Environmental Monitoring Coalition

Monday – May 24, 2021 at 3:00 pm ET

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1. The meeting was called to order by Judy Morgan at 3:03 pm in place of Jerry Parr, Chair and David Friedman, Vice Chair

2. Roll call – Uttenweiler (see checklist at the end of the summary)

3. Update on Current Activities

1. Updating of EPA Method 200.8 – Morgan

The group is going to go forward with the writing a modification document by Richard Burrows. Once the group has reviewed his document, the overall plan will be reviewed by the working group, the EMC and then discussed with EPA.

b. Acrolein/Acrylonitrile Holding Time Study – Morgan

The final lab and data should be finished by early June 2021. The results seem to bear out the proposed holding time and preservation time changes in the study. Recommendation should be completed for sharing with the rest of the group for the June or July meeting. There was a general discussion about the data and the accuracy which is considered good. No data from any lab will be recognizable once published.

c. Initial Demonstration of Capability – Morgan

Dan Hautman reported back to Jerry with this message:

I discussed this topic both internally with our TSC Lab Cert team and also brought it up with all our EPA Regional DW Certification Officers during a conference call this afternoon.  We are not aware of any issued guidance or correspondence that specifically addresses or advises drinking water laboratory Certification Officers to exclusively focus on regulated parameters when conducting drinking water laboratory audits and/or reviewing IDC data.  As you know, there are several approved analytical methods that include an extensive list of target analytes that fall within the scope of the procedure, but most often only a subset of these analytes are federally regulated in drinking water.  During yesterday’s EMC call, I made the point that I suspect nothing was ever issued because this position could be inferred since we codify within 40 CFR Part 141:  the regulated analytes, the approved analytical methods specific to monitor those regulated analytes, and the lab certification requirement that applies to conducting compliance monitoring for these regulated analytes with those approved methods.  EPA allows drinking water primacy states to be more stringent than federal requirements and some may establish state codified monitoring requirements for these additional non-federally regulated analytes, which then would warrant a state auditor’s cited finding.  States also have the authority to be more stringent than federal regulations in how they implement their laboratory certification/accreditation programs and could require labs to generate IDC data for all analytes included in the method scope.  Included within our CO training program are ways for COs to be efficient and prioritize data review during a lab audit.  We suggest the auditor not include in their lab audit these non-regulatory analytes that fall within the scope of the method, but rather they specifically focus on the drinking water federally regulated analytes and associated QC.

During our call with the Regional COs, it was mentioned that auditors review a significant amount of information and if during a lab audit the regional CO would happen to notice poor performance for a non-regulated analyte with failing QC data or poor recoveries in the IDC, they may identify that observation in their report.  In this case, the Region mentioned the observation would include a recommendation that the lab maintain awareness and consider looking into why the method may be performing poorly for that non-regulated analyte, but they would not make it a finding requiring any corrective action.  The observation would be shared with the lab for broad awareness and recognition that the failed IDC for the non-regulatory analyte may represent an early warning of potential future lab performance problems.  Often times specific target analytes can be more sensitive and may serve as early indicators/sentinels that the analytical system (extraction and/or analysis) may be teetering and soon may fall out of control for regulated analytes.

There was a short, general discussion on the paragraphs above. The general agreement was that the information above was acceptable.

Sarah Wright indicated the state assessor group was no longer meeting, but she does have an email list if outreach is needed.

f. Collaboration with EPA letter - Friedman

David Friedman asked Mike Oscar, ACIL Government Relations Director, to review and edit the letter which is attached.



Jerry still needs to set up a task force to work with the EPA. This should be completed prior to the June 2021 EMC Meeting.

Sarah Wright offered to forward the letter to her group for review.

g. EMC Proposal to help EPA address Monitoring Issues (Attachment to EMC letter) - Parr

h. QC Criteria Effort – 608.1, 624 and 625. – Parr

Essentially table – discussion will take place during the June 2021 meeting. It is possible that more comments will be needed.

This is potentially close to completion and needs the timeline for the project.

i. DOEE Sealcoat Protocol

Although EMC did not reach consensus on this topic, based on the discussion and subsequent emails, Jerry sent this response as to his professional opinion.

The Environmental Monitoring Coalition (<https://envmoncoalition.org/>) discussed this briefly at our call last month but did not reach consensus on any position.  But I can share some of the discussion and some information I gleaned from  additional research.

You appear to be want a method to measure PAH in the actual product, not in asphalt, sediment, etc.  If so, I think there are several issues.

1. Reporting on a dry weight makes no sense since the products are liquid.  Event to attempt to determine a dry weight would be a safety hazard due to the volatile components on many of these products. One product contains up to 75% ethanol. Others have highly flammable petroleum distillates.

2.  The method is written as if the product was a solid such as a chunk of the parking lot or soil.  The SOP mentions 8270, but does not indicate the sample preparation method.  Page 17 of the data package discusses using methylene chloride to extract a 1-5 g sample, presumably using SW-846 Method 3540. Method 3580, Waste Dilution, is designed to measure organic compounds in a non-aqueous liquid and would be more appropriate.

3. As shown in the data package, the recommended quality control is not appropriate.  Because of the dilutions required, it is unlikely the laboratory will ever see recoveries for surrogates or matrix spikes.  The QC requirements in the NELAP standard and SW-846 were designed for typical environmental levels in the ppb range, not in the percent range. This type of QC is not appropriate for a product.  All that is required is calibration verification and maybe a duplicate.  No matrix spikes, no surrogates. This is because there is no "extraction" which could lead to low recoveries.

4.  Your list of PAH is the standard PAH on the priority pollutant list.  Coal tar contains many other PAH including nitrogenous PAH like carbazole.  See the attached article. Note that while your list is about 75% of the PAH in coal tar, it is only 20-30 % of the PAH in crude oil.

Finally, I'm not sure using a NELAP accredited laboratory makes sense in this case.  Environmental labs are set up to measure environmental media such as water and soil, not products containing very high levels of contaminants. Bringing such a sample into an environmental laboratory would likely result in significant contamination of their other samples.

A product testing laboratory accredited to ISO 17025 might be more appropriate.  Here is one example: <https://www.lcslaboratory.com/material-testing/msds-tests/>. Note their chemical composition test uses GC to measure chemicals from 0.05% to 100%.  There are many others.  Google <product testing msds>.

No further action by EMC is requested.

j. TOC/BOD correlation – Johnson and Lipps

The Task Force is being formed. Once the review takes place, the report will be done. The project is still underway. There is a sentence in the regulation but does not provide details. WEF has four labs on their professional community that might be able to provide definitions of a long term study and what a correlation is. This is relating to a wastewater treatment plant.

5. There being no further business, the call was concluded at 3:23 pm.

Respectfully submitted,

Robert Uttenweiler

ACIL Section Executive Officer

**Roll Call**

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| **Members** |  | P / A |
| Jordan Adelson | US Navy (DOD ELAP) | P |
| Kristin Brown | Utah DOH | P |
| Richard Burrows | Eurofins | A |
| Michael Delaney | MRWA (Massachusetts Water Resources Authority) | P |
| David Friedman - Vice Chair | ACIL | A |
| Jay Gandhi | Metrohm | A |
| Mary Johnson | Rock River Reclamation District (WEF) | P |
| Kitty Kong | Chevron | P |
| William Lipps | Shimadzu | P |
| Sharon Mertens | Milwaukee MSD (TNI) | P |
| Judy Morgan | Pace Analytical (ACIL) | P |
| Jerry Parr - Chair | TNI | A |
| Steven Rhode | MWRA (APHL) | P |
| David Thal | Environmental Standards | P |
| Sarah Wright | APHL | P |
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| **Staff / Invited Guests** |  |  |
| Carol Batterton | TNI | A |
| Robert Uttenweiler | ACIL | P |
| Kathleen Young | PerkinElmer | A |
| Tarun Anumol | Agilent | P |
| Richard Bright | ACIL | A |
| Michael Flournoy | Independent Consultant | A |
| Lori Pillsbury | OR Dept. of Environmental Quality | A |
| Zach Mandera | OR Dept. of Environmental Quality | A |
| Jack Farrell | AEX | P |
| Brad Meadows | Babcock Labs | A |
|  |  |  |
| **EPA / Others** |  |  |
| Dan Hautman | EPA | A |
| Adrian Hanley | EPA | P |
| Kim Kirkland | EPA | P |
| Troy Strock | EPA | P |
| Bekah Burket | EPA | P |
| Lemuel Walker | EPA | P |
| Brian Damico | EPA | A |