

**Safe Water Advisory Group (SWAG) A City Council Advisory Committee Meeting Minutes  
Tuesday, March 7, 2023 City Hall Conference Room A and via Zoom**

Attending in person: Brian Goetz, co-chair; Councilor Vince Lombardi, Asst. Andrea Amico, co-chair, Elizabeth Barrett, Katrie Hillman, Bill McQuillen, Rep. David Meuse City of Dover Water Department representatives. Via Zoom: Laurel Schadler. Staff: Al Pratt, Mason Caceres, Stephanie Seacord (recording secretary)

Co-chair Andrea Amico welcomed SWAG members to the first meeting of 2023.

**Minutes:** The Committee moved and voted to approve the December 2022 minutes. Approved unanimously.

Full SWAG meeting recording: <https://youtu.be/crZP6r4nxNI>

1. SWAG survey results

<ul style="list-style-type: none"><li>• 10 SWAG members completed it</li><li>• Tuesday &amp; Wednesdays were the best days to meet</li><li>• 6:30-8:30pm was the best meeting time</li></ul>	<p><u>Future Topics:</u></p> <ul style="list-style-type: none"><li>• Other sources of PFAS in the City that could impact water supply (ie artificial turf, car washes, solar panels, landfills) - 7 votes</li><li>• Public outreach around watershed and drinking water sources - 7 votes</li><li>• Legislative updates - 7 votes</li><li>• How City emergencies impact water supply - 4 votes</li><li>• Coakley Landfill's impacts to drinking water - 4 votes</li><li>• Legionnaires - 3 votes</li><li>• Overall Water Supply Infrastructure - 1 vote</li><li>• Wastewater - 1 vote</li><li>• Cesium-137 - 1 vote</li><li>• Lead &amp; issues impacting children - 1 vote</li></ul>
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2. Year in review 2022 -- City Water Update presentation:

<https://www.cityofportsmouth.com/sites/default/files/2023-03/Portsmouth%20Water%20%202022%20Year%20in%20Review%20March%209%202023%20update.pdf>

- a. Precipitation: Started dry, recovered in Jul-Dec. Drought Monitor shows recovery.
- b. Average temperature increased 1.7 degrees. Jul & Aug 3<sup>rd</sup> warmest on record in 150 years. Nov 7<sup>th</sup> warmer.
- c. Bellamy surface water graph is key indicator for Portsmouth water supply. Portsmouth relies first on surface water supply, saving the groundwater for peak summer demand.
- d. Portsmouth Water: added Madbury #5. Pease Haven well back online.
- e. Demand is decreasing thanks to 1500 efficient appliance incentives. Saving an estimated 50k gallons a day (18.3 million gallons a year.) Also closing the gap between 'pumped' and 'sold' – closing leaks.
- f. Working on Bellamy protection with Dover, also the interconnection project.
- g. PFAS performance – 360 million gallons of water treated. Looking at future treatment of Portsmouth Well water in anticipation of EPA health advisor MCLs. Treatment for Greenland Well in CIP.
- h. Introduced Mason Caceres who will take Al Pratt's role on SWAG. Al to take Brian's role on Restoration Board.

3. Legislative update / EPA MCL update from Rep. David Meuse:

<https://www.cityofportsmouth.com/sites/default/files/2023-03/SWAG%202023%20Environmental%20and%20Water%20Bills%20030723.pdf>

- a. Late filings on bills this session but many Water/Environment in the queue.
  - b. Key issue is siting of landfills.
  - c. HB205 back – private well testing (Rep. Meuse sponsor) re: PFAS 1/3 wells tested > MCLs and require testing when new wells are drilled.
  - d. Establish lead level testing for pre-school children.
  - e. Appropriation bills HB534 create Water Assistance Fund to repair/replace water treatment damaged in storms.
  - f. PFAS: food packaging, insurance cover preventive care
- David will supply updates as bills advance.

4. EPA health advisory MCLs expected. NH markers are Portsmouth standard.

5. City of Dover Water Department presentation on Tolend Landfill:

Gretchen Young, Environmental Project Manager; Dean Rochelle Group Project Manager, Christine Binger, Verdantas, John Storer Community Services Director – EPA 5 Year Update

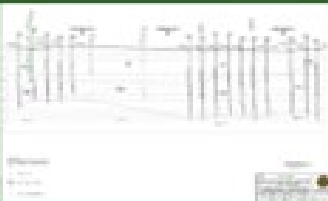
<https://www.cityofportsmouth.com/sites/default/files/2023-03/Dover%20Presentation%20SWAG%20March%202023.pdf>

### Landfill History

- 1996
  - 100% Remedial Design submitted to EPA
  - Design included Source Control Remediation and an in-situ bioremediation approach (not a traditional cap)
- 1998-2004
  - EPA reviews design
  - Conducts Pilot Project
  - DLG prepares a Revised Focused Feasibility Study
- 2004
  - EPA issues Amended Record of Decision (AROD)
    - Requires a treatment trench (not capping)
    - Requires additional risk evaluation and Pre-Design Investigations (PDIs)
- 2006-2011
  - Southern Plume PDI (2006-2007)
  - Southern Plume Groundwater Extraction Operation in operation (2007 to 2011)
- 2008-2009
  - DLG evaluates vapor intrusion in homes and sediment impacts in Cocheco River
  - EPA concluded that concentrations in these two media do not pose unacceptable risks

### Landfill History

- 2007 - 2009
  - DLG conduct a Source Control Focused Feasibility Study (SCFFS: 2007) – Identified site conditions would present challenges to a treatment trench
  - EPA issues an Explanation of Significant Differences (2009 ESD)
  - Changed treatment trench (2004) to multi-level groundwater extraction
  - Initial NHDES Groundwater Management Permit issued



### Main Landfill Area

- Source Control system in place (2012)
- Ditch surrounding landfill is removed
- Groundwater extraction system constructed



- >260 Million Gallons of impacted groundwater removed
- Groundwater is captured and diverted via sewer to the Dover WWTF

### Next Steps and goals

- Additional Southern Plume Hydraulic Modeling
  - Required by EPA prior to remediation design submission
- Installation of additional monitoring wells and piezometers
- Southern Plume Remedial Action Design (once modeling completed)
- EPA final Remedial Action Design approval
  - Bid & Award Contract for plan implementation
- Construction of Southern Plume Remedial Action Plan (hopefully in 2024)

Per Gretchen Young: In 2007, ground water extraction technology was initiated. Water is directed to the Dover sewer system. In 2010, they created a force main from the site and connected it to the Dover wastewater treatment facility. From 2012-2017, “things moving along as planned. Groundwater extraction working well.”

Time stamp 52:10: At the Bellamy Reservoir intake, there are signs of PFAS at low levels. Right now there is no detected levels of 1,4 dioxane in the water intake, but there are low levels detected levels in the tributary. Monitoring at the levels is showing everything is holding steady or decreasing at the shore line. Dover is working with the agencies and they are requesting additional monitoring. Hope to install additional monitoring wells in the summer. Once models in place, will move forward with remediation design and hopeful to start construction in 2024.

Gretchen reviewed the EPA 5 year review plan from 2022.

Now working on EPA 5 year monitoring plan with additional wells.

Time stamp 1:03:38 Brian Goetz says they are seeing 3ppt of PFOA at the intake. Other PFAS compounds are non detect on the four quarter average. One recommendation we have is to look up stream a little bit so you have a comparison. Sampling at the intake has been happening quarterly will continue, probably indefinitely.

Time stamp 1:07:16 Andrea Amico asks what was put in the landfill to cause high levels of PFAS. Christine Binger responds “everything” and it was used for municipal and domestic waste.

Time stamp 1:08:30 Andrea Amico asks what treatment technology are you using to treat the groundwater?  
Christine Binger responds it is "POTW" and ground water extraction. Then sending it to the wastewater treatment. Gretchen Young clarifies the water is not going through any carbon treatment before going the wastewater treatment plant.

1:14:30 Dr Laurel Schaidler asked for clarity on a previous comment re: Dover saying their sludge from the wastewater treatment plant goes to Canada. Gretchen Young responds "it does" and it is not "a great solution".

Q. Andrea Amico asks Dover what is the anticipated impact on Bellamy if the EPA MCLs are very low?

A. Gretchen Young responds there is a commitment to keep PFAS from getting to Bellamy.

Data from Tolend Landfill can be found on the NHDES websites.

Dr Laurel Schaidler asked Rep David Meuse about a bill he provided an update on that would require insurance companies to cover preventative healthcare on PFAS. Dr Schaidler asks if there are other states doing that or a model that is being followed?

Rep Meuse said the plan is to monitor levels of chemical in the blood and what is the long term impacts. He is not sure if other states are taking this approach. Rep Meuse says New Hampshire has been a leader on PFAS and other states have their eyes on legislation in NH re: PFAS.

National Academy of Science guidance for blood levels and medical monitoring.

Next meeting June.

**No comments from public. Adjourned at 8:10 pm**