November 14th Microfiber Pollution Working Group Notes:

- Welcome: Tom Metzner, DEEP
  - Want to look at the law and its requirements and see what the group can agree upon addressing each requirement.
- Introductions by each member
- Discussion of Requirements in Public Act 18-181
- a. "consumer oriented information that explains the process by which such microfibers are shed from clothing and are dispersed in the state's waterways"
  - Tom: We want to highlight the concerns members of the working group have on the statements in the draft of how microfibers get into the waterways.
    - This is meant for the lay-person, it has to be simple enough for them to understand but we want to be scientifically accurate.
  - Tom: What is the size of a microfiber (or microplastic)?--> There isn't a common, standard size that all parties agree on
    - o Dr. Ward & Dr. Breslin: <5 millimeters in length and <10 microns in diameter
    - David Sutherland: don't put it in scientific terms for the general public, put it in terms of something a lay person would understand (smaller than a strand of hair, etc.)
    - Lisa Erdle: This is a definition for control, not logical effect.
    - Consensus: Definitions for people involved vs. regular people (lay-persons) are different. There is a place for a scientific and legal definition and a common one, which can be useful in educating the public.
  - Demi Fox and Lisa Erdle: There are many sources of microfiber pollution, but we know that laundering and washing machines contribute to it and we can focus on that now
    - Sarah Pierce: AHAM does not agree with targeting washing machines
    - Miriam Diamond: We know the most about washing machines; there are other sources but we don't know enough about them (e.g., microfibers in the air)
  - Stephanie Karba: The apparel industry is working really hard in order to create a standardized test method so that we can actually quantify using the same method company to company.
- b. "best practices for consumers to eliminate and reduce the disbursement of microfibers from clothing into the waterways of the state"
  - Miriam Diamond: Textiles over time—newer textiles have a shedding rate less than older textiles (clothing)
    - Moving toward more durable clothing
  - Demi Fox: Keep it simple for the public in the public education campaign
  - Bill Lucey: We can say something like clothes shed plastic fibers, some you can see and some you can't, and these can end up in oceans and waterways like the Long Island Sound
  - There isn't enough evidence (according to the University of Toronto team) to say that any laundering practices (other than washing less frequently) would reduce the amount of microfibers
    - However, we can say that the use of filters can help reduce amount of microfibers released in washing machine effluent

- Senator Kennedy: Mermaids public education campaign example
- Technology
  - Cora Ball about 30% removal, Guppy Friend (about 90% removal) & External Filters → (Filtrol 160—most effective)
    - Easy solutions for people to just want to do something

## --BREAK--

- c. "information on efforts that members of the apparel industry, including, but not limited to, brand labels, are undertaking to reduce or eliminate microfibers in clothing"
  - Kristen Kern: AAFA is gathering information and data to find out the best practices they can tell their consumers
    - o Right now, they need more information
  - Steph Karba: Apparel industry is working to find a standardized and quantified shedding rate (OIA) so that they can use to company to company
    - o Bringing researchers and brands together
    - Not a definition of durability, but a measurement to use and for consumers to infer durability
    - Beginning stages; timeline is in the process of being created
  - There are several organizations claiming that they have a solution (e.g., an additive on the clothing) and they're testing it (Patagonia)
- d. Other components of a consumer education and awareness program including funding
  - Consumer awareness part: telling consumers about the problem, what they can do about it and what is being done by the industry
  - Sue Quincy: cost approximately \$20,000-30,000 (for the educational component)
    - Human impact on environment already part of the curriculum, students taught "how to think" not "what to think"
    - o Integrate into plastics issue
  - Lisa Erdle: Supports this idea
    - o Students go through a water sample and find the amount of microfibers in it
  - Demi Fox: NOAA's Marine Debris Program hosts two grant competitions each year;
    announcements are typically published in August
    - Removal FFO: every year
    - o Research FFO: every other year
    - o Prevention (through Education and Outreach) FFO: every other year
    - UK social media campaign—What's in my wash? #What'sinMyWash
      - Consumers could share what their clothing's made out of—gets people to pay attention to the issue
  - Funding discussion—funding is always hard to get (esp. in the U.S. vs the E.U.)
    - o Dr. Ward: hard to get funding for a new topic like microfiber pollution
  - Dr. Breslin: we don't know about the amount of microfibers in the Sound
    - Lack of local research

- ii. Working with Mystic and Norwalk Aquariums on exhibits, research and promotion of research
  - Mary Ellen Mateleska—Mystic Aquarium:
    - Plastics pollution education and exhibition → both macro and microplastic prevention
    - Working with 22 other aquariums around the country on a campaign on plastic pollution
      - Tracking behavioral change on 1 consistent message
    - Undergraduate research from all over the country; students present information at the aquarium during its busiest days
    - o Social media campaigns from Mystic Aquarium:
      - Facebook, Instagram, Twitter
      - Consistent message
      - Easy to access for consumers
- iii. Social media campaign
- iv. Tie in to plastics in the ocean issue

Break - 10:15 - 10:30

- III. Continuation of discussion of above
- IV. Recommendations for report Education, reengineering, filtration
  - Statement
  - Technologies
  - Dr. Ward: An opportunity to mention the K-12 education and we'd be able to see if it is effective in the future.
  - Bill Lucey: This is a long-term project; can't just have a few meetings
    - Imperative to have a way to monitor the effectiveness of the campaign
    - Quite a bit of sampling and research
  - POTWs and WWTPs → examine phosphorus and microfibers and the sludge
- V. Next Steps, Timeline, Goals 11:45 12:00—Tom Metzner:
  - We need to know what everyone agrees on and can agree on
  - Some outreach component should be developed (like the Mermaids public education campaign or the CT DEEP fertilizer campaign)
  - Conference call after draft of the report

12:00 - adjourn