatory threshold and the other below the regulatory threshold, both entities will state that their results are correct. This can also happen with entities using the same method, but is less likely.

Split samples will also become more common as entities may not trust the results of alternate, less proven methods or the results of the entity splitting samples with them (SW-846 or otherwise).

4. Section VI: Proposed Action to Withdraw Reactivity Interim Guidance From SW-846 Chapter Seven and Remove Required SW-846 Reactivity Analyses and Threshold Levels from Conditional Delistings.

Comment: Ohio EPA acknowledges many of the reasons stated in the *Federal Register* notice to remove the threshold levels to determine whether a waste is reactive for cyanide or sulfide and understands that U.S. EPA finds the testing procedure flawed. However, many regulated entities in Ohio still use the testing procedure and it is currently incorporated by reference into several Ohio hazardous waste permits. To remove this testing procedure would leave our permits referencing a non-existent procedure. Ohio EPA recommends revising Chapter Seven to remove the threshold values, but keep the methodologies for determining reactive cyanide and sulfide as procedures that are referenced until they can be replaced with other methods.

5. Section XI: Announcing the availability of the RCRA Waste Sampling Draft Technical Guidance (Technical Guidance)

Comment: The Technical Guidance document does a good job of presenting fundamental statistical concepts. One area that should be addressed is a statistical approach to temporal variations in waste stream characteristics. This was somewhat addressed in Box 5 in Chapter 5, but not to the extent that is necessary to lead generators of waste through the statistical process. Facilities that continuously generate waste may only sample once a year or at some fixed frequency. Ohio EPA recommends the inclusion of statistical methods, in the document, that can be used to determine whether the sampling frequency and the number of samples is sufficient for characterization of the waste over a period of

time.

6. Section (XI)(C): Will This Guidance Replace the Existing Chapter Nine of SW-846?

Comment: The *Federal Register* notice states "This document will update and replace the original sampling guidance version of Chapter Nine found in U.S. EPA publication, SW-846 when the Fourth Edition of SW-846 is published." However, in Section 1.3 of the RCRA Waste Sampling Draft Technical Guidance document it states "this guidance document does not replace SW-846 Chapter Nine, nor does it create, amend, or otherwise alter any regulations." These statements are contradictory and should be rectified.

Ohio EPA prefers that Chapter Nine of SW-846 be retained and the Technical Guidance be added to SW-846 as a new chapter. The Technical Guidance is quite advanced in the application of science and will likely not be understood by many members of the regulated community. Since the ultimate responsible person for correctly sampling and evaluating a waste is the generator, we believe they need a guidance document that will be useful to them. Chapter Nine presents a more practical and understandable approach to sampling and waste evaluation that generators can use to either perform their own sampling and waste evaluation or evaluate the results produced by a third party hired for that purpose.

7. Section (XI): Announcing the availability of the RCRA Waste Sampling Draft Technical Guidance - Chapter 5, Section 5.3.1 Limitations

Comment: The Technical Guidance lists volatilization as a disadvantage for compositing samples. Ohio EPA agrees with this conclusion, but recommends that an explanation be included in the document that addresses the use of Method 5035 for compositing samples containing volatile organic compounds and that this type of compositing of samples is permissible.

8. Section (XI): Announcing the availability of the RCRA Waste Sampling Draft Technical Guidance - Chapter 5, Section 5.3.3 and 5.3.5.

Comment: The Technical Guidance does not provide an easy approach for a generator or the owner/operator of a permitted facility to estimate the number of individual grab samples that should be composited. The approach suggested in Section 5.3.5 is a waste evaluation study. Most facilities and generators will not be able to clearly state the criteria for an acceptable standard error for such a study or want to participate in such a process. The Ohio EPA suggests that statistical

guidance be given on how to determine the number of individual grab samples that should, at a minimum, be used for compositing. U.S. EPA should give target criteria to aid States and generators of waste in making decisions on whether the compositing design is sufficient.

9. 40 CFR § 261.20: Characteristics of A Hazardous Waste - General

Comment: Ohio EPA suggests that U.S. EPA take this rulemaking as an opportunity to review and determine whether the ASTM sampling methods referenced in Appendix I of 40 CFR § 261 are available. It is our understanding that they no longer exist. The methods referenced should either be updated to the current version or their reference removed from the Appendix altogether.

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