

**Town of Montville Water & Sewer Commission**  
**REGULAR MEETING MINUTES**  
**April 1, 2024-- 6:00 PM**  
**Town Council Chambers – Town Hall**

**Informational Meeting – No Votes Taken**

**1. Water and Sewer Commission**

**a. Call to Order**

Chairperson Longton called the regular meeting of the Water and Sewer Commission to order at 6:00 p.m.

**b. Pledge of Allegiance**

All stood and pledged the flag.

**c. Roll Call**

Present was Chairperson Chuck Longton. Commissioners Richard Gladue, Frank Miceli and Town Councilor Kevin Lathrop were absent. A quorum was not present.

Also in attendance was Superintendent Derek Albertson, and Administrator Ronald McDaniel.

**d. Alterations to the Agenda -- None**

**e. Motion to approve the Regular Meeting Minutes of March 4, 2024 -- No Vote**

**f. Communications pertaining specifically to matters which concern the Commission -- None**

**g. Remarks from the Public Regarding Items on the Agenda with a three-minute limit--None**

**h. Report from Operations**

Superintendent Albertson submitted an Operations Report for March 2024, as follows:

**1.0 Compliance/Process**

**1.1 Water Pollution Control Facility**

The Montville Water Pollution Control Facility (WPCF) is required to meet state and federal standards for effluent discharged to the Thames River. The WPCF adheres to the federal standards in the National Pollution Discharge Elimination System (NPDES); state standards are present in the permits for nitrogen control as well as for stormwater monitoring. No local or formal complaints were received regarding the collection system or the WPCF.

Average daily influent (average) flow to the WPCF continued to be elevated due to significant storm events causing Inflow and Infiltration contribution; an average of 3.3 million gallons per day (MGD) with a total treatment volume of 90.3 mg for the month. This represents the highest (monthly) treatment volume in seven years; approximately 28% higher than normal. Approximately 65 million gallons (MG) of treated effluent was discharged to the Thames River. The large rain events in March increased not only overall flow to the facility, but intermittent “surge flows” at peak times in the rain events. March 23 was reportedly the wettest March day in Connecticut ever.

Each day, approximately one-third of the treated effluent was recycled (sold) to Rand-Whitney Container Board (RWCB) (typically, 50%). RWCB had a scheduled outage on March 6. The startup following an outage caused some process challenges (due to high wastewater loading and recycle water demand).

Process control generally improved in the earlier part of the month (when compared to January and February with higher removal efficiencies for BOD<sub>5</sub> and TSS). As is typical of the spring months (and the recent unusually intense rain events and temperature fluctuations) BOD/TSS

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removal was a challenge. A nutrient study nitrogen and phosphorous deficiencies (in the influent) due to the overloading of carbon. Wastewaters from industries such as pulp and paper are rich in carbon but deficient in nitrogen and phosphorus. Some “seed sludge” was received via mutual aid to enhance biological activity (secondary treatment) at the plant.

Waste activated sludge (WAS) was calculated to have an approximately 3.5% total solid (TS) which is considered poor. The process control did not lend to a settled sludge and thus thickening (dewatering) was inefficient.

### 1.2 Water Supply

The Montville Water Supply (WS) met required state and federal standards. No regulatory requirements/concerns are present.

A 30-day water audit (purchased versus sold water) is underway.

## **2.0 Staff**

### 2.1 Health and Safety

Several key staff members have left the Town employment (i.e. Lab Director, Collections Operator). Through training and testing, both new employees have qualified for their positions, respectively. Advertisement will begin for the open *Treatment Plant Operator*. The *Senior Maintenance Mechanic* will be retiring in June of this year; appropriate recruiting will begin shortly. The HR Director has been briefed of current staffing requirements formally via a succession plan. This type of planning is a process and strategy in the event of a staff loss. It is used to identify and develop new, potential workers/leaders who can move into roles when they become vacant.

No injuries, grievances or job-related concerns were reported for staff. Both January and February this year were the warmest on record for the respective months of the year, making nine consecutive months of record warmth, the *National Oceanic and Atmospheric Administration* (NOAA) reported. The warmer summers will have implications related to worker safety (i.e. heat stress).

ConnOSHA inspections were completed by David Boutin, CSP (*Occupational Safety Officer*) on March 14, 15 and 20. Identified concerns were addressed with staff and the safety contractor GreenCorp with appropriate responses made to ensure safety of site personnel. This surprise review assists the WPCA staff in creating a safe work environment.

### 2.2 Training

Staff continued to receive training (state or professional organization sponsored) to meet CTDEEP and CTDPH requirements for (wastewater /water certification) training credits. The staff attended First Aid, CPR, AED, BBP and Stop the Bleed training in March. The water operators will attend LCRR and leak detection training in April.

Yearly cyber-security training is a requirement by our insurance provider for all employees who use Town computers or have Town email accounts; the IT Department has initiated training for WPCF staff.

Deep River WPCF staff toured the plant on March 22 to review the information for fuel cell and new turbo blowers.

*World Water Day* was celebrated on March 22. The precious liquid is a thin red line between war and peace, says UN in a recent report to announce the Day.

## **3.0 Equipment**

### 3.1 WPCF/Collection System

Routine maintenance was performed at WPCF. Proposed work includes the distribution boxes repair (coating). All pump stations were inspected and cleaned. The Route 32 bridge pipe supports (over Stoney Brook) will be repaired shortly.

#### **4.0 Projects**

A summary of existing projects is provided in an attached project summary table. Additionally, the FY 2024 and FY 2025 CIP lists are provided.

##### **4.1 WPCF/Collection System/Water Supply**

Biobot Analytics data show that New London and New Haven Counties as having significantly lower incidents of COVID-19 cases (higher concentrations of viral bits in the influent; thus, there are fewer people suffering from the virus.

I & I (inflow and influent) studies were completed in the areas found in the previous studies as having high contribution during rain events. Significant Inflow and Infiltration (I & I) problems within the collections system are being identified. The recent storm events showed an increase in total influent; significantly higher than base level (dry) flow conditions indicating there is significant I & I issues. CCTV inspections enable observation of the condition of pipes firsthand. Targeted inspections of some of the 1,650 manholes in the collection system were made.

As previously indicated, a replacement project is underway for Cook Water Tower. The glass fused to steel construction is state of the art and represents a low maintenance option to conventional steel tanks. Additionally, the mixing equipment will reduce the amount of TTHMs in the stored water as well thermal stratification issues. A mixing system ensures the best management practice for water storage.

##### **4.2 Regulatory Oversight**

No regulatory oversight or action is ongoing for the WPCA. No existing *Consent Decrees* or *Consent Orders* currently exist. No formal reporting was required other than the typical monthly permit submittals. No complaints have been received from the appropriate regulatory bodies.

Knapp Engineering completed the required (annual) flow meter/laboratory equipment calibrations on March 1. Additional sensor calibrations will occur in April by Aaron Associates.

Permit renewal activities began in March 2024; as stipulated, a permit renewal package must be formally submitted to the CTDEEP six months prior to the federal NPDES permit expiration date (October 31, 2024). As part of the permit support, the Superintendent and Lab Director conducted an inventory of equipment and disposable items for the upcoming disinfection season.

The USEPA has announced planned dates for this year's DMR-QA Study. The Study is scheduled to start on May 8, 2023, and run for 12 weeks until July 28, 2023. This is a laboratory check by the federal body to confirm SM Procedures are being adhered to and conducted properly.

The USEPA announced the first part of requirements for the Lead and Copper Rule Revisions (LCRR) in December 2021 as part of the original 1991 Lead and Copper Rule. The three-year compliance window includes an initial assessment of service lines (inventory) by the end of 2024. The line inventory will include data collection (from GIS, billing and historic connection details). Gaps will be identified. Sampling and/or more invasive (digging methods) can be employed to determine whether a lead line is present.

#### **5.0 Development**

Several inquiries for potential development projects have been presented to the WPCA for review/comment. Connection fees were received for the Oxoboxo Lofts and Wilton's Way developments.

#### **6.0 Financial**

The WPCA operates with an *Enterprise Fund* which is operated like a private sector business account except with a target zero-balance ending. In other words, it is understood that a utility is a customer service business. The FY 2024 WPCA Sewer and Water Budgets began on July 1, 2024. During the last four years, significant revenue increases have been observed by RWCB's influent contribution as well as septic receiving. Cost savings have been mostly observed by cheaper energy (fuel cell generated) and installing new, lower demand equipment.

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The FY 2024 Water and Sewer Budgets and CIPs were approved by the WPCA/Town Council during the March Meetings.

#### 6.1 Accounts Review

Asset management is the process for maintaining a desired level of customer service at the appropriate cost and lowering asset risk. Current rates (and ancillary fees) appear to be adequate at this time to cover costs for wastewater activities. Water billing is falling short of costs due to the leak.

The WPCA Administrator will work with the WPCA Engineer to conduct a WS rate survey.

#### 6.2 Assets

The WPCA will enhance its understanding of the WPCF and Water Supply assets with the permanent/inspection attributes positioned on the water and sewer GIS platforms. As previously noted, the cost of depreciation is provided in utility spread sheets, but it is not an “out-of-pocket” expense. This data is an important portion of the four-part approach to asset management: planning, financial foresight, capital visibility, and data collection/review. Old assets can be sold on third party websites (i.e. Municibid) leading to revenues.

#### 6.3 Grants/Funding

Federal grants announced on December 4, 2023 will be used to protect Long Island Sound. A total of \$20 million will be directed by the USEPA to promote climate resiliency and environmental improvement of the surface water body.

Some current wastewater projects are funded by State funds including one grant (CTDEEP \$5 million *Grant-in-Aid for Sewage Treatment Facility Infrastructure Improvements and Upgrades at the Montville WPCF- State Grant Agreement 2017-170491*, approved via March 2014 Town of Montville Resolution No. 2014-25). The bonds were for infrastructure improvements within the plant including the new chlorine system, new recycling pumps, and grit removal system. Additionally, the aeration systems for SBR-1, 2, 3, 5 and 6 were replaced. A review of the approximately \$4.5 million in grant monies (slated for the WPCF) indicated adequate funding for the proposed projects with an approximately \$450,000 margin- this money will be used to remedy the concrete failing in SBR-4 or the influent d-boxes. A debt service audit was conducted for the four bonds most recently procured for the treatment plant. One bond was paid in July 2018 and another was paid in February 2019; thus, reducing debt service by at least \$150,000-\$200,000 per year. The remaining two bonds will be paid in August 2032 (headworks upgrade) and July 2034 (new emergency power generator), respectively.

Based on a review of the WPCA’s Eligibility Application the CTDPH DWS had determined that the Cook Water Tower replacement project was ready to proceed and that DWSRF funding will be available. The Mayor/WPCA/Finance Director was notified of the intent to pursue federal funding for the tower project. The scheduled completion date of the storage tank is October 31, 2024. A *Drinking Water State Revolving Fund* (DWSRF No. 2024-7125) loan agreement package for \$1,360,332.50 was signed by the Mayor on August 30 for the Cook Hill Tank Replacement Project (CTDPH Agreement #2024-7125). Additionally, it was suggested the project would likely receive a additional subsidy of approximately \$300,000 for the project. Reimbursements have been received.

The loan balance on the (not amortized) loan defined in the December 10, 2007 *Reimbursement Agreement by and between The Mohegan Tribal Utility Authority and Town of Montville* has been significantly reduced due to the recent town development connections to the water supply. The original principal of the note was \$2,642,792 and now stands at approximately \$450,000.

The State DECD still recognizes the Town as a *Distressed Municipality*. The citation often allows consideration for certain funding and/or grants to enhance the community.

#### 6.4 Energy

A > 5% decrease in plant energy demand has been observed associated with the (more controlled) lower dissolved oxygen (DO) settings loadings (for this March compared to last March) in the process tanks due to the new fine-bubble diffusers as well as the new (more efficient) turbo blowers. Approximately 90% of the WPCF energy comes from the fuel cell.

In January, February and March, the Administrator and Superintendent met with Dan Joyce of Balanced Rock Energy (WPCA Energy Broker) to review current and future contract conditions for purchasing energy off the free market. It is likely the cost will rise 50% for the next contract due to market conditions.

The (electrical) energy is the single largest monthly expenditure. Electrical Energy is supplied to the plant by the 460 kW Doosan Fuel Cell America, Inc. fuel cell (onsite generation by Unit #10587), Eversource (transmission) and First Point Power (generation). The power generation was formerly supplied by Constellation Energy. The WPCA is using less public grid kWhs due to this onsite generation. Fuel cell operation issues were encountered during the month. Each month a review of energy usage is conducted for each billing (i.e. plant, pump stations) to determine if there is a sudden rise in demand which often indicates mechanical problems (i.e. pump/motor failures). During the recent (year-end) fuel cell audit, it showed a savings of \$182,000 per year annual savings (i.e. demand charges, ratchet charges) due to this onsite generation (95.5% availability) with the Pure Cell (400 kW) unit; it is the best performing unit of its kind in Connecticut.

In March 2023, the Montville WPCA and Town signed a 20-year solar service agreement with N. Silver Brook, LLC- a Montville based renewable energy company. The agreement will save the Town of Montville more than \$850,000 and is structured for the town to receive the full savings amount within one year of the solar facility's completion. N. Silver Brook and its partners allocated solar energy from a Connecticut solar project in Naugatuck to the WPCA's electrical accounts. On June 9th, that project was selected as a winning bid in Connecticut's Non-Residential Renewable Energy Solutions (NRES) program. All of the WPCA's electrical usage was assigned to the winning bid and will result in lower energy costs.

Superintendent Albertson highlighted information from his monthly report, specifically phishing and cyber-security training for WPCA staff initiated by IT Town-wide annually; a Stop the Bleed and other health safety training in March; training and testing by key staff members—the Collections Operator passed the operator exam and as reported previously received his CDL and the Lab Operator completed the lab course and will be sitting for the exam. The Plant continued to have lower energy use for removal by 8% this March compared to last March due to better control of oxygen going to the process tanks. Most of the electrical energy is used to put air in the tanks. The new blowers and the controls for them maintains a better defined oxygen level thus less use of energy. The month of March had very high flow and the influent rate was 30 % higher than usual. The influent flow through the facility usually at a rate of 62 million gallons was actually 90 million gallons which contributed to poor settling causing operational issues. Additionally, received was the general nitrogen reduction permitted loading amount from the State—it was 38% percent lower in 2023. As a result, the Plant was recognized as one of the best operating in the State and will therefore receive a check for approximately \$3,000. Biobot in partnership with Harvard University monitors the influent for covid within Town and has offered for free to monitor noroviruses such as the flu and drugs such as cocaine, fentanyl, methamphetamine, nicotine, and

i. Report from Administration

Administrator McDaniel reported on significant connection fees collected this month due to development. Six (6) units of the Oxoboxo lots came online; six (6) units of a 22 unit condominium development at 225, Route 32, six (6) units of apartment at the former Entertainment Zone building, across from the Town Hall, and one (1) residential connection. As a result, an \$105,000 payment was made today to the Mohegan Tribal Utility Authority lowering the balance owed to under \$500,000. The Administrator also elaborated on a report filed by the Superintendent with the agenda. Administrator McDaniel is doing cyber readiness training and taking other courses at the urging of the Superintendent. Although the Plant is good shape, there is concern with cyber interference with the water and sewer constraints of it. A playbook has been developed with several developed modules that is hoped to be used with the summer intern. Secure file storing, updating patches, the sharing of data, better passwords, and multi-factor authentication was also mentioned. The Administrator also commented on his time at the Plant and complimented Superintendent Albertson for its staff development and the way in which it is run.

**j.      Report from Mayor – *None***

**k.      Report from Engineers**

Superintendent Albertson reported the closing date for bid for the Stoney Brook Bridge project is April 9 and the d-box project will be going out to bid this week. He also reported that the fuel cell supports 90% of energy use at the Plant with no transmission costs.

**l.      Old Business -- *None***

**m.      New Business -- *None***

**n.      Report/Referrals from Planning & Zoning**

Chairperson Longton remarked that at the Planning and Zoning meeting there was no discussion directly related to the Commission. Discussion at the meeting involved regulations for cannabis establishments within Town and to adopt code regulations to prohibit any other facilities in Town. Administrator McDaniel commented on high water usage for cannabis cultivation.

**II.   Water Commission**

**a.      Report from Operations -- *None***

**b.      Report from Administration**

Administrator McDaniel reported he is continuing to learn about the Neptune system; a robust system to do more data analysis and audits. The system also has the ability to automatically track spiked water usage.

**c.      Report from Engineers**

Superintendent Albertson reported there will be another Cook Water Tower status meeting in two (2) weeks. Administrator McDaniel confirmed the meeting will be by phone on April 17, 2024 at 10:00 a.m. in the Plant conference room.

**d.      Old Business -- *None***

**e.      New Business -- *None***

**III.   Remarks**

**a.      Remarks from the Public -- *None***

**b.      Remarks from Commission Members -- *None***

**c.      Adjournment**

The meeting was adjourned at 6:12 p.m.

Respectfully submitted by,

Gloria J. Gathers  
Recording Secretary, Town of Montville

**AN AUDIO RECORDING OF THE MEETING IS AVAILABLE ON THE TOWN OF  
MONTVILLE WEBSITE.**