

Secretaries' Science Advisory Board

MEETING MINUTES

Training Room, Green Square Building

Wednesday, April 5, 2023

10:00 AM-1:00 PM

The Department of Environmental Quality (DEQ) and the Department of Health and Human Services (DHHS) Secretaries' Science Advisory Board (SAB) met on Wednesday, February 8, 2023, in person in the Training Room in the DEQ Green Square Building, in a public meeting. SAB members in attendance were Tom Augspurger, PhD, Chair; David Dorman, PhD; Jamie DeWitt, PhD; Richard Di Guilio, PhD; Tom Starr, PhD; Gina Kimble, PhD; John Vandenberg, PhD; Betsey Tilson and Detlef Knappe, PhD. The SAB members in virtual attendance were David Howard; and Elaina Kenyon, PhD. Also, in attendance were DEQ and DHHS staff: Frannie Nilsen, PhD; Stephanie Bolyard, PhD; Michael Scott; Richard Rogers, Paula Chappell, Dylan Friedman, Chris Ventaloro, Kennedy Holt, MSPH; Virginia Guidry, PhD, MPH; and Zack Moore, MD, MPH.

I. Call to Order

Meeting called to order at 10:05 AM by Chairman ("Chair") Augspurger noting it is an in-person meeting with a few Board members attending virtually due to schedule conflicts.

II. Review and Approve Agenda

Chair Augspurger asked for a motion and second to accept the agenda with the changes made to accommodate the presentations. The agenda was approved by unanimous vote.

[April 05, 2023 Agenda](#)

III. Ethics Statement

Chair Augspurger read the ethics statement and reminded the members that if anyone had any conflict of interest, or issues for which a conflict may be perceived, to indicate so. No conflicts were noted by those in attendance.

IV. Approval of Meeting Minutes for February 08, 2023

The draft meeting minutes were circulated to all members and minor edits were requested; the December minutes were adopted unanimously by verbal vote to include the requested edits.

[February 08, 2023 Meeting Minutes](#)

V. DEQ/DHHS Updates

DEQ Update: ([meeting recording 00:05:49](#))

Provided by Sushma Masemore, P.E., Assistant Secretary for the Environment, NC DEQ.

PFAS Update:

- DEQ continues to implement the [PFAS Action Strategy](#), which prioritizes 3 action areas: 1- Protecting Communities, 2- Protecting Drinking Water Sources, 3- Cleaning Contamination. Most of the update is related to Protecting Communities.

- Sampled 50 large municipal drinking water systems in anticipation of EPA's MCL announcement and reported results to the operating systems. DEQ is working with the affected communities and operators.
 - DEQ's Division of Water Resources is also implementing a plan to sample smaller community systems.
- GW team is testing ambient monitoring wells across the state that DEQ oversees or has access to. The data will be presented and made available when the testing is finished.
- DEQ's Division of Waste Management is working with Guilford Co Health Dept and the City of Greensboro to sample private wells for PFAS around the Greensboro Airport. There have been 22 wells resampled based on earlier results, and we are working with the City and property owners to communicate the results.

Chemours Update:

- Fayetteville Area/Surrounding the Facility: There have been over 10,000 residential wells have been sampled, over 5000 qualify for filtration and/or municipal water connection.
- Lower Cape Fear Region: This is part of the effort Chemours is taking to further characterize the contamination in NC. There have been 4462 residential well samples have been collected and analyzed for the Consent Order PFAS, 1083 residential wells (~24%) have PFAS that are above the consent order criteria; 636 in New Hanover County, 93 in Brunswick County, 352 in Pender County, and 2 in Columbus County.
 - DEQ has identified 7100+ properties that will be tested.
 - DEQ believes there are more properties to test that have not requested testing, and DEQ is working diligently to connect with these community members.
 - Reviewing the Chemours Work Plan for this Lower Cape Fear Region that includes hypotheses as to how the contamination got into this region.
- Barrier Wall: Construction is progressing on the wall and the contaminated ground water extraction system. The extraction system will have to comply with the NPDES permit for the facility which is one of the most stringent in the country for a PFAS emitting facility. It is currently operating at ~20% of the design flow.
- Stack Testing: The emissions from Chemours go through a thermal oxidizer before being released as well as various carbon absorbers. DEQ's Air Quality team has been working with EPA to evaluate the new test method (OTM 50) and the data will be released after review.

Board questions and DEQ answers occurred at 00:14:55 in the [meeting recording](#).

DHHS Update:

Provided by Kennedy Holt, MSPH, Environmental Toxicologist, Occupational & Environmental Epidemiology, NCDHHS

- Fish Consumption Advisories for PFAS: DHHS is finalizing work on PFAS related consumption advisories. The staff is working on suite of things around this; the advisories themselves and the communication plan for the impacted residents, communication materials for signage at Local Health Departments and local jurisdictions so ensure a coordinated effort and messaging campaign.
- DHHS is working with DEQ's Division of Water Resources, Water Sciences Section to increase the monitoring of algal toxins in NC. DHHS is taking DEQ's routine samples to conduct additional analysis of cyanotoxins to understand their prevalence in NC and help establish a background data set for NC.

Board questions and DHHS answers occurred at 00:26:20 in the [meeting recording](#).

VI. PFOS and PFOA Bioaccumulation Factor (BAF) Evaluation (*meeting recording: 00:35:30*)

The initial presentation on this topic was presented on October 3, 2021, and can be found [here](#).

[Summary of the Evaluation of Literature PFOA & PFOS Bioaccumulation Factors for use in Surface Water Standards Development Presentation](#)

The Request from DEQ to the SSAB was:

- 1) Does the SSAB support for the use of EPA literature for the foundation for BAFs for NC?
- 2) Is the method that DEQ Applied to the EPA's vetted BAF data a scientifically sound approach for NC BAFs?
- 3) Is the EPA's method of using the geometric mean as the BAF scientifically sound for use in NC waterbodies with PFOA & PFOS?

The summarized Board discussion regarding Item #1:

- Board members support the use of the EPA-vetted literature to be used as the foundation for BAF derivation in North Carolina (Dec 2022 Meeting).

The summarized Board discussion regarding Item #2:

- Board members agree that DEQ's process is a scientifically sound method, as the goal is to derive a surface water concentration to ensure fish are safe to eat.
- With all species from the EPA's Draft Aquatic Life Criteria included in the BAF calculation for PFOS and PFOA, the Board notes that the summary statistics have not changed much and either data grouping is appropriate. (Feb 2023 Meeting).

The summarized Board discussion regarding Item #3:

- Board members (with 2 abstentions) supported the use of the geometric mean as that is the value that the EPA uses in their BAF calculations (April 2023 Meeting).

IX. DEQ Actions Regarding EPA's proposed MCLs for PFOS and PFOA (*meeting recording: 01:29:30*)

Provided by Julie Grzyb, Deputy Director of the Division of Water Resources, NC DEQ

[PFOS and PFOA Proposed MCL Presentation](#)

- The Board discussed the need for effective and timely communication to customers of public water systems that levels of PFOS and PFOA above or below 4 ppt been measured in the finished water. (add time stamp in meeting recording)

X. PFAS in NC – Next PFAS for Toxicological Evaluation (*meeting recording: 01:54:08*)

Provided by Frannie Nilsen, PhD, Environmental Toxicologist, NC DEQ

[PFAS in NC Presentation](#)

XI. Public Forum

No members of the public signed up to speak at the meeting.

XII. Adjourn

Meeting was adjourned at approximately 1:15pm