



**TOWN OF PLYMOUTH
WATER POLLUTION CONTROL AUTHORITY
80 MAIN STREET
TERRYVILLE, CT 06786**

The Special Meeting of the Water Pollution Control Authority was held on August 24, 2026, at 7:00 PM in the training room of the facility at 35 Canal Street, Pequabuck, CT.

PRESENT: Regular Members

George Andrews JR. Chairman
Philip Armbruster, Secretary
Peter Giancesini
John Murphy

OTHERS IN ATTENDANCE:

Plant Manager – Jason Patrick
Assistant Plant Manager- Ryan Wells
Recording Secretary- Heather Dell'Aera

PLYMOUTH, CT
TOWN CLERK'S OFFICE
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Heather Dell'Aera
TOWN CLERK

1. Call to Order:

The meeting was called to order by Chairman Andrews at 7:00 p.m.

2. Roll Call Attendance:

Chairman Andrews took roll call attendance.

3. Discussion & Voting: Appointment of Alternate Member Joseph Carey Jr. to Regular Member:

Upon a motion made by Mr. Murphy and seconded by Mr. Giancesini, it was VOTED: To recommend Mr. Joseph Carey Jr. to be moved from an alternate member to a regular member on the WPCA Board. Roll call was taken and the motion passed unanimously.

4. Acceptance of Minutes:

a. Regular Meeting Minutes- June 2026 & Public Meeting Minutes- June 2026

Upon a motion made by Mr. Murphy and seconded by Mr. Armbruster, it was VOTED: To approve the Regular Meeting Minutes of June 15, 2026 & Public Meeting Minutes of June 15, 2026 roll call was taken, and the motion passed unanimously.

5. Bills and Communications:

a. Review & Approval of WPCA Monthly Bills for June & July 2026:

Upon a motion made by Mr. Armbruster and seconded by Mr. Murphy, it was VOTED: To approve WPCA monthly bills for June & July 2026. Roll call was taken, and the motion passed unanimously.

6. DEEP Monthly Operating Report for June & July 2026:

Assistant Plant Manager Mr. Wells reported:

June-

- We had no violations of our NPDES Permit for the month of June.

Flow-

- Average monthly flow for June 2026 was .812 MGD (46.4% of design flow).
- Plant is designed for 1.75 MGD
- 3.1" inches of rain in the month of June leads to increased flows.
- Phosphorous discharge: 4.66 lbs./day average
- Total Nitrogen – 72.2 lbs./day. Our discharge limit is 42 lbs./day.

Sludge-

- We trucked out a total of 32,526 dry lbs. of solids or 16.26 dry tons.
- The sludge hauler had an average solids content of 3%
- Total gallons hauled out for incineration was 130,000 gallons or 20 tanker loads.

Efficiency, % Removal-

- BOD % Removal = 96%
- TSS % Removal = 97%

July-

- We had no violations of our NPDES Permit for the month of July.

Flow-

- Average monthly flow for July 2026 was .853 MGD (48.7% of design flow).
- Plant is designed for 1.75 MGD
- 6.9" inches of rain in the month of July leads to increased flows.
- Phosphorous discharge: 4.75 lbs./day average
- Total Nitrogen – 82.4 lbs./day. Our discharge limit is 42 lbs./day.

Sludge-

- We trucked out a total of 34,152 dry lbs. of solids or 17.08 dry tons.
- The sludge hauler had an average solids content of 3%
- Total gallons hauled out for incineration was 136,500 gallons or 21 tanker loads.

Efficiency, % Removal-

- BOD % Removal = 97%
- TSS % Removal = 98%

7. Follow up Discussion- Wright Pierce – Phosphorus Upgrade / CDS Funding:

Mr. Patrick reported- The CDS grant application was submitted through Grants.gov on July 16, 2026, and Notice of Award was received on August 10, 2026. The CDS funding will support design related work for the plant upgrade project. The grant provides approximately one million in federal funding and requires approximately 20% local match, resulting in a total project expenditure of approximately \$1.2 million.

Christine Kurtz reported- The Water Pollution Control Facility Phosphorus Removal Evaluation report is still under review and is anticipated to be completed in about a week. Following completion, we will receive the report, the board will review the recommendations, and it will be submitted to DEEP for review and approval. The anticipated DEEP review period is approximately three months. DEEP is also aware of the plants screw pump failure concerns and the CDS funding that has been awarded. Ms. Kurtz briefly reviewed the recommendations she has previously presented for the plant upgrade. Based on the current higher flows, a tertiary filter is recommended. The I&I study was also discussed briefly; it would not eliminate the need for a tertiary filtration system. She reviewed the plants' average daily flow (1.28 MDG). When flows are over 1.05 MGD is when we start to struggle with phosphorus removal. Along with the tertiary system there is also work needed on the secondary clarifiers to eliminate the need for a second pump station. The project is including an aeration tank, screw pumps, secondary clarifiers, tertiary filter and sludge evaluation. The proposed improvements are being planned to accommodate the plant's needs for approximately the next 20 years. Previously the estimate was \$55 million, the current estimate is \$57 million which includes contingencies. Potential funding was discussed including loans and grants (up to 30% grant for phosphorous related upgrades). Wright Pierce will continue to work with DEEP and investigate other funding opportunities that may be available. The project will also be required to go through value engineering (projects over \$10 million are required). Value Engineering is anticipated to take place during the 30% and 60% design stages and will look at possible cost savings and alternatives. The design process is estimated to take approximately a year and a half to two years depending on DEEP review. With construction on the plant not starting for approximately three years. Mr. Patrick questioned if the sludge study would tell us if it's worth it or not to do the thickening and give a cost savings over time. Ms. Kurtz reported that when looking at the equipment alone, sludge thickening is cost effective; however, when the necessary building modifications are included, the cost effectiveness changes. The operational benefits and potential grant funding will also need to be considered before making a final decision. A brief discussion ensued regarding the overall project cost, possible funding opportunities, project timeline and the importance of educating the public as the project moves forward. The Board discussed possibly using outside assistance for public outreach and working with the NVCOG (Naugatuck Valley Council of Governments). Mr. Andrews stated he will speak to the mayor and get a better understanding of the steering committee. Ms. Kurtz will contact the NVCOG to discuss the scope of the project but will wait for Mr. Andrews to speak to the mayor first.

8. Follow up discussion & Voting- Jet Truck Noise Cancelling Headphones:

Mr. Wells reported- The new jet truck is registered and in service. Staff are continuing to purchase the necessary valves, tools, nozzles and hoses for the truck. In addition, we are working on developing a maintenance program and jetting schedule. Mr. Wells presented a quote for Sonetics noise cancelling communication headsets. The headsets provide hearing protection while allowing the operators to communicate with each other while working around the jet truck and other loud equipment. Mr. Wells stated they were able to test the headsets during on-the-job training for the new jet truck and they worked very well. The headsets can also be used while performing other work involving loud equipment or for use with traffic

control. The quote presented was for five (5) headsets and a communication hub for \$7,570.00. The headsets will be individually labeled and stored at a charging station at the plant. Mr. Patrick also reported that the old jet truck was sold for \$10,000.00. A brief discussion ensued regarding using the proceeds from the sale of the old jet truck and transferring the necessary funds into the appropriate account for the headset purchase. The board also discussed the hearing protection and safety benefits of the headsets. Upon a motion made by Mr. Murphy and seconded by Mr. Armbruster, it was VOTED: To purchase five (5) Sonetics noise cancelling communication headsets and communication hub in the amount of \$7,570.00. Including transferring the funds from the Capital account. Roll call was taken, and the motion passed unanimously.

9. Discussion- Belt Filter Press:

Mr. Wells reported- The belt filter press has been removed from the plant. The electrical equipment was disconnected last week, and the crane/rigging company removed the press and loaded it on to a trailer for transport to New Jersey. The removal had freed up the former belt press room for future use.

10. Discussion & Voting- Screw Pump Failure:

See Attachment- A brief discussion ensued regarding the screw pump failure, temporary bypass options and the need for an emergency backup pump should the remaining screw pump (B) fail. Mr. Andrews stated due to the screw pump failure and the immediate need to protect the plant, the purchase may fall under the emergency provisions of the town charter. He will contact the mayor's office to confirm the proper purchasing procedure is followed. Upon a motion made by Mr. Murphy and seconded by Mr. Armbruster, it was VOTED: To allocate an amount not to exceed \$100,000.00 for the purchase a portable bypass pump for the emergency screw pump repair. Pending confirmation with the mayor's office regarding the appropriate purchasing procedure. Roll call was taken, and the motion passed unanimously.

11. Discussion & Voting- Town Invoices for April, May and June 2026 for a total amount of \$201,074.40:

Mr. Patrick presented the invoices for the months of April, May and June 2026.

Upon a motion made by Mr. Murphy and seconded by Mr. Ganesini it was Voted: to pay April 2026 = 66,547.44, May 2026 = \$67,269.98 and June 2026 = \$67,256.98 - three (3) Invoices for the total amount = \$201,074.40. Roll call vote was taken and the motion passed unanimously.

12. Discussion & Voting- Wright Pierce Invoice #0000252981 in the amount of \$12, 999.22 & Invoice #0000253309 in the amount of \$9,121.61:

The Statements were reviewed. A brief discussion ensued. Upon a motion made by Mr. Murphy and seconded by Mr. Ganesini, it was VOTED: To pay invoice #0000252981 in the amount of \$12,999.22. and invoice #0000253309 in the amount of \$9,121.61. Roll call was taken and the motion passed unanimously.

13.Adjournment:

Upon a motion made by Mr. Murphy and seconded by Mr. Armbruster, it was: VOTED: To adjourn at 8:19 pm. Roll call vote was taken, and the motion passed unanimously.

Attachments:
Screw Pump A Failure

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Heather Dell'Aera". The signature is fluid and cursive, with the first name "Heather" and last name "Dell'Aera" clearly distinguishable.

Heather Dell'Aera
Recording Secretary

Plymouth WPCA Board Meeting

8/24/2026

Screw Pump A Failure

We currently utilize two CPC Internalift Screw Pumps. These pumps are original from the upgrade that was completed in 1990 and have been in operation on and off for 36 years. These pumps are very important in the process, as they pump the return sludge from the secondary clarifiers and the primary effluent up to the aeration tanks for the wastewater to be treated. This is the only pumping that is done in the actual treatment process and everything else flows by gravity.

For normal operation, averaging approx. 1MGD, we run one (1) screw pump at a time, and the other one is used for a back up or for extremely high flows. There have been times during very high flows that both these pumps had to run for a considerable amount of time. For instance, in 2024 we had a few months we were averaging over 2 MGD and both pumps needed to run to keep up with the flows. (Current flows are 0.86 MG)

On Monday July 20th an operator went to swap from Screw Pump B to Screw Pump A and the pump had immediately tripped out. Screw pump A was reset and put back into lead, but the pump could not keep up with the incoming flow. Upon further evaluation we discovered the lower part of the screw had rusted and broken to the point where it was not able to lift the water.

I reported the equipment failure to DEEP and we set up our bypass pump as a backup. This is an older pump and our bypass pump has to be manually controlled meaning we need an operator on site to start the pump and to keep an eye on the pump while its pumping.

We immediately started looking into repair and replacement options, keeping in mind that these pumps are going to be replaced during our upcoming phosphorus upgrade. In the upgrade we are abandoning the screw pump well and installing submersible pumps instead. After talking with Wright Pierce, we decided to contact DEEP and propose the idea of completing the upgrade in phases. The first phase would only include eliminating the screw pumps and installing the new submersible pumps and piping. Christne reached out to DEEP and they did approve this approach, but this will not be able to be completed quickly, and we still need to figure out a reliable option for a backup. We have three (3) options that we are looking into.

Option 1 - Repair Screw Pump / Replace

This option does not make sense.

The goal is to have something in place before winter. A new pump is over a half a million dollars and at least a year's lead time.

Just to pull the screw pump, transport to GA Fleet and inspect the pump is going to be \$60,000 and if it can be repaired it would be months out and not before the winter.

Option 2 – Winterized By-Pass Pump

Another option is to stick with using a bypass pump and winterize the pump and piping. (use of heating blankets for piping and having automatic drain lines to ensure nothing would freeze in the pump). If we were to go this route, I would recommend purchasing a new Godwin pump, with the ability to automatically start and run off floats. Our current pump is very old, it is not automated and we cannot easily drain the pump. A benefit of this option is we would acquire a new bypass pump that would be very reliable, could self-prime and automatically start and stop off a float system.

The downfall would be the possibility of the pump freezing. This would also make snow removal very difficult.

A new Bypass pump alone without any winterization would be \$77,460 (including float system)

Option 3 – Install Submersible Pumps

The issue with this option is the wet well is very shallow for a submersible pump. The idea is to look at submersible pumps that we are currently using at the pump stations and treatment facility and see if we can make those work as back up pumps. This way we could still use these pumps in the future when the upgrade is complete. Wright Pierce has evaluated using our largest pump (Pump station 8) and has determined that pump is too large. We are now looking at using a couple of the smaller pumps.

Jason Patrick
Plymouth WPCA Plant Manager