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January 28, 2014

Ms. Kim Kirkland
U.S. Environmental Protection Agency
Materials Recovery and Waste Management Division
Office of Resource Conservation and Recovery
Office of Solid Waste and Emergency Response [5304P]
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Comment on Federal Register Docket #: EPA-HQ-RCRA-2012-0072 *“Waste Management System; Testing and Monitoring Activities; Update V of SW-846”*

Dear Ms. Kirkland,

The Environmental Laboratory Advisory Board (ELAB or Board) is a standing Federal Advisory Committee Act board that advises the U.S. Environmental Protection Agency (EPA or Agency). The Board’s Charter states that it is to provide consensus advice, information and recommendations on issues related to EPA measurement programs and facilitate operation and expansion of a national environmental laboratory accreditation program.

At this time, ELAB has prepared the following comments regarding the above-mentioned Federal Docket for your consideration. The Board commends the Agency on its hard work and many improvements on Update V to SW-846.

The Board members thank you for reviewing and considering our comments. If any questions arise after your review of these comments, the Board would certainly be open to having you attend its next conference call on February 19, 2014, from 1 to 3 p.m. EST.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "P. Root", is written in a cursive style.

Patsy Root
Chair, Environmental Laboratory Advisory Board

cc: ELAB Board

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ELAB Comments on EPA–HQ–RCRA–2012–0072

1. **FR pages 63187 and 63188:** The Board thanks and congratulates the Agency on the clarifications to the status of SW-846 methods, naming conventions and the strong statement regarding preference for using the latest method version (as previously requested by ELAB).
2. **FR page 63191:** The Board thanks and congratulates the Agency on the resolution of the bis(2-chloro-1-methylethyl)ether naming issue (as requested by ELAB).
3. **FR page 63191:** The Board thanks and congratulates the Agency on improvements in consistency between Chapter 3 and Methods 6010 and 6020 and on the inclusion of collision cell approval.
4. **FR page 63191:** The Board thanks and congratulates the Agency on the removal of the requirement for a separate sample for styrene and vinyl chloride in Chapter 4.
5. **FR page 63191:** Previous versions of Chapter 4 stated that vinyl chloride and styrene had to be analyzed from an unpreserved vial. EPA responded by removing the requirement in Chapter 4, for aqueous samples. This is a positive change; however, styrene and vinyl chloride should also be removed from the following statement for solid samples:

“If compounds that may be reactive in acidified soils (e.g., [vinyl chloride](#), [styrene](#), 2-chloroethyl vinyl ether) are analytes of interest, collect a second set of samples without acid preservatives and analyze as soon as possible.”
6. **FR pages 63191 and 63192:** The Board approves of the addition of a formal quantitation limit termed the lower limit of quantitation (LLOQ).
7. **FR pages 63191 and 63192:** The Board recognizes that the current method detection limit (MDL) procedure does not meet Office of Resource Conservation and Recovery (ORCR) needs, but the Board believes that the Office of Water is considering an update to the MDL, in which case ORCR may want to reconsider its position at some time in the future because the LLOQ would be more effective in combination with a reliable detection limit.
8. **FR page 63191:** Regarding the elimination of the use of the current MDL, ELAB agrees with ORCR that the MDL in its current form has no place in the program. However, should The NELAC Institute’s proposed revisions to the MDL be accepted, the MDL could be valuable for making the determination that a waste is nonhazardous for a given constituent if that constituent is not detected and the MDL is less than the Resources Conservation and Recovery Act (RCRA) limit. The only caveat is that it is necessary to be certain that the MDL is appropriate for the specific matrix to which it is being applied. This may mean that the generator would have to demonstrate that the MDL can be verified in its specific matrix.
9. **FR page 63192:** The Board approves of basing the LLOQ acceptance limits on the laboratory control sample limits with the addition of 20 percent.
10. **FR page 63192:** The Board approves of the changes to the Initial Demonstration of Proficiency requirements.



11. **FR pages 63192 and 63193:** The Board approves of the addition of the relative standard error as a method for evaluation of calibration curves and appreciates the consistency with similar approval in 40 CFR Part 136.

12. Additional guidance has been provided in the proposed revision of Chapter 1 (including references) regarding the calculation of the upper confidence limit (UCL) for making the determination as to whether a waste may be hazardous. Specifically, in Section 1.1.3.2 of Chapter 1, several documents are listed for the development of Sampling and Analysis Plans. At least two of these documents contradict one another in their use of the UCL for making the determination that the analytical results for a given waste could exceed the RCRA limit.

- In SW-846, Chapter 9, page 16, starting in Section 7 and Equation 6 (which is repeated multiple times in Chapter 9), the **two-tailed critical value** for the Student's t distribution is used.
- In Chapter 1, Reference 8, "RCRA Waste Sampling Draft Technical Guidance" (EPA 503-D-02-002), in Section 3.4.3.1, Appendices F (Equation F.6) and G (Table G-1) the **single-tailed critical value** for the Student's t distribution is used.

ELAB believes that use of the single-tailed critical value is statistically correct and ask that either Chapter 9 be revised to utilize the single-tailed critical value for the UCL or the conflicting references in Chapter 1 be removed.