

WWTF Contingency Committee Meeting No.1
August 21, 2023
Lewes BPW Conference Room
3:00pm

Committee Members

- Barbara Curtis, BPW Board Director, Chair
- Earl Webb, BPW Board Director
- Austin Calaman, BPW General Manager
- Tim Ritzert, City Councilperson ex-officio
- Donna Colton, Committee Member
- Mark Prouty, Committee Member
- Sumner Crosby, Committee Member- Virtual
- Bob Heffernan, Committee Member- Absent
- Daphne Fuentesvilla, Committee Member- Absent

Others Present

- Jay Lagree
- Sharon Sexton, BPW Executive Assistant

The meeting was called to order at 3:04pm.

Key Takeaways

- The purpose of the meeting was to discuss and establish the framework for future meetings and handle administrative matters. The committee is to review and further evaluate options 1 and 2 as described in the draft November 28, 2022 GHD Lewes WWTP Long Range Study and make recommendations to the Board for consideration. This includes research, review, and evaluation of costs, benefits, and feasibility of proven and operational technologies.
- The main topics discussed were review of resolution 23-006, meeting frequency and scheduling, and review of GHD proposed options 1 and 2. Other topics included potential alternative technologies for the wastewater treatment plant.
- Discussion on Nereda technology.

Positive Moment

- Highlighted the importance of gathering more information and asking tough questions when evaluating treatment options.
- Anticipation for technology demonstration.
- Suggested reviewing the batch reactor system as a viable option for replacing the wastewater treatment facility.
- Discussed utilizing partners and resources to achieve goals.

- Expressed willingness to conduct research and reach out to treatment plants for data gathering.
- Discussed agenda items and the possibility of a slide deck presentation for the next meeting.

Goals

- Expressed interest in finding technologies that can save space.
- Discussed visiting the Berlin plant to see the batch reactor system in action.
- Asked questions about saltwater compatibility and other technologies to assess suitability for needs.
- Need further discussions and information gathering regarding DNREC's potential changes to the nutrient loading factors of the permit.
- Exploring other treatment system locations and seeking DNREC's agreement on the suitability of the new technology.
- Requirement to retrofit pump stations with flow meters to monitor infiltration and test increase in salinity at specific locations.
- Plan to gather data from other treatment plants for comparison.
- Make a decision by January after evaluating all options thoroughly to present to the Board.

Challenges

- Obtaining a permit for an ocean outfall can be challenging due to the complexities of the regulatory process and the need to meet environmental standards. The Rehoboth Bay TMDL, which sets limits on pollutant discharges into the bay, further complicates the permit process and has raised concerns about obtaining an ocean outfall permit.
- Expanding facility flow capacity may pose challenges, such as uncertainties surrounding technology changes without increasing the flows.
- Changing the nutrient loading factors of the permit, triggering regulatory involvement.
- Discussed the impact of shutting off power in high-risk areas during an evacuation.
- Discussed the water treatment system, emphasizing its strict parameters and demanding maintenance.
- Discussed the impact of an increase in flow on membrane technology efficiency.
- Discussed the pressure to make a decision on the recommendation to the Board by January 31, 2024, while prioritizing the need for reliable information before deciding.

Discussions

- Mentioned the need for additional information to further evaluate the technology, including square footage and flood zone data.
- Discussed involving the city in a land swap or taking over an existing facility.
- Questioned the need for land acquisition and infrastructure modifications. Mr. Prouty believes that there is room on the current site for a new plant while the current facility is

active. BPW would continue discharge to the canal. Some existing equipment could be reused and retrofitted.

- Mr. Prouty stated that the best way to discharge is by spray irrigation. BPW does not have space for spray irrigation. Concern with discharging treated effluent to tidal wetlands.
- Ongoing discussions and studies are exploring the feasibility and impact of various wastewater discharge options.
- Discussed technology in treatment options, one scenario with membrane filtration and the other with activated sludge.
- Acknowledged the use of drying beds, which have had issues with the modules.
- Acknowledged the need to consider the increasing number of storms and potential impact on the treatment plant.
- Discussed Aqua Nereda technology and compared it to the current MBR system. Aqua Nereda system is activated sludge granules and uses minimal space and is more energy efficient.
- Aqua Nereda system resiliency to be explored.
- Noted that they haven't seen salinity issues in the system yet.
- Gather information from treatment plants in Alabama and other locations to compare costs and feasibility.
- Mr. Ritzert questioned if there would still be a relationship with Sussex County if another option other than option three was chosen. BPW holds agreements with the county now, and those agreements will continue.
- Mr. Prouty discussed the Batch Reactor System as an alternative technology.
- Discussed the impact of the state archaeological study at the Sussex County site on the committee and the Board. GHD to provide another option under Sussex County.

Action Items

- Ms. Curtis requested that all members submit questions for the next meeting to be addressed regarding alternative technology.
- Mr. Crosby will research salinity of the adjacent wetlands and the effects on freshwater (i.e., treated effluent) wetlands.
- Mr. Calaman will be attending a conference later this month and will possibly have a chance to talk about alternative technologies.
- Mr. Prouty will present a slideshow on Batch Reactor technology and contact the Berlin wastewater treatment facility to schedule a tour.

The meeting was adjourned at 6:08pm. Meeting video can be viewed at <https://www.youtube.com/watch?v=0eMKA8lwrWQ&t=238s>

Respectfully Submitted
Sharon Sexton
BPW Executive Assistant