

## NADP QAAG Meeting Minutes

Tuesday, October 8<sup>th</sup>, 2025

1:00 PM – 2:30 PM Central

Joined via Zoom

**Attendance:** Martin Shafer, Richard Tanabe, Christa Dahman, Eric Hebert, Justin Knoll, Dana Grabowski, Zac Najacht, Mark Kuether, Katie Blaydes, Tim Sharac, Marcus Stewart, Greg Beachley, Jason O'Brien, Cheryl Sue, Melissa Puchalski, Nicole Miller

### 1. Site Support Issues/Questions – *EEMS – Eric Hebert*

- Eric Hebert discussed ongoing site audits and introduced Justin Knoll as a new EEMS team member who will help with workload distribution. They reviewed feedback from Dana and Richard and will implement new training procedures to address identified issues.
- Eric raised concerns about two siting criteria: a 15% or less ground slope within 5 meters of the sampler, and ground cover typical of the area within 5 meters of the collector. Eric highlighted that these criteria, developed in the 1970s, may be misleading as they only consider a small area around the sampler, potentially providing inaccurate information about the surrounding environment. The group agreed that expanding the radius for ground cover assessment might be necessary, but they need to determine an appropriate distance. They also noted that while the ground slope criterion is a guideline, its relevance to collection efficiency remains unclear, as they lack data on this specific aspect.
- The group discussed tracking and recording of certain data points, in the end agreeing that marking them as "not tested" where the possibility remained that they would be providing inaccurate data due to lack of historical tracking.
- Eric reviewed the status of AMNET audits, with Vid scheduled for an Ohio (OH52) installation later in the week. Richard confirmed that speciation measurements had been discontinued at most sites.

### 2. Site Operations – *Richard Tanabe*

- No major update, current challenge has been with the government shutdown and determining which federal sites with federal employees are operating and able to receive shipments. Approximately 40 sites have submitted surveys or we have received Out of Office replies indicating they are on furlough, there have been about 8 sites that have indicated they have been cleared to continue sampling.

### 3. PFAS – *Martin Shafer*

- Martin Shafer provided updates on PFAS research and collaborative projects. He highlighted recent progress, including a recent paper on Evaluating PFAS prevalence and potential for biological effects in Lake Superior Tributaries (<https://doi.org/10.1093/etoinl/vgaf073>), a manuscript that has been submitted for EPA review, and a Master's thesis. Melissa P. has been leading efforts on the 12-point plan for PFAS sampling, which has been submitted to Exec Committee for review. The plan is to submit a motion to approve the PFN subnetwork as an official NADP network during the fall meeting. Martin also mentioned new funding for studying

PFAS at 7 NTN sites in Minnesota in 2026-29, and ongoing efforts to recruit more sites for PFAS research.

- Network Field QA: Martin presented updates on quality assurance changes, proposing to shift from quarterly to semi-annual field blank and spike collections while increasing laboratory precision and uncertainty testing. He shared results from a Duke Forest co-location study showing remarkable precision in PFAS measurements, with RSDs ranging from 6% to 14% for different compounds at low concentration levels. The discussion also covered the extremely low detection rates in trip blanks, with only a few compounds detected above the limit of quantification, demonstrating the high quality of sample handling and processing.
- There was a discussion on the readiness of the PFAS Research Center lab for network approval, with Martin highlighting the need to consider NTN qualifiers' applicability (NTN "notes" codes, which are currently ignored, oftentimes indicating debris or other impacts to samples) to PFAS collections and improve data web accessibility. Christa Dahman expressed concerns about lab staff's understanding of the quality assurance plan and emphasized the importance of defining standard operating procedures.
- There was also discussion about the issue of debris in NTN samples, with Tim noting its prevalence and Martin suggesting further discussion on how to handle it. Currently debris in NTN samples do not impact PFAS analysis. A point was raised that flags would be good to carry over to explain absence of valid NTN samples for same period of PFAS samples.

#### 4. Lab Investigation Projects (current and upcoming)

- Hg Passive Samplers *Christa Dahman* - Christa provided updates about the ongoing passive mercury sampling project and their results. For passive mercury sampling, Christa reported that Q1-Q2 2025 data was complete, with Q3 data incoming, and proposed rebalancing sampler types to reduce costs while maintaining data quality. Currently 4 Tekran, 1 NADP, and 1 of each Travel Blank (TB), switch to 1 Tekran, 2 NADP, 1 NADP TB (every other quarter). Will continue to investigate activated charcoal impregnated with chloride vs Sulphur, Tekran is Sulphur but chloride is less aggressive on the instrument.
- TN/TP *Katie Blaydes* - Katie provided an update on TNTP sampling, noting that a total phosphorus study with Colorado State University was on hold due to high background levels from the samplers.
- AMoN Alpha Samplers *Katie Blaydes* – Katie presented results from the intercomparison study comparing Alpha passive ammonia samplers to Radiello samplers, with data showing similar performance between the two methods. Continuing with CA83, WI06, and CO98 inter-comparison until end of year. Confirmation of the order was received just before the meeting, still on track for 1/13/2026 start date. Operator training will be held in mid-November. The group agreed to increase field QC for Alpha samplers to 15% TB and 15% duplicates for one year to ensure precision, with plans to reassess based on results. Set criteria for precision after a year (i.e.10%)
- MDN Bag Testing *Christa Dahman* - Christa provided an update on the initial results from the prototype MDN bag and mentioned issues with Teflon bags for MDN sampling, noting elevated

blanks and handling difficulties. Another option is polypropylene bag, still waiting on sample for QA testing.

- Christa and Richard are exploring alternative sampling methods to reduce costs and shipping issues. Christa proposed using 2-liter Teflon bottles, which are reusable and less prone to breakage, though they are expensive upfront. Brominate in bottle, then transfer to vial for storage. In addition can consider using polypropylene or HDPE funnels, pipette tips, and rigid tubing to facilitate sampling. Richard provided information on the potential to reduce shipping costs by optimizing box sizes and minimizing glassware use. Further testing will continue on the bottles, and cleaning methods and explore options for acquiring the necessary materials.

#### 5. Lab Updates –

- Naviant ABBYY OCR *Zac Najacht* - Zac Najacht presented the OCR (Optical Character Recognition) initiative with Navient, which aims to improve data entry efficiency. The State Lab of Hygiene is exploring this technology, with NADP potentially covering annual costs. Zac explained the proposed changes to the data entry process, including scanning forms and using OCR software to reduce manual data entry. The team is waiting for the OIS department to finalize the contract before proceeding with development.
- SEAL AA500 Validation *Katie Blaydes* - Katie reported on the installation of a new SEAL AA500 instrument, which will replace the discontinued NTN Hach Lachat. The goal is to have the instrument validated by the end of the year. Plan is to use archive samples for validation. The throughput between the two instruments is about the same (60/hr) and the costs are similar.

#### 6. QA Documents – *Nichole Miller*

- 2024 QAR – review by end of December.
- Updated NTN field procedures – lid procedure change – review by 10/20/25