

Secretaries' Science Advisory Board

MEETING MINUTES

Virtual – Webex (see sign in information on Agenda)

Monday, August 1, 2022

10:00 AM-1:48 PM

The Department of Environmental Quality (DEQ) and the Department of Health and Human Services (DHHS) Secretaries' Science Advisory Board (SAB) met on Monday, August 1, 2022 virtually via Webex, in a public meeting. SAB members in attendance were: David Dorman, PhD (Acting Chair); Viney Aneja, PhD; Jamie DeWitt, PhD; David Howard; Elaina Kenyon, PhD; Gina Kimble, PhD; Detlef Knappe, PhD; Thomas Starr, PhD; Betsey Tilson, MD MPH; and John Vandenberg, PhD. Also, in attendance were DEQ and DHHS staff: DEQ Assistant Secretary Sushma Masemore; Frannie Nilsen, PhD; Kim Gaetz, PhD, Kennedy Holt PhD, JW Spoo, PhD; Michael Pjetraj; Brian Wrenn; Michael Scott; Richard Rogers; Sharon Martin; Laura Leonard and Dylan Friedenber.

I. Call to Order (Temporary Chairman David Dorman)

Meeting called to order at 10:00 AM. Temporary Chairman (Chair) Dorman convened the meeting at 10:00 AM, noting it is a virtual meeting. He stated that Dr. Augspurger asked him to serve as chairman and is not attending today's meeting. He said Mr. David Howard, New Hanover County health director, has accepted the position on the Board to represent the State Health Directors, and will introduce himself a bit later.

II. Review and Approve Agenda

Chair Dorman asked for a motion and second to accept the agenda, which was approved by unanimous vote.

[August 1, 2021 Agenda](#)

III. Ethics Statement

Chair Dorman 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. Dr. DeWitt explained that she is currently working on research on PFAS, receives funding from the NC General Assembly and the federal government for said research, and serves as an expert witness in cases involving PFAS. Dr. Knappe also explained his research on PFAS, indicating he also receives funding from the government.

IV. Approval of Meeting Minutes for June 6, 2021

The draft meeting minutes were circulated to all members for review July 29, 2022. Dr. Vandenberg asked if links to documents/webpages mentioned in the minutes could be included, especially those concerning PFAS; Chair Dorman agreed it would be helpful. Dr. DeWitt moved acceptance as modified; Dr. Vandenberg seconded, and the June minutes were adopted unanimously as amended by verbal vote.

V. SSAB, DEQ, and DHHS updates (Meeting Recording: [7:04](#))

SSAB Update:

The Chair welcomed Mr. David Howard to the Board and asked him to introduce himself.

Mr. Howard said he has served the past 5 years in New Hanover County, as Assistant Health Director and as Director for the past 1 ½ years. He served prior in Bladen County and Hyde County as Health Director. The County Health Department permits all private wells in the county, and so Mr. Howard and the Department are involved in PFAS work and protecting drinking water. He said he is happy to be on the Board and to give a perspective to the Board of the Health Departments. He has a Bachelor's degree in business and a Master's degree in Public Health from UNC-Greensboro.

DEQ Update:

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

Mrs. Masemore gave updates on the GenX drinking water health advisory by EPA and DEQ's response/action plan, groundwater sampling by DWR for PFAS, and the joint fellowship program between DEQ and the Collaboratory.

EPA's PFAS announcement/DEQ's Action Plan –

- Lifetime drinking water health advisories for PFOA, PFOS announced June 15, replacing 2016 health advisory. The new EPA interim lifetime advisories are 0.004 parts per trillion [PPT] for PFOA and 0.02 PPT for PFOS. EPA plans to propose national drinking water regulations for PFOA and PFOS this fall and final in 2023;
- 4 PPT is the analytical limit being used currently.
- PFAS Network data shows detectable levels of PFOA and PFOS above 4 PPT in 53 Counties; sampling protocol being established in 50 sources and conducting testing over the next three (3) months;
- Wastewater systems discharging PFAS into surface water are being monitored
- NC interim maximum allowable groundwater concentration (IMAC) for PFOA is 2000 PPT, set in 2006; proposed to be reduced a couple years ago to 70 PPT per EPA 2016 guidance; halted after following most recent science indicating additional review prudent and a potentially much lower reference dose;
- Received request to withdraw IMAC for PFOA referencing EPA's health advisory; currently under review
- 703 monitoring wells, at 234 monitoring stations in 68 counties; working toward testing all wells, starting in the Cape Fear River Basin [DWM Presentation on GenX Private Well Sampling](#)
- GenX and PFBS: recent EPA drinking water advisory for GenX set at 10 PPT, replacing DHHS provisional health goal of 140 PPT; Chemours filed petition for review of EPA's health advisory in federal courts; private drinking water wells impacted with levels above 10 PPT of GenX to receive water remediation (three options) from Chemours, so owners can make an informed decision, and feasibility study re: public water connection to be complete 9/13/2022; affected Counties are Cumberland, Bladen and Robeson, in addition to New Hanover and Columbus.
- Public hearing regarding the barrier wall proposal was held in June; the Hearing Officer is reviewing comments to offer recommendations.
- DAQ is continuing to monitor Chemours 1.0 pounds/month emission level; 1.07 lbs GenX emissions reported in June; working to remit, monitor
- Guiding actions to Action Strategy [Press Release - PFAS Strategy](#); [DEQ Action Strategy for PFAS](#)
 - Protect Communities – Identify risks, notify citizens at risk of exposure
 - Protect Drinking Water – set regulatory standards, working with utilities and industries
 - Cleaning up existing contamination – remediation of sites

- Joint fellowship program between DEQ and NC Collaboratory; Dr. DeWitt (ECU) and Dr. Lee Ferguson (Duke University) first Fellows, and will start in late-August, completing work in December 2022 [DEQ/NC Collaboratory Fellowship Program announcement](#)

The following links are provided that are referenced in the discussion following the DEQ Update.

- Data are shared with homeowners and health directors on public water, private well sampling and filtration options, so the homeowners can make an informed decision [GenX Information for Residents](#)
- Groundwater data are available on website now: [Groundwater Management Data](#)

DHHS Update:

Provided by Dr. Kim Gaetz, DHHS

Dr. Gaetz welcomed Mr. Howard to the Board and thanked him for his partnership on PFAS in New Hanover County. She also welcomed new staff member: Josh Loehmann (Health Assessment Coordinator), Dr. JW Spoo (Environmental Consultant) and Robert Cockrell (Fellow to Epidemiology branch, working on the Environmental Health Dashboard). The beta version of the Dashboard is available on the DHHS website: [Environmental Health Dashboard \(NCDHHS\)](#)

A CDC grant was just awarded to DHHS to be part of the national environmental health tracking network, launching August 1, 2022.

1. PFAS and other issues:
 - a. Close partnership with DEQ efforts on PFAS; reviewing guidance on PFAS exposure, testing and clinical follow-up just released by the National Academy of Sciences, Engineering and Medicine.
 - b. Updating PFAS/GenX data on website and provider memo, based on feedback and overview of health communication in other states; Dr. DeWitt coauthored feedback.
 - c. DHHS participated in the NC Clean Transportation plan and public participation plan is drafted and posted on DHHS website, per EO 246, Section 8 [NCDHHS Public Participation Plan](#).
2. Climate Change – BRACE program developing climate impact compendium, being finalized; informing future climate and health impacts and adaptive capacity in NC [Climate Change and Health](#).
3. Private well and health program was awarded Year 2 funding, including a pilot project to geolocate wells and septic systems in low income/underserved census tracts in southeast NC; collaboration between the epidemiology department and environmental health service division of DHHS.
4. NC COVID wastewater monitoring also now monitoring monkeypox; no detections so far at any sites.
5. Dr. Dorman invited Dr. Spoo to introduce himself; he is a veterinary toxicologist and has worked in toxicology for 33 years, 27 in private sector with RTI International, joined DHHS in May and most of his time spent on PFAS; he is looking forward to learning more about how PFAS affects NC and other states.

VI. NCDEQ and the EPA PFAS Values

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

[NC DEQ and the EPA PFAS Values presentation](#)

Dr. DeWitt mentioned a paper published by the Dutch equivalent of EPA which addresses potency on internal concentration basis and provided the link: <https://ehp.niehs.nih.gov/doi/full/10.1289/EHP10009>

Chair Dorman asked Dr. Nilsen to give the presentation on the Consent Order Toxicity Studies, as the meeting was ahead of schedule.

VII. Consent Order Toxicity Studies

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

[Status of Chemours Consent Order Toxicity Studies](#)

VIII. Lunch Break – 11:30 AM-12:30 PM

IX. Board feedback on PFMOAA papers (Meeting Recording: [1:28:00](#))

The Board discussed the two PFMOAA peer-reviewed (Yao et al. 2020 and Woodlief et al. 2021) to determine if the existing data is of high enough quality and presents adequate results to derive a reference dose. The two questions posed by DEQ were:

1- Review the PFMOAA studies in detail.

- assess the quality of the studies (low, moderate, high)
 - based on sample sizes, dose regimes, endpoints measured

2- Do these studies provide enough scientific support to utilize the POD for deriving a Reference Dose now?

The Board discussed that the two studies were of high quality and had limitations in their own ways but nothing that would prohibit their use by the NCDEQ. The Woodlief study presented mostly no effects data (effects not statistically significantly different than controls), so higher doses may be appropriate to realize the toxic potential of PFMOAA. This study could be useful range-finding to inform the consent order studies. Currently, there is much more research/data needed for PFEAs. These two studies do not provide a consistent point of departure or adequate foundation from which to derive a reference dose for PFMOAA.

X. Water and Fish Collection Update (Meeting Recording: [1:55:00](#))

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

[Summer 2022 Water and Fish Collection Event presentation](#)

Dr. Holt (DHHS) said the fish consumption advisories are site-specific; the study wanted to look at the Cape Fear River holistically, rather than one part at a time. Sectional review of the rivers and fish travel methodology is used by Wisconsin, and this study mirrored that. Fish advisories are already in place for specific Cape Fear River sections for other things such as mercury, and they do affect how other advisories are made.

XI. Public Forum

Several speakers had signed up, but no one was present to speak.

XII. Adjourn

Chair Dorman entertained a motion to adjourn, made by Dr. Vandenberg, seconded by Dr. Aneja which was agreed by the Board, and with no further business, Chair Dorman adjourned the meeting.

The meeting adjourned at 2:15 pm.

Respectfully submitted,

Louise G. Hughes

Assistant to Sushma Masemore, Assistant Secretary for the Environment, DEQ