

Town of Montville Water & Sewer Commission
REGULAR MEETING MINUTES
October 3, 2022-- 6:00 PM
Town Council Chambers – Town Hall

1. Water and Sewer Commission

a. Call to Order

Chairman 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 were Commissioners Town Councilor Alfred Mandler, Brian Quinn, Anthony Siragusa, and Chairman Chuck Longton. Absent was Commissioner Shawn Jinkerson. A quorum was present.

Mayor Ronald McDaniel and Superintendent Derek Albertson were present for the meeting.

d. Alterations to the Agenda --None

e. To consider and act on a motion to approve the Regular Meeting Minutes of August 1, 2022
Motion by Commissioner Mandler; seconded by Commissioner Siragusa to approve the Regular Meeting Minutes of August 1, 2022. Discussion: None. Voice vote: 4-0, all in favor. Motion carried.

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
Chairman Longton asked three (3) times for remarks from the public. There were none.

h. Report from Operations/Administration Division

Superintendent Albertson submitted an Operations/Administrative Report for September 2022 as follows:

1.0 Compliance/Process

1.1 Water Pollution Control Facility

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The Montville Water Pollution Control Facility (WPCF) met required state and federal standards for effluent discharged to the Thames River. No local or formal complaints were received regarding the collection system or the WPCF.

Average daily influent (average) flow to the WPCF was 2.0 mgd with a total treatment volume of 61 mg for the month. Approximately 50% of the treated (or 1 mgd) effluent was recycled (sold) to Rand-Whitney's paperboard facility. Process control was very good with high removal efficiencies for key contaminants (BOD₅ and TSS). Total Nitrogen (TN) loading was discharged in the treated effluent well below the permit (loading) level. Waste activated sludge (WAS produced during secondary process) was improved to over 5% TS.

1.2 Water Supply

The Montville Water Supply (WS) met required state and federal standards. A lightning strike on September 22 caused an interruption of water flow (and subsequent surge) causing some sediment to be raised. One cloudy water report was received.

2.0 Staff

A newly hired Maintainer (Greg Bindloss) will start work on October 3.

2.1 Health and Safety

No injuries, grievances or concerns were reported for staff. As indicated, a review of all safety training was conducted for the staff. New staff will be trained appropriately for risks identified.

In a report recently published by NOAA, the average temperature this past summer was 2.5 degrees F above average. August 2022 was the warmest month ever recorded for the state. Increasingly, there will be attention required for heat related risks. NOAA's Climate Prediction Center released its forecast for October on Thursday, and below-average temperatures are absent from the prediction everywhere in the U.S. Working in heat can be hazardous and can cause harm to workers. The Superintendent will ensure adequate training in the workplace to keep workers safe from the risks of working in heat.

2.2 Training

Staff continued to receive training to meet CTDEEP and CTDPH requirements for (wastewater /water certification) training credits. The Superintendent initiated the eight part DOE (SWIFT VINPLT) Wastewater Virtual In-Plant Training (Fall 2022) training on September 27 and Eversource's Storm Preparedness Training on September 28. The new employee will be provided Health and Safety training appropriate to his position. Site hazards will be identified and discussed.

3.0 Equipment

3.1 WPCF/Collection System

Routine maintenance was performed at WPCF. All pump stations were inspected and cleaned during the month as well as a large number of manhole inspections were made.

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A significant rain event (greater than 7 inches) occurred on September 5 and 6 with no adverse conditions observed. While maximum (spike) influent levels during the 24-hour period were observed, no “storm mode” was encountered in the process tanks. Maximum influent flow occurred from 6 p.m. to 8 p.m. and maximum effluent flow occurred from 8 p.m. to 10 p.m. A hydraulic study was completed by the Superintendent to confirm that the total increase in flow was less than 2x the (seasonal) normalized flow meaning that stormwater contribution (I/I) was not a significant concern at this time in the 62-mile sewerage collection system. The plant was able to absorb the increased total flow (> 45%) into the plant without losing process control (i.e., solids loss in the effluent). The plant is at a significant elevation above the Thames River; it is not expected that storm surging is not expected to adversely affect the plant. Hardening improvements (e.g., dikes) are not required during this time.

The Engineer was met on September 14 to complete a report to be filed with the CTDEEP about conversion of one of the SBRs (SBR-4) to an aerobic digester. Trials indicated success with a >50% reduction in solids generation (and thus significantly lower disposal costs).

A review of the plant’s ASTs was conducted (for chlorine storage). One plastic tank considered beyond its life was cut up and disposed of. A national railroad strike could have derailed critical deliveries of chlorine to wastewater treatment plants, among other potentially crippling disruptions, prompting the White House on September 13 to review contingency options for protecting the nation’s water. The WPCF supplier (Borden & Remington) reported no immediate impact to bulk supplies. The Association of Metropolitan Water Agencies recently voiced its support of an agreement reached in September between the railroads and their unions that prevented any interference of the shipment and delivery of chlorine and other essential water treatment chemicals. Significant storage exists onsite to prepare for supply shortages.

CCTV sewer pipe/manhole inspections was conducted in prioritized areas (those areas identified in the 2010/2011 URS reporting/CIP Cross-Country Clearing areas) as having a high R-value; that is, those sewer most likely to have increased flow due to strong rain events. Approximately 4,000 feet of cleaning/CCTV inspection has occurred so far in 2022. Work within the collection system is recorded in the GIS system (inspection attributes) as record for potential regulatory review. In the future, some additional MSI work (multi-sensory inspection) including radar and sonar may be used for the larger sewer mains if found to contain problems.

Reportedly, RWCB will begin additional re-lining operations in October (Faria Road to the plant).

Eversource notified the WPCF of proposed work for transmission lines (1080, 1070/1000, and 1090/1000 lines). No problems are expected for the WPCA during the work.

The CTDPH was met on September 15 to review the status of the Cook Water Tower replacement project submittals. Town submittals (i.e., variance, plan approval) have been completed. A presentation will be made to the WPCA to update the commission about the proposed work. Subsequently, the Town Council will be made aware of developments.

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The water supply and WPCF (and associated collection system) is considered critical infrastructure. Outside of weather, cyber threats represent the largest concern. To block information technology (IT) or operational technology (OT) compromises, routine assessments are performed to minimize exposure by appropriate vulnerability management for block both inside and outside threats.

4.0 Projects

A summary of existing projects is provided in an attached project summary table.

4.1 WPCF/Collection System/Water Supply

Supply issues have lengthened plant project timelines, including the grit chamber and the diffuser replacement projects. The Superintendent is working diligently to ensure completion of these grant funded projects by the end of the calendar year.

An Atlas Copco (turbo) blower quote was received on September 21. The FY 2023 CIP includes funds to purchase the third (and final) blower for SBRs 1 and 2 (newly installed Blowers 5 and 7 serve SBRs 2, 3, 4, 5 and 6). As indicated, the existing (Spencer) blowers were rebuilt and will serve in a redundant position. The aeration system configuration will now exist with a brand new (energy efficient) first-position turbo blower backed up with a rebuilt older blower. Expectations are that this system will be trouble free for at least 20 years and provide significant energy savings and better process control.

The SBR-4 diffuser project was found to be significantly under budget due to the low volume of grit removed from the tank.

Montville is served by a fairly new (separated) wastewater collection system with its inception in the 1970's. The Route 163 corridor to the west of the WPCF was the first area to be served by the Town's system. Sanitary sewers in the Route 32 corridor to the north were installed later during the 1980's. The Rand Whitney Corporation's (RWC) dedicated line for industrial process water was installed in the 1990's while the Mohegan Tribal Utility Authority (MTUA) sanitary sewer line was installed in the 2000's.

A targeted inspection/review of some of the 1,650 manholes in the collection system was made. Weakened manholes (i.e., lids, frames) can be a hazard during the winter (plowing) season. Suspect manholes were inspected along various streets in town, including Podurgiel, Woodland, Bridge, Driscoll, Dydo, Wildwood, Chesterfield, Maple, Benway, Manor, Jerome, Porach, Galvin and Lathrop. Those requiring immediate attention included those on Maple Avenue Extension and Lathrop Avenue. It has been reported that paving is proposed for Route 32 as well as other locations within the Town. Coordination with the WPCF is necessary to ensure the manholes are cared for and raised properly.

CCTV and cleaning work was completed by staff as part of the current cross-country project. The project is divided into three sections (northern, central and southern portions). Working with the engineers, the extent of clearing has been minimized (thus lowering project costs). Cleaning and

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CCTV work for the project was completed the week of September 19 along Hunters Run and Oakdale Middle School.

The LCRR investigation of water supply connections is continuing with the WPCA met on September 12 to discuss the status. The goal is identify only those lines requiring additional inquiry (i.e., house inspection, test pits) to confirm no lead conditions. Up front work has significantly reduced the amount of suspect lines. As indicated, there is no expectation for finding lead lines with the (younger) distribution systems.

Oxoboxo Lofts contains a groundwater remediation system (pump & treat) which will eventual be discharged to the municipal sewers. The engineers were met on September 12 and 19 to confirm the potential connection.

Science Department Heads for Montville High School and Saint Bernard School and The Williams School were contacted for plant tours and classroom support as part of the Superintendent's community outreach program.

4.2 Regulatory Oversight

No regulatory oversight or action is ongoing for the WPCA. No existing *Consent Decrees* or *Consent Orders* currently exist.

Heavy rainfall has provided relief to the drought conditions in Connecticut. The U.S. Drought Monitor has lowered the drought category; the D3 designation has been significantly reduced in New London County. The heaviest rain has fallen in southern and eastern parts of the state where 6 to 8 inches was received. The U.S. Drought Monitor has reduced the area covered to a D2 designation. A small area remains in the D3 designation in extreme southeastern Connecticut. Reservoir levels currently remain at 72% of capacity. Fire danger is considered low and the 90-day rainfall deficit has disappeared and is around 0.0".

The research organization Climate Central released a report in September that analyzes the major electricity outages in the U.S. since 2000. The two key findings are that 1) most of these events are caused by extreme weather, and 2) as extreme weather becomes more common because of climate change, so do the power outages.

The plant's paved areas were swept to reduce grit (to ensure compliance with the SWPPP program).

ASTM C1920-21 Standard Practice for Cleaning of Vitrified Clay Sanitary Sewer Pipelines was published by ASTM in December 2021 making it the first standard ever for cleaning municipal sanitary sewer lines. It works in accord with EPA guidelines and CMOM on reducing overflows and defines the Standard Operating Procedure for cleaning sewer pipelines.

Steven Donbrosky, Veolia NA Treatment Plant Operator Lead for the New London Department of Public Utilities (Public Water System, Lake Konomoc Water Treatment Plant Facility)

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inspected the Chesterfield PS in September. No watershed inspection violations were observed on the property.

The Superintendent was asked to apply to the *Wastewater Certification Program* (testing review body for wastewater treatment operators), administered by the CTDEEP Bureau of Water Protection and Land Reuse. The original intent of the program was to assure competent superintendents and shift operators for wastewater treatment plants of various types and complexities.

On September 19, the Superintendent was invited to join a workgroup for the *Water Planning Council- USGS Data Collection Program* (to support the recommendations of the State Water Plan). It is anticipated that the workgroup will need 9 to 12 months to complete the evaluation surface water and groundwater data for the Water Planning Council.

According to September correspondence, the CTWEA (Legislative Committee) is scheduling WPCF tours for state legislators in the fall. As challenges in our industry continue to mount it is vital to demonstrate to those in these leadership positions the vital work completed. Montville was selected as a potential tour facility.

The CTDEEP has promoted the celebration of five decades of *The Clean Water Act* implementation which has reduced direct pollution discharges to our nation’s waters and improved wastewater and stormwater infrastructure.

In a first for the world, the *California State Water Resources Control Board* recently approved requirements for testing drinking water for micro-plastics. Under the new plan, 30 large water utilities in the state will be required to test quarterly for micro-plastics beginning in 2023. This testing will extend to all states in the coming years.

The U.S. observes *National Preparedness Month* in September to remind Americans to be ready for disasters (man-made or natural). Severe flood events are expected to become more common as climate change intensifies, and many US communities are like Jackson, MS, in that their outdated water infrastructure are not prepared for the challenge. As such, the WPCF staff is committed to preparing for any event that may interrupt the water supply or treatment of wastewater.

Forever chemicals (PFAS is one example) are being investigated for their prevalence in the environment and the potential for human health issues. PFAS is a group of 4,000 to 10,000 chemical compounds for which toxicological studies have been started. Some of the chemicals will be USEPA regulated as “hazardous” under CERCLA and have MCLs for water. A CERCLA designation gives the USEPA or other agencies authority to require facilities to investigate and report uncontrolled releases and to enforce cleanup or to recover costs. Additionally, Superfund inclusion will lead to federal monies available to help communities manage this problem.

5.0 Development

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Several development projects have been presented to the WPCA for review/comment. P & Z correspondence was related to proposed residential development at 245 Route 32 and 1108 Old Colchester Road. Mr. Tim Carr of Down to Earth Environmental LLC contacted the WPCF about connecting pump and treat groundwater discharge to the municipal sewers. Fees and rates will be determined based on the current rules and regulations.

6.0 Finances

The WPCA operates with an *Enterprise Fund* which is operated like a private sector business account except with zero-balance ending. The FY 2023 WPCA Sewer and Water Budgets begin on July 1 of each year.

The WPCA budget cycle is closing with the auditors formal review of the financial sheets for FY 2022. The financial condition of both water and wastewater accounts are considered good. While there have been noticeable increases in some costs, the utility can be proud to serve its ratepayers with the same (low) costs for water and sewer. The recently approved potential increase in loading from Rand-Whitney (and improved septic receiving) should result in significant more revenues to cover unexpected costs and keep our rates low. The municipal accounting review (as part of the Town Audit) includes the WPCA with file testing in September.

In the future, mounting (cost) effects will challenge further efforts to provide economic utility services. Climate change, infrastructure maintenance, coupled with emerging contaminants increase the need to improve AR and lower AP.

6.1 Accounts Review

Current rates (and ancillary fees) appear to be adequate at this time to cover costs for water and wastewater activities. With the close of FY 2022 the WPCA finds itself in good financial condition. Energy savings are consistent with earlier months due to the new turbo blowers as well as onsite generation with the fuel cell. The water supply showed a slight under budget AR (1.7% of total projected budget) while sewer (again) showed improved AR (14% of total projected budget) due to higher than anticipated revenues from RWCB, MTUA, and septic haulers. This accounting includes out-of-pocket expenses and not depreciation.

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 GIS platform. As part of year end activities for 2022, an asset listing was completed and reviewed by key staff members to determine depreciation.

6.3 Grants/Funding

Some current wastewater projects are funded by State funds including two bonds and one grant (CTDEEP \$5 million *Grant-in-Aid for Sewage Treatment Facility Infrastructure Improvements and Upgrades at the Montville WPTF- 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 will be replaced. The

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Mayor requested an extension for the Grant. A review of the approximately \$4.5 million in grant monies (slated for the WPCF) indicated adequate funding for the proposed projects with approximately \$200,000 margin.

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. In a January 12 *Circular Letter*, the CTDPH DWS provided information about drinking water infrastructure funding directed through DWSRF programs over the next five years from the Bipartisan Infrastructure Bill (BIL) aka the Infrastructure Investments and Jobs Act (IIJA). The possibility of using American Rescue Plan Act (ARPA) funds to help offset the costs of this project is a possibility. The Finance Director was notified of the intent to pursue federal funding for the tower project. The CTDEEP held a hearing to collect comments on the draft fiscal year 2022 and 2023 Priority List (Priority List) for the Clean Water Fund program on May 16. Wright-Pierce will be at the September 8 WPCA to discuss the project. Filings have been in the P & Z department including the wetlands department. The September Zoning Board of Appeals Meeting will be attended by the WPCA Engineer and Superintendent for a placement variance (setback) for the proposed tank.

The Connecticut Rural Water Association is promoting a PFAS Cost Recovery Program.

6.4 Energy

Overall, there has been a continued decrease in plant energy demand observed associated with the lower (and more consistent) DO settings in the process tanks and the new (more efficient) turbo blowers. The third position blower will be place as part of the FY 2023 plan.

Electrical energy is supplied to the plant by the Doosan Fuel Cell America, Inc. fuel cell (onsite generation), Eversource (transmission) and *First Point Power* (generation). The power generation was formerly supplied by *Constellation Energy*. Approximately 75% of the energy came from the fuel cell in August.

The Doosan *PureCell Model 400* Fuel Cell unit began producing power onsite in June 2020 resulting in a large drop in grid power demand (up to 75%). Of note, the Doosan Corporation formally changed its legal entity name to HyAxiom, Inc. (effective February 24). The HyAxiom 460 kW fuel cell has run close to perfection (96%) in 2022. The unit is the best performing in Connecticut. The onsite generation has led to significant savings by reducing the transmission costs because most of the power used is generated onsite.

Superintendent Albertson submitted his report that is self-explanatory—processes are running well, no complaints reported, and August and September were good months. Per a question from Commissioner Siragusa, Superintendent Albertson will review and report back to the Chairman Longton whether Hillcrest received notification on prior water issue.

i. Report from Mayor.

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Mayor McDaniel reported on the launch of the Everbridge system stating residents are being asked to sign up for notification on various categories—road closures, road paving, water shutdowns, and hurricanes. On the Town website, there is a QR Code to access the alert system and all are invited to sign up. Mayor McDaniel will obtain the QR Code for Commissioner Siragusa. Also, there are two (2) new hires at the plant and one, Maintainer Greg Bindloss, began work today.

j. Report from Engineers

Superintendent Albertson introduced WPCA professional engineers Barry Parfitt and Mariusz Jedrychowski to give an update on the Cook Water Tower replacement project. PE Parfitt reported the project application was brought before the Zoning Board of Appeals for a variance that was approved and will be filed with the Town Clerk. The site plan was submitted to the Planning & Zoning Commission for approval at its last meeting but will be heard at its November 8 meeting. The project was accelerated in the spring to DPH to meet a deadline to qualify for specific funding. Documents were submitted and comments received from DPH; work is being done to finalize the designs and to obtain appropriate regulatory permits. On project is on track for submission of a final set of designs to DPH for comments to proceed with the bid process that will be brought before the Commission for approval and forwarded on to the Town Council. Per a question from Commissioner Siragusa about switching the antennas to the new tank, PE Parfitt reported it was not a part of the project. Mayor McDaniel reported there are options to move the antennas to other towers or they can continue to be used from their existing tower location for a long time to come without the need to ground them.

k. Old Business -- *None*

l. New Business -- *None*

m. Reports/Referral from Planning & Zoning

Superintendent Albertson reported a report on the Cook Tower replacement was tabled to its next meeting. Mayor McDaniel reported Town Planner Burdick submitted an email regarding a couple of items regarding the same that came in late this afternoon that may effect the project.

II. Water Commission

a. Report from Engineers -- *None*

b. Old Business -- *None*

c. New Business -- *None*

d. Remarks from the Public

Chairman Longton asked three (3) times for remarks from the public. There were none.

e. Remarks from Commission Members

Commissioner Quinn inquired about a presentation for solar energy intended for this evening. Superintendent Albertson remarked that he and Mayor McDaniel are waiting on figures from Titin Energy for more potential savings. Commissioner Quinn remarked on the Town's commitment to solar energy; Mayor McDaniel reported on a number of options for the same i.e., purchase payment power, credit numbers from the State, and a mix between the WPCA, the Town, and the Board of Education. Energy credits are given for municipalities only; not to businesses. Chairman Longton was glad to be home and no longer in Wyoming. Mayor McDaniel remarked on a continuous watch on the hurricane season and reported on approval of the Town for debris management to be located on PTA Lane.

f. Adjournment

Motion by Chairman Mandler; seconded by Commissioner Siragusa to adjourn the meeting at 6:17 p.m. Discussion: None. Voice vote: 4-0 , all in favor. Meeting adjourned.

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.**