

Hays, Karen

From: Mitchell, Ken <Mitchell.Ken@epa.gov>
Sent: Tuesday, December 3, 2019 12:26 PM
To: Hays, Karen
Cc: Kuoh, Dika; Mitchell, Ken; Jenkins, Brandi; France, Danny; Blevins, John; Worley, Gregg; Waterson, Sara; Lusky, Katy; Davis, Amber
Subject: Issues with ERG EtO Lab Analyses

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Karen...

On or about August 1, 2019, EPA's contract laboratory (Eastern Research Group - ERG) made a change to their method used to measure ethylene oxide (EtO) in ambient air samples. Although the change was intended to reduce the impact of several interfering compounds in the analysis, it also inadvertently resulted in a loss of sensitivity for the method, mainly affecting air samples with relatively low levels of ethylene oxide at or just above the method detection limit. The result of this change was that air samples were initially marked as "Non-detect" for ethylene oxide when the previously employed method may have provided a low but measurable concentration. EPA became aware of the impact from this method change in mid-November and has worked with ERG to determine that all ethylene oxide samples analyzed since August 1, 2019 need to be reviewed and reprocessed. This reprocessing will reestablish the sensitivity of the ethylene oxide method back to its original level and, once completed, will likely provide additional measurable concentrations in place of the reported "ND's", consistent with earlier reported data. None of the ethylene oxide data previously reported for EPA's existing air toxics networks are affected. I understand that the reprocessed sampling results will be delivered to GA EPD by ERG this week.

While ERG reestablishes their ability to process samples using the original method, EPA Region 4 would like to offer to process any new samples in our lab for the state so as to help minimize any impacts to your EtO sampling program. Our lab is currently in a position to run approximately 30 samples/month (assuming you can continue to supply your own flow controllers). Our normal procedure is to supply the evacuated and cleaned canisters. The details on the EPA Region 4 lab's MDL/MRL for EtO in air (Method TO15) are as follows:

>MRL is 0.073 µg/m³ (nominally)

>MDL is 0.032 µg/m³

>Turnaround time is 35 days

If you would like to send samples to us for analysis while ERG reestablishes the original method, please let me know. We are also making this offer to SCDHEC. Depending on the level of interest from one or both states and the potential volume of samples, we may need to talk about how you would like to prioritize the analyses.

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