

Lewes Board of Public Works
Contingency Committee Meeting Minutes
November 6, 2023
2:00pm

Committee Members

- Barbara Curtis, BPW Assistant Treasurer, chair
- Earl Webb, BPW Board Director
- Tim Ritzert, City Council Ex-Officio
- Mark Prouty, Committee Member- Absent
- Bob Heffernan, Committee Member
- Austin Calaman, BPW General manager- Virtual
- Donna Colton, Committee Member
- Sumner Crosby, Committee Member
- Daphne Fuentevilla, Committee Member-Absent

Others Present

- Sharon Sexton, BPW Executive Assistant

The meeting was called to order at 2:05pm.

Key Takeaways

- The purpose of the meeting was to discuss wastewater treatment plant topics.
- The main topics discussed included discharge of effluent, potential spray irrigation locations, partnerships, research needs, challenges, and involvement of Sea Grant. The main issues included saltwater intrusion, phragmites growth, political and financial challenges, nutrient loadings, and purchasing a sludge press.
- Reviewed the presentation from Aqua Nereda on the Aerobic Granule Sludge technology. The committee was disappointed in the presentation and the lack preliminary visuals, even though aerials were provided. The cost estimates provided did not include tank costs, construction costs, or engineering costs. The simplicity of Aqua Nereda Granule Sludge technology is attractive.
- Reviewed the Berlin Sequencing Batch Reactor (SBR) plant tour. Impressions of the plant: Clean, efficient, small footprint, capability to build while still in operation, and the spray irrigation was miles away,
- Next steps included sending minutes for approval, investigating spray irrigation options, gathering information, assessing saltwater exposure and sea level rise, negotiating with the county, and scheduling the next meeting.

Current Workflow

- Suggested spray irrigation across the street from the wastewater treatment plant.
- Explored potential discharge locations, including wetlands.

- Continue to explore Aqua-Nereda Aerobic Granular Sludge technology and its potential benefits, including reduced energy consumption and chemical use.
- Consideration is being given to renting a sludge press from Sussex as a possible solution. The cost implications of purchasing a sludge press versus existing payments to Sussex are being discussed by the Board. Decision on hold due to the Wastewater treatment facility long-range planning study.
- Discussed the sludge press at the Berlin facility, which achieved a solid state of 19-20 percent.
- Investigate the possibility of using BNR technology while seeking clarification on its chemical dependence.
- The potential problems with saltwater intrusion and phragmites growth include loss of freshwater resources, ecosystem disruption, and damage to infrastructure and agriculture.
- Discuss using the existing membrane system in conjunction with new technology to achieve desired water quality if possible.
- Mr. Crosby provided an update on his meeting with Mr. Ullman and Mr. Wozniak from the University of Delaware. The wetlands adjacent to the current wastewater treatment plant may not be ideal for effluent discharge. Changing the salinity of the wetlands changes the preferred species of plants.

Goals

- Determine a cost-effective, efficient, and environmentally friendly waste treatment solution.
- Discussed the importance of understanding shoreline and assimilation studies related to ocean discharge.
- Deliver high-quality water that exceeds state requirements.
- Maintain system functionality while facing challenges of saltwater exposure and sea level rise.
- Develop a proposal to present and negotiate utilizing new efficient technology with the county and get a feel of the county's thoughts on the Aqua Nereda Aerobic Granule Sludge technology. Sussex County is considering a Biological Nutrient Removal (BNR) system.
- The Contingency Committee must present to the BPW Board of Directors by January 31, 2023.

Concerns

- Difficulty proceeding forward with research without the authorization to spend money on study options.

Decision

- During the meeting, the August 21, 2023, August 29, 2023, and September 12, 2023, minutes were motioned by Mr. Heffernan to be sent to the board for approval. The committee agreed unanimously. (Mark Prouty and Daphne Fuentesvilla absent)

Follow-up Meeting

- Scheduled the next meeting for November 14, 2023, at 2:00pm.
- Second meeting scheduled for December 1, 2023, at 3:00pm.

Action Items

- Request the process design report and gather additional information from the Aqua Nereda Aerobic Systems company.
- Gather information on the feasibility of different options.
- Contact consultants from operating Aqua Nereda plants for further details on meeting water quality standards.

Respectfully Submitted
Sharon Sexton
Executive Assistant