

**Citizen's Advisory Workgroup (CAWG) Meeting Summary  
February 11, 2020 {Final 3/10/2020}**

**Attendees:**

William Barnett	Theresa Landrum	Randy Rothe
A. J. Birkbeck	Deb MacKenzie-Taylor	Ninah Sasy
Connie Boris	Susan Manente	Christina Schroeder
Daniel Brown	Renaë Mata	Steve Sliver
Daniel Buyze	Pam McQueer	Tony Spaniola
Penny Burns	Gale Dugan	Sandy Wynn-Stelt
William Creal	Abiy Mussa	
Jennifer Carney	Amy Peterson	
Kory Groetsch	Kelly Ploehn	
Michael Jury	Bob Potocki	

The attached presentation was used to help facilitate the discussion.

**Meeting Summary**

**MPART UPDATES:**

(Provided by Steve Sliver)

- Comment period ended on January 31<sup>st</sup> for the state drinking water maximum contaminant levels (MCLs); approximately 3,300 total comments received. EGLE currently evaluating and preparing a detailed response, identify any changes made based on the comments. The goal is to have responses to the Environmental Review Rules Committee by the end of the month to be reviewed prior to the meeting. On target to have rules completed by May.
  - MPART Human Health Workgroup also evaluating comments regarding health-based values. They will assist with responses, the possibility of changing MCLs, and specific health-based comments that may need to be addressed individually.
  - Science Advisory Workgroup has a detailed report with discussions regarding decision making and differences between state and agencies levels.
- Updated to 78 PFAs sites confirmed in Michigan
  - *Portage Michigan, Former Landfill and Firefighting Training Facility*
    - Discovered during self-Initiated testing
    - Open House 2/13
  - *Muskegon County Airport*
    - This was previously marked as an area of interested because of water data from residential wells surrounding the Site
    - New on-site data confirms it as a PFAs site
  - *Georgia Pacific Corporation*

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- Community Updates: *(These sites/areas of concern are not published yet)*
  - *Pellston Airport*
    - Discovered during self-initiated private well testing
    - Townhall meeting scheduled for 2/11
    - EGLE will complete on-site testing soon to confirm as a PFAs Site
  - *Arbor Hills Landfill*
    - Townhall to be announced
    - Discovered in on-site monitoring well. It is not anticipated to be migrating off-site, but EGLE will sample up to 10 private wells to confirm
  - *White Pigeon*
    - Townhall meeting to be announced, currently working with local health officials
    - Notice of off-site migration was issued, migration likely going into the White Pigeon River
    - EGLE will sample up to 35 private wells surrounding the area of concern

**DERMAL EXPOSURE STUDY UPDATE:**

(Provided by Abiy Mussa)

- Very high concentrations of PFOA applied directly to mice's skin was found to cause immune system disfunction. The concentration used was 20-80 times higher than the highest concentration found in the environment
- Study also examined exposure verses ingestion as well as recurring dermal contact using highest concentration and new toxicity information
- Based on that information, main concern for route of exposure is still ingestion and
- Used research from a paper published in 2012 (new study doesn't change how dermal exposure is evaluated)

**Questions:** Sandy – What are the levels of concern for bathing/showering?

**Answer:** Deb – 100,000 ppt range is where it starts to become a concern. Currently no sites in Michigan have tested that high. Filters are available for the home if concerned.

**Question:** AJ - What efforts are taken to increase awareness or notify the impacted communities. He has noticed people still using water for recreation (fisherman, kids standing in water, etc.) when foam is present.

**Answer:** Deb – Signage available for communities that are impacted, in addition will work with local health department if communities need them. Information regarding foam was distributed last spring. In addition, dermal exposure study is repeated exposure, 2-hours a day, for 12 weeks.

**Answer:** Sue – With recreational season upcoming, she will contact Kent County again, permanent signs for communities along the Huron River delivered.

**Answer:** Abiy – Ingestion is the major exposure route

**Question:** Tony – Why was such a high dose of PFAs used?

**Answer:** Abiy – Used higher concentrations for worker safety concerns (NIOSH). To evaluate exposure risks for people working with those chemicals daily.

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**Question:** Connie – Have studies been conducted on blood and tissue samples from children in Oscoda that were exposed through impacted drinking water wells? Do you observe health impacts and mental effects on these people?

**Answer:** Deb – MDHHS conducting PFAs exposure and health studies in communities with high levels being done (Parchment and Cooper Township, along with north Kent County). Study to look at blood levels and associated health effects with those levels. Working with the Agency for Toxic Substances and Disease Registry to look at health effects in children from those communities compared to children in communities with varying concentrations of PFAs in their blood, and possibly health outcomes associated with elevated PFAs levels. Also looking at neurological-behavior outcomes; ongoing study with children exposed to PFAs at a daycare center located on a military base in New Hampshire.

**MPART SITE EVOLUTION:** Process of identifying PFAs Sites and working with impacted communities (Provided by Steve Sliver)

- **Discovery:** MPART approach in identifying sites  
EGLE Investigations include:
  - Proactive groundwater and surface water testing, including Fish
  - IPP Program-identifying discharge points
  - Public Water Supply testing - middle tier areas where PFAs was detected, but not exceeding. Currently being monitored, but what additionally needs to be done?
  - In response to a complaints
  - Self-Initiated Investigation (ex. Pigeon Ford, BEAs conducted for property transactions)
  - Self-Initiated Private Well testing (ex. Pellston - local school tested shallow private wells, after PFAs was identified in the deep municipal wells)

**Question:** AJ – Availability of State sponsorship for self-initiated private well testing.

**Answer:** Steve – Currently the EGLE State lab charges \$290 for PFAs analysis, other labs can be less expensive (ex. Fresh Waters Futures Lab charges \$70). However, EGLE will occur costs in areas of suspected impact. In addition, discussing releasing a Citizens Guide for PFAs with possibly a map showing impacted or possibly impacted areas in Michigan. – GIS capabilities, working on getting all existing data sets/testing analysis in Michigan in one database and also the use of prediction software with existing data.

**Comment:** Dan Brown interested in assisting with a solutions/guidance document for citizens.

- **MPART Evaluation:** What the information it means?  
Evaluated in multiple directions before the data is released and put context to it:
  - Technical Review - Laboratory results
  - Human Health Review - Is the concentration a concern?
  - Potential Sources – Are results ambient or is there a bigger issues happening?
  - Receptors – Who are the potential receptors and exposure pathways?

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- **Communication:** How to effectively communicate the information/findings?
  - Property Owner, Responsible Party, Operator
  - Local Health Departments (usually first agency contacted)
  - Local municipalities and officials
  - Elected Officials – State and Federal
  - Consistency of information going into the community and to the citizens
  
- **Next Steps:**
  - Investigation
  - Monitoring
  - Testing
  - Mitigation
  - Remediation
  - Outreach/Communications with community through the whole process
  
- **Hurdles:**
  - Resources
    - Staff, Funding, IT Resources
  - Time
    - Action vs. Communication
  - Lack of Information
    - Investigation, Research
  - Priority
    - Other regulated contaminants, regulatory authority

**HOMEWORK:** Keeping in mind the process of identifying and communicating PFAs Sites or impacted communities discovered, please think about and identify the following.

- Inventory of what empowers an impacted community
  - Information
  - Timeliness
  - Content
  - Delivery
  
- Input/Ideas
  - Ongoing investigations and remediations
  - Effective communication

**Question:** Dan – When will MCLs be released? More questions/concerns may arise once those are identified.

**Answer:** Steve – Lots of questions raised, still evaluating,

**Question:** Connie – Concern with PFAs in Soil? When will criteria for soil be decided?

**Answer:** Steve - Currently evaluating PFOs in soil from land-applied biosolids, how they move through matrix? behave differently depending on soil? (ex.sticks better to organics, doesn't like sand). Soil

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Survey underway, Toxicology Evaluation with DC, Remedial alternatives-are they like metals? Landfill and now in leachate water. Still evaluating.

**COMMUNITY SHARING ROUND-ROBIN:**

- **Updates/Follow-up**

- No comments regarding the January 21, 2020 CAWG Meeting Summary and it will be finalized
- Draft recommendations for information sharing – Jeff and Christina will assist, waiting for Steve's guidance

- **Announcements**

- Dan Brown attended a joint meeting with lawyer from WWF regarding PFAs, identification, procedures, sharing information from different agencies.
- Soil Discussion for Ann Arbor - regarding high PFAs concentrations found in local compost that has been applied to citizens gardens for "decades." Nearby surface waters tested had low concentrations. Concerns of it leaching into vegetables, etc.
- Tony attended a presentation in Berkley California, included several topics:
  1. PFAs in compostable food packaging, lots of available information from Europe
  2. "Black Plastic" material - found in food containers and electronics = have PCBs (banned in Europe)
  - Reminder PFAs conference in Ann Arbor next week (full) will be live streamed
  - No Defense Movie – tickets still available at Michigan Theater
- Bob – Thanked Steve for the Dark Waters Movie, followed by comments. Interested in Dr. Murphy's Research (MSU) regarding PFAs in fish and animals. Hoping other PFAs compounds are identified and studied
- Arney – Encouraged others to reach out to their congress person and/or representative about PFAs concern, etc. Also, wondering about EPA mapping tool for site investigations. (Steve later updated the group through email that the EPA PFAS Analytic Tool has limited access/use)
- Steve will update at the next meeting on DOD and EPA are on the National Defense Authorization Act Provisions
- Let Steve know of future agenda items that should be discussed.

**Future Meetings:**

March 10, 2020

April 14, 2020

May 12, 2020

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Moving Forward – Steve would like to focus on engaging communities, public education, possibly host future meetings from a townhall or community meeting