

Prepared By:

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Thank you for providing the opportunity to comment.

I appreciate the efforts taken to prepare the proposed Methods Update Rule.

My comments follow.

1. Table IC should be updated to allow Method 624.1 to be used for the monitoring of 1,2-Dichlorobenzene.
2. Section 6.7 of Method 624.1 requires the use of three surrogate compounds from Table 5 of Method 624.1. Table 5 of Method 624.1 does not contain dibromofluoromethane. Section 5.9 of Method 8260B includes dibromofluoromethane as a recommended surrogate.

Table 5 of Method 624.1 should be updated to include dibromofluoromethane. This would help ensure that laboratories could use the same surrogates for Methods 8260B and 624.1 which should help lab efficiency.

3. Section 7.3.2.1.1 of Method 624.1 the concentration of the lowest calibration standard must not exceed the ML values listed in Table 1 of Method 624.1 for those analytes which list ML values. At least two of the listed ML values are 4.8 ug/L. Chloroform is one of these compounds.

The laboratory should be allowed to use a ML based on the lowest calibration standard as long as it meets the permittee's data quality objectives.

For example, a lab should be allowed to use a chloroform ML of 5.0 ug/L if this still allows the permittee to demonstrate compliance. If a permittee has a wastewater single grab max limit of 0.030 ug/L, then the lab should be able to use a chloroform ML of 0.010 ug/L or lower. (0.010 ug/L is three time less than the single grab max limit of 0.30 ug/L in this example.)

The rounding language Section 7.3.2.1.1 of Method 624.1 explicitly prohibits a lab from rounding 4.8 ug/L to 5.0 ug/L for those compounds that have a listed ML of 4.8 ug/L in Table 1 of Method 624.1.

EPA should consider removing the ML column from Table 1 of Method 624.1.

4. Section 8.1.2.2.1 of Method 624.1 seems overly prescriptive (e.g., street addresses, telephone numbers, and e-mail addresses). If all employees work for one business, then documentation of a business contact should be sufficient.
5. Section 8.1.2.2.1 of Method 624.1 seems to indicate that the quality control officer will witness the analyses. The quality control officer may review data and the associated procedure(s) (including method modifications). The quality control officer should not be required to watch the analyst perform the testing.

6. Section 8.1.4 of Method 624.1 requires a matrix spike and a matrix spike duplicate (MS/MSD) with each batch of samples. For laboratories running batch sizes of 4 samples or less this seems excessive. The current Method 624 requirement of running MS/MSDs on a 5% frequency (one per 20 samples) and at least monthly is sufficient to demonstrate performance of the method in the matrix.
7. Sections 8.1.4 and 8.3 of Method 624.1 require a matrix spike and a matrix spike duplicate (MS/MSD) on a 5% frequency (one per 20 samples) for a given site or discharge. This seems excessive and could unnecessarily cause laboratory testing costs to increase.
8. Section 8.3.3.1 of Method 624.1 indicates that a sample cannot be used for permitting or regulatory compliance if it is associated with a failing MS/MSD precision and/or MS/MSD recovery. There are cases (especially in compliance monitoring) where this will lead to unnecessary re-testing or re-sampling. Data outside control limits can still be useable and allow the permittee to meet its data quality objectives and demonstrate compliance with its permit limits.

For example, the following could be true and the results more than sufficient for the permittee to demonstrate compliance with their compliance limits.

Permit limit is 0.030 ug/L.

Measured sample result is 0.005 ug/L.

MS/MSD recoveries are 122% and 125% with an upper control limit of 120%.

9. Section 11.3 (GC Resolution) of Method 624.1 seems unnecessary and overly prescriptive for GC/MS. The mass spectra can be used to quantitate and qualitatively identify overlapping compounds.
10. Section 2.d.iii.B of Appendix B to Part 136 (Definition and Procedure for the Determination of the Method Detection Limit – Revision 2) requires that the MDL_B be set to highest blank result observed. Section 4 (Ongoing Annual Verification) of Appendix B to Part 136 requires that two years of blank data be used to set MDL_B as part of the annual MDL verification. The requirement that the MDL_B be set to the highest blank value measured in a two year period could inappropriately increase the MDL and the quantitation limit / reporting limit / minimum level.

The requirement to set the MDL_B to the highest MDL value should be removed or made optional. The EPA may want to have the lab develop a policy for addressing the impact of blank data on the MDL; however, the proposed policy seems to need improving. The lab should work with their clients (who could be permittees) to ensure that their data meets their clients fitness for use (i.e., data quality objectives).

Example:

The calculated MDL_S for Method 624 methylene chloride is 0.001 ug/L.

A detectability check sample of 0.003 ug/L is used to verify the Method 624 methylene chloride MDL_S on a quarterly basis.

The lab's lowest nonzero calibration level for Method 624 methylene chloride is 0.005 ug/L. The lab has used the 0.005 ug/L calibration level for 20 years and has been able to obtain calibration curves where the average response factor can be used.

A lab performs 80 Method 624 methylene chloride method blank determinations in a two year period.

70 of the measured blank values are non-detect (non-numerical).

9 of the method blank values are between 0.002J and 0.004J ug/L.

One of the method blank values is 0.006 ug/L.

Sections 4 and 2 of Appendix B to Part 136 indicate that the MDL should be set to 0.006 ug/L based on one blank data point from a two year period. If the lab chose to set the quantitation limit / reporting limit / minimum level to three times the MDL, then the quantitation limit / reporting limit / minimum level would be set to 0.018 ug/L.

The resulting increase in the MDL and quantitation limit / reporting limit / minimum level could require the lab to J flag results between 0.006 and 0.018 ug/L and keep the lab from reporting results below 0.006 ug/L. This would be occurring when the lab has shown for over 20 years that results greater than or equal to 0.005 ug/L should normally be reported.

11. The EPA may want to consider the following process that reduces work on the lab compared to the proposed MDL process while achieving many of the same goals. The proposed system removes the annual requirement to re-calculate the MDL. If the initial MDL estimate is verified when generated and on an ongoing quarterly basis (each quarter that the method is used), then the annual requirement to re-calculate the MDL may not be worth the additional effort. The proposal also makes the use of blank data optional and relies on the labs and their clients (e.g., permittees) to work together to ensure that a lab's data meets the clients fitness for use (e.g., data quality objectives).
 - a. Perform a MDL study per the current Appendix B (not the proposed Appendix B) – adding the proposed requirements to perform testing on all instruments and over multiple (e.g., three days) could be added to the current MDL process.
 - b. Analyze a detectability check sample (a standard spiked at no more than three times the MDL) that must meet the methods qualitative identification requirements after performing the MDL study.
 - c. Analyze a detectability check sample each quarter that samples are analyzed by a method to ensure that the MDL is still reasonable.
 - d. Make the MDL_B (MDL based on blank data) optional and allow the lab to determine the process whereby blank data is used to increase the MDL. The lab should work with their clients (who could be permittees) to ensure that their data meets their clients fitness for use (i.e., data quality objectives).