# LITCHFIELD WATER POLLUTION CONTROL AUTHORITY REGULAR MEETING MINUTES

Town Hall Annex, 80 Doyle Road, Bantam, CT 06750 Thursday, November 9, 2023 ~ 7:30 PM

**CALL TO ORDER:** David Wilson called the regular September meeting of the Litchfield WPCA to order at 7:34 PM.

### **ROLL CALL**

<u>Present:</u> Members present were Dave Wilson, Christian Bratina, and Sky Post, Also present was Ted Donoghue, Plant Superintendent.

Absent: William Buckley, David Geiger, and Raz Alexe, Public Works Director,

**SEATING ALTERNATICES:** S. Post was seated as a regular member.

**MINUTES: Motion:** None presented.

#### **BUSINESS**

1) Public Request and or Comment. Kate Honan, of Beach Street in Litchfield. Mrs. Honan had two questions. Referring to the WPCA Minutes dated 10/12/23, and the part in which the flood resiliency study was mentioned. Mrs. Honan asked, who are the policy makers who decided the 500 year flood elevation standards and is it the state that is requiring this? D. Wilson answered that the state uses the TR 16 wastewater engineering standards (Guides for the Design of Wastewater Treatment Plants prepared by the New England Interstate Water Pollution Control Commission), the CT DEEP did not create these standards. Her question was whether the probability of a 100 year flood event occurring is 1%. D. Wilson answered yes. So a 500 year flood event occurring 2/10 of a percent. D. Wilson answered correct. She next asked if we are going to have Woodard & Curran look at doing both a 100 year and a 500 year study, although for very little improvement. D. Wilson said these are what the requirements are now by the Regulator in Hartford. C. Bratina said that these are the new standards used nationwide, as rainfall intensity has increased so much due to global warming that 100 year floods now occur every 20 years, NYC did this five years ago. K. Honan then referred to the Town of Cornwallwhich is building a small wastewater treatment plant, is only doing a 100 year flood study. C. Bratina commented that they should do both the 100 & 500 year studies. D. Wilson said that they have not even started, and that their eyes will be opened as they move forward with this project. K. Honan said the state should be looking at the cost difference D. Wilson said the state does not look at that issue. C. Bratina commented that some of the plants have flooded- and when this occurs a plant equipment could be seriously damaged and a plant could be offline for up to six months and then you spend a tremendous amount of money on repairs. So it is in the best interest to spend the money up front to protect the infrastructure from catastrophic flooding events. The 500 year flood plain is the best indicator of what is likely to occur with the much high rainfall intensity events - which are predicted to be much more frequent due to the atmosphere holding much more moisture, due to climate change. Her last question was referring to page 2 of the 10/12/23 WPCA Minutes, Craig Motasky-from the CT DEEP, had shared that the 5 mg/l DO requirement on the discharged effluent would be part of the new NPDES permit. What is that? T. Donoghue answered that it was dissolved oxygen, and went on to say that we have not had that requirement in previous NPDES permits, and the reason may have been of where our outfall pipe discharges into the Bantam River. This is a bottlenecked section which has naturally forming rapids, in which the river is naturally higher in velocity and there is more

agitation of the river and the plant effluent with the atmosphere. K. Honan asked if the Bantam River will remain a Double AAA river classification. C. Bratina answered yes, as this new DO minimum will improve the river quality for fish. T. Donoghue said this will help in the lower flow months of the Bantam River as well, as typically the DO in the Bantam River is between 9-11 mg/l and the discharged effluent has been as low as 2 mg/l. T. Donoghue then mentioned going back to K. Honan earlier questions, that during the month of July flooding was so bad in Vermont that three plants were inundated once again, has this has occurred numerous times over the last three years, and there is now discussions to move them further away from the receiving waters that they discharge into. D. Wilson said that rainfall intensity and frequency have changed, and explained that the Federal Government has previously accepted the new standards, the CT DOT had not, and so recent bridge and road work in town has not used these new standards. Tom Schwartz from Woodard and Curran was called in to update the Board, so the public comment section ended.

- 2) **Update on Torrington Inter-municipal Agreement:** D. Wilson mentioned that all the incumbents on the City of Torrington Board of Selectman, were all reelected. So he and W. Buckley will reach out to Ray Drew to follow up on negotiations. T. Donoghue has yet to receive the FY 23 usage bill from the Torrington WPCA as well.
- 3) **2024 WPCA Meeting Schedule:** T. Donoghue put forth the 2024 Regular WPCA meeting schedule, and noted he had changed the location from 29 Stoddard Road to 80 Doyle Road, at the Town Annex-since it has been over 2 years since we last hosted a meeting at the treatment plant., and if we are to stay at this location, it should be reflected on this document, as this is what will be posted on the Town's website.

**Motion:** S. Post put forth a motion to accept the 2024 WPCA Regular Meeting dates. Discussion, D. Wilson and C. Bratina prefer to move the regular WPCA meetings for 2024 back to the plant location at 29 Stoddard Road, Bantam, CT. S. Post withdrew his motion.

**Motion:** S. Post put forth a motion to accept the 2024 WPCA Regular Meeting dates, with the location being the treatment plant at 29 Stoddard Road, Bantam CT. C. Bratina seconded, and there was no discussion. All members voted "aye" and the motion carried.

4) Woodard & Curran Update: Tom Schwartz, a Senior Project Manager at Woodard & Curran, called into the meeting at 7:40 PM to update the Commission on the status of the ongoing engineering study. After a brief introduction to the group, D. Wilson asked how the modeling is going for the flood resiliency study. T. Schwartz said it was going good, we are just getting going on that, so we got the final data from the surveyor. It should be completed within the next two week. He felt, they are a week behind, but everything looks good for what they need, and they will be able to integrate all this work into what has already been completed into Technical Memoranda #1-which is the current assessment of the existing wastewater treatment plant. So that document is in pretty good shape, as we mostly have about 80% finished. The next step is to go through the QA/QC process with their team, once they get the flood resiliency information. So it is the modeling and flood resiliency that has yet to be done over the next month or so. D. Wilson thanked. T. Schwartz and then asked if there were any surprises since he last spoke with them over two weeks ago, T. Schwartz said no, and hopes there will be no surprises from the modeling. As it was discussed, with D. Wilson, T. Donoghue, and C. Bratina, from their data assessment the secondary clarifiers are the area of the plant that are a bottleneck and limits your ability to treat properly during high flow events, and as it is known you are on the edge. T. Donoghue and his team do their best to ensure compliance, and it is a testament that they are not violating the permit more often. As we have discussed there are two technologies that could reset the goal posts in returning the solids and hold them in the process properly, as poor setting solids can lead to non-compliance events when they leave the system and enter the river.

Because the solids don't settle well, you are at the edge of keeping the solids in the system, which is a function of the settling rate of the solids and the volume and surface area of the clarifiers. That being said if we can reduce the sludge volume index on the solids, we can push the secondary clarifiers beyond their current loading capacity. The clarifiers are on the edge of the TR 16 standards-possibly somewhat undersized, but two of the existing secondary tanks are not up to the current standard and then add-on the poor settling of the solids during some times of the year, and that lead to permit violations. We are looking at technologies that can help improve the settle ability of the solids, and if that was the case it could change the outcome for the existing secondary clarifiers. That could forgo the need to add a fourth rectangular clarifier, or having to abandon all three and upgrade to deeper circular clarifiers. We are very excited to see what these technologies can offer, but if these technologies would not work, that would change the outcome of the study. We are getting slightly ahead of ourselves, as our current technical memo for phase 1 is to give an assessment of current conditions. But the most important is the secondary clarifiers, something needs to happen there. We are looking for ways that are capital avoidance, if these system can work it will change how we look at things in the next phase. Otherwise we will be looking at an additional clarifier or clarifiers for the future. They are expecting more information from these two companies we are supposed to be focused on current conditions, but if we can make an impact in lower SVI's that would be vital to control costs for any upgrade work. One company BioMag® offers a bench test which will give you a good idea of how well it will perform. The other company, INDENSE®, can provide a rental unit, and if you agree to purchase the process you get up to 50% of the rental cost back and they do offer a rental unit, which can help offset the final cost- up to 50% back if we decided to purchase it. Tom and Arron will be visiting Pennsylvania next week to look at both of these technologies- at no cost to the Litchfield WPCA as Woodard & Curran has an educational budget that pays for such trips. S. Post asked would this involve a lab trial, as well as a plant trial. T. Schwartz said it could. There are two technologies we are looking at. The first called INDENSE®, which is a cyclone system to separate the poor settling biology from the good when it is removed from the system as WAS (waste activated sludge). It separates the colloidal from the solids and after two weeks you begin to see improvement with your SVI's as well as having better biology. This company offers a full sized trail unit, which they can bring to the plant. It is a 5 'x 7" skid that they will bring to the plant and hook up to your WAS line, there are no new pumps needed, as it will use existing pumps. It could be plumbed in outside too. The trail cost is around \$8,000 per month, and they want to do it for three months. If you purchase it, you will get half of that rental costs back

The other technology is called BioMag® which is a ballasted activated sludge system where they use magnetite-fully inert iron oxide particles, to enhance the settling of solids in the secondary clarifiers. It is a very fine, but very heavy, particle which you mix into your system and it makes the floc much heavier, so that when it hits your secondary settling tanks, the MLSS settles much faster. The magnetite is then removed by a magnet- and reintroduced back into the system. It is a much more complicated and more expensive system, requiring much more capital-intensive, and the more expensive of the two. However the reason they want to look at it more, is that it will produce the better settling sludge of the two, because that magnetite is so heavy and it is much more immune to biological upset than the IDENSE® system. So both should be looked at more for their viability. T. Donoghue mentioned that they installed the INDENSE® system- as part of a three month trail, at the GNHWPCA plant, in New Haven, and T. Schwartz said that he had spoken with Dan there earlier today, as they finished installing it today. T. Donoghue said that would make it very easy for us to visit and see how it is performing in month or so, which should be enough time to show a benefit. T. Schwartz said that they should see

the results in two to four weeks. T. Donoghue had spoken with Ryan Harrold- Asst. Operations Manager at GNHWPCA, and the filaments they get are Limcola and Nocardia, which is not what we typically get, but they get poor settling sludge too. D. Wilson appreciated the updates and a promised a fuller house next time for more question. Mr. Swartz said that he or Arron can appear in person as well, and they will share results from their road trip when they return from PA.. The next several weeks will be very telling. D. Wilson asked T. Schwartz if he had any questions for us, which he did not, and said T. Donoghue has been very good at answering all the questions he and his team launch at him on a frequent basis. He will report back to D. Wilson and T. Donoghue on any new information he may get on the modeling as well. D. Wilson noted that the BioMag® technology adds magnetite which attaches to the solids to make it settle faster and then they separate the magnetite to reuse it. T. Donoghue mentioned that the magnetite is proprietary and that you need a silo for storage, D. Wilson said you don't need a silo, but have to keep some in storage. T. Donoghue said the installation cost could be seven figures, as well as higher operating costs. He explained that the INDENSE® system is much simpler, and the skid can be placed inside on the WAS line with no additional new pumps. C. Bratina asked the WAS line? T. Donoghue thought it would be placed in the RAS line at first too, but once installed into the WAS it removes the bad biology and since we co-mingle our WAS and primary sludge, we would see improved settling in the primary tank at first. In the trail in GHHWPCA they running it side by side with their existing WAS system. It would be much easier to put in this system compared to the BioMag®, as T. Donoghue showed pictures of the set up in New Haven. The BioMag® system also turns the MLSS to black, because of the magnetite. C. Bratina said this technology has been around for quite a while.

5) **Distillery and Arethusa Discussion:** D. Wilson stated that the Board voted to begin surcharge billing in November. We need to get the two drafts agreements addressed and signed with them, and we need to set up meetings with Chris and the Bakers. D. Wilson stressed that we should not tell them what to do, and we should simply address where they are outside our limits. The results of what they may or may not do will be reflected in the surcharge. We would like to do this in the next two weeks before Thanksgiving- as D. Wilson will be away. T. Donoghue asked if we want to do this first and then talk with the DEEP to discuss the pretreatment agreements. D. Wilson thought we had followed up. T. Donoghue asked if we should send out the pre-treatment agreements. C. Bratina thought we had, but if not, we should send them out. T. Donoghue will follow up and send out the two agreements. T. Donoghue reported that his team, D. Wilson and J. Baker did an online training with Randy Bean- a retired Vermont DEC regulator on high strength wastes from diaries, breweries, and distillers. It was an excellent training and offered much insight into the best practices and choices we should be making in regards to these two commercial dischargers. D. Wilson shared Arethusa and the Distillery each contribute about 10% of the loading into the plant- or 20% total. T. Donoghue said that this is BOD capacity, not hydraulic capacity which is the one things we most often talk about, due to high flows from rainfall and weather events. R. Bean did a good job discussing the two and how they are different, but equally important. The discharge from the Distillery, called silage, should not even being discharged into our systemas it is way too strong treat and it is only 300 gallon per batch. R. Bean called the pretreatment (P2) of side streaming and the silage, should be going into our sludge dewatering process or is it more economical for them to not pay the surcharge, and haul it to the digester in Southington for treatment. C. Bratina stressed that once they see the surcharge, it will motivate them to compare costs and possible treatments. Donoghue reported that R. Bean had said that once you accept the waste, you are more than likely stuck with it. He shared with us a fact sheet, his presentation and will try to get a video they created up in VT on dairy waste treatment.

6) Solar Project Update: D. Wilson said that the people running the project scare him, as he feels in a month they will come back and say "we gave to do it this way, there is no time to waste, you've got to approve it or and we won't end up saving money and we have a couple up at Town Hall involved too. C. Bratina said he understood that we have a signed agreement with the company. And they need to meet it. D. Wilson said the agreement is all smoke and mirrors. T. Donoghue mentioned that they had hired an Environmental consultant who submitted numerous questions about tank remediation that have occurred on the plant site over the last 20 years. The Fire Marshall was the gate keeper for all this information and records. D. Wilson went through it all, and it was determined that two tanks were removed back in 2002 and 2003. On one of the tanks they had to remove 130-160 tons of contaminated soil that were taken down to Phoenix in Waterbury to be properly disposed of. D. Wilson said this was typical of any municipality that had fuel oil tanks. These two tanks were not in the areas of the construction of the solar array and the conduits to come to the main building. This consultant had already received all the same information, but missed it or had more questions to ensure that they would not have any issues working on our site, and starting asking all these legal questions. C. Bratina asked what does this have to do with solar? D. Wilson responded that with the lease, it is almost like a Phase 1 project. D. Wilson had spoken with the consultant and cleared everything up, but this slowed things down once again. The picture they submitted was not even our facility. They submitted the wrong one and got it approved by Eversource, it was for a project on Russell St at Public Works. C. Bratina asked if we have approved drawings. D. Wilson said we don't even have that. T. Donoghue spoke with J. Cerkanowicz from Verogy and they are now planning to have the array completed in April of 2024. C. Bratina commented that we do not even have drawings yet. D. Wilson said they did install some planting to clean up the view, but that they sit so low, you still see everything. And D. Wilson asked Carol Bramley from Inland and Wetlands if that is what they are supposed to look like. T. Donoghue mentioned that they will be installing a new culvert at the front gate, which will be done by Towne & Aurell. S. Post asked about the past issue with having enough capacity with the ATS switch. D. Wilson said that we have resolved that, as our consultant discovered that our breakers were set at 700 amps, and that was because they could not get a large enough feeder conductor through the conduit to provide 1,000 amps so 700 amps is the most we can handle. T. Donoghue noted that we have a 1,000 amp breaker that is set at 700 amps. 1, S. Post asked would we need 1,000 amps, D. Wilson said with the computer programing we can stage how equipment starts up. T. Donoghue mentioned that normally the plant draws 100 amps to run the entire facility and if they ordered the new transfer switch early in the years it would have been delivered by January-which they did not want to do to save money. C. Bratina said we should not plan on seeing any reductions in electricity costs this current FY. T. Donoghue said that we can hold out for it to begin in April and we will see how the winter goes. We have extra money in the Fund Balance and in the FY 24 operation budget due to the lower bond payment. Towne & Aurell has dropped off equipment and D. Wilson wants them to then to install rock check dams in the channels, to help raise the bottom of the change to stop all the undercutting, which was what happened to the existing culvert from the last storm on 9/29/23-during which a 5 ft. section of the bottom was ripped out granted it was rotted out, but it was the flared end. We looked inside and saw that the bottom was rotted out. A rock check dam-installed before the pipe, will slow the velocity to "zero' and then it will ramp up from there from an E & S point of view. D. Wilson mention that the pipe at the front entrance at Stoddard Road is reinforced concrete pipe, but that one was corrugated, they will be installing a plastic pipe with a smooth bore, which will allow for more capacity. D. Wilson said we are working up the closure of the asphalt plant s-which typically close around Thanksgiving, but due to global warming they are

open to the first week of December, possibly the 8<sup>th</sup> which is a Friday. Southbury is usually the last plant to close.

- 7) **NPDES Permit Update:** T. Donoghue said there was no update, but he will see C. Falk at the Manager's Forum on December 11<sup>th</sup>. It seems we are not at the top of the priority list at the moment.
- 8) **WPCA Tax Collector:** We are still having issues and D. Wilson feels we should hire a bookkeeper to enter data into Munis, scan the checks for deposit. The 1s Selectman feels that the Tax Collector and Town Clerk should be appointed and not elected. T. Donoghue mentioned wasn't that John Torrant who made that suggestion that these two position should be appointed, but he made the suggestion to merge the Borough and that went nowhere. C. Bratina asked if we hire a bookkeeper to enter all the information into Q, would we have to buy her the Munis program. T. Donoghue said it would be an upload of the data. The current issue to have an account receivables report very similar to what S. Mitchell created out of Excel. It has been challenging trying to mimic that report out of Munis. C. Bratina asked if "Q' can generate those types of report and T. Donoghue was not sure, as he thought it was a system that only tracked and handled the payments of customer and then would upload to Munis, we would need to speak with H. Bunnell. . C. Bratina said that it must be a database that she is entering the data into and then uploading it into Munis. So you should be able to generate reports from that. D. Wilson said it is the finance department that told us we cannot split invoices, that has been corrected. Donoghue said that she had not understood the question, but we can do it. C. Bratina suggested that we give some of the sample reports we want to see and see if they can generate them from "Q", instead of using Munis. Munis does not make any sense when we get the audit, so we might as well tailor Q to provide the reports we need. S. Post asked if we are adding an additional person. D. Wilson said we don't have H. Bunnell because of the issues of trying to properly pay her, it has become a hornet's nest. D. Wilson said we are trying to pay a bookkeeper the same amount that we had previously paid S. Mitchell-which is around \$10,000. The fiancé department said they don't like to pay a town employee both a W2 and a 1099, it is not illegal they just don't like it. C. Bratina asked why we don't hire someone who is familiar with "Q" who can do this for us. D. Wilson said he has a person, who handles the taxes in Morris, Goshen, and Fall Village who may be interested. C. Bratina said then that should be the way to go, and that we could contract for one year and see if we are happy with her services. D. Wilson said he is not making any progress up at Town Hall. C. Bratina said we have been talking about this for months, and that the Munis reports are not very useful for the Board and if we can find someone who is familiar with "Q" and can generate some good financial reports that would be great. D. Wilson said Munis is the Town's accounting system, and for the average user is cumbersome, as it takes four inputs to get a bill paid. T. Donoghue shared that S. Mitchells receivables reports showed all the assessments, what was in arears by FY and all other revenue collect each month, and was on one page and she updated it each month. In regards to Munis it is lumped into line items and is not itemized like the previous report we enjoyed. D. Wilson will continue to push so that we make some progress.
  - 9) **Fund Balance Update-Transfer to Fund 66**: D. Wilson said we don't need to do a transfer today, but he want it addressed soon. C. Bratina said it would be good to list for the Board what the Fund balance is, as we will need extra money in FY 24 for electricity T. Donoghue was asked to email out an updated Fund Balance amount, and it will be discussed at a future WPCA meeting.
  - 10) Commissioner's Request: None presented.
  - 11) Public Works/Treatment Plant Report

T. Donoghue reported that Permit compliance has been maintained since the last report, we did report one Sewage Bypass event detailed below. Routine operations and maintenance work continues, and for the month of October the total flow was 19.419 MG and the daily average flow was 0.626 MGD. We removed 52,000 gallons of bio-solids for final disposal during the month of October, and that they have the level of the FST and BST at their lowest levels all year. With how the month ended and November started we did pull 2 extra trucks. D. Wilson asked about the mixing in the FST tank. T. Donoghue said we are below the mixer and at the top of the cone. Solids percent have been in the mid 4% range YTD, but the last two loads were 5.3% and 6%. For the start of the FY we are down compared to last year in volume and costs, so that is good news. And we will continue to micro manage it.

## **Easements:** No report.

- a) We processed a total of 129,600 gallons of septage during the month of October a 2.5% increase over last October. YTD we are down 8.4%.
- b) For October effluent BOD removal percent was 99% and TSS removal percent was 98%. The minimal removal rates per our NPDES permit is 85%.
- c) The daily average of Total Nitrogen lbs. /day discharged into the Bantam River was 3.9 mg/l or 20.0 lbs. /day. It was higher than normal as we had an outlier reading the first week. YTD we are at a monthly average of 12 lbs. /day with two months to go. Our daily limit is 24 lbs. /day.
- d) The daily average for Total Phosphorous discharged in the Bantam River was 1.53mg/l. or 4.7 lbs. /day. The monthly average cannot exceed 3.7 mg/l and our daily maximum cannot exceed 7.43 mg/l.
- e) On 10/4/23, we used a drone to inspector Manholes in flooded area of Interceptor in White Woods swamp. When things dry out, we will go out again for inspections.
- f) On 10/16-10/19 Green Mountain performed CCTV and jetting on the Torrington Road. Hart Drive sections, and sections of the Main interceptor. D. Wilson said he tried to look at some of that report on his cell phone. T. Donoghue said it is not designed to read on a phone. We did have them do a portion of the interceptor before the swamp from Whites Woods and they started on the other side of the swamp. You could see some leakage from joints, which is typical of the old concrete pipe. Because we did not have a permit for Torrington Road, DOT stopped us before we were done with maybe 1,000 feet to go from Tollgate to the town line. We had to go down to one lane, for which we need a permit.
- g) On 10/18/23 we met with Woodard & Curran and the rep for the BioMag® ballast treatment process at the WWCF.
- h) On 10/24/23 we cleared a blockage at Litchfield High School-in which a private manhole seeped out sewage. We had to report a Sewage Bypass Event. They do have a couple manhole that are allowing surface water an sediment to enter the collection system We could use the epoxy and make them water tight, as the Town manages the O & M on the buildings at the school, and it would not cost us much in labor and supplies. T. Donoghue describe how the blockage was created by grit and not FOG. The line is cast iron downstream from the 2,000 gallon grease tank and they had it pumped out and we CCTV'ed it and there is a PVC pipe coming out of tank into the CI, and possibly the fernco coupling is compromised. We will zip up there the next times we have a heavy rainfall to see if any clear water is coming down this section of pipe that had the

blockage. The town is responsible for the buildings but it is not expensive for us to fix it with epoxy. D. Wilson asked about the inlet to the grease trap. T. Donoghue said he will have to look at that. They did see grit after the grease trap. C. Bratina asked who is responsible for repairing a broken pipe there. T. Donoghue said he would turn it over to R. Alexe. C. Bratina asked how we would finish the remaining 1,000 feet on Torrington Road. T. Donoghue said we would have to get a permit in the spring.

- i) 10/25-26/23 Installed Pro-Rings on five manholes in Bantam, that are in wetlands.
  - 12) Collection System Work: We installed Pro-Rings in the area upstream from Jacki's Restaurant in Bantam, which totaled 5 manholes, this area is in wetlands and at the bottom of the hill, so the ground gets quite saturated. Looking at the YTD CMOM report in the CCTV area we are up to 15%-thanks to Green Mountain ding the majority of Torrington Road to Tollgate, Hart Drive and the parts of the interceptor from White Woods Road to North Shore Road. We are over 18% for jetting, as Green Mountain did portions of jetting before they CCTV'ed. We have inspected 21% of our 652 manholes and we have repaired 66 manholes with Pro-Rings, grouting, and concrete work. We also QSR'ed all the manholes on Hart Drive, as the brick work between the manhole frame and the cone begins to deteriorate due to cracks in the road allowing moisturewhich can freeze and expand over time, to get into this area, and it slowly eats away at the brick and mortar work and has to be refurbished. The QSR, which is special mortar with fiberglass in it, does an excellent job and is easy to apply. This is the product that Green Mountain uses too. This will ensure that water stays out and the structural integrity of the brick work is maintained for years to come. This has been the big thing we have been chasing over the last year. S. Post asked how expensive is it to fix with a broken pipe- say 100 feet upstream from a manhole. T. Donoghue answered that if it is the joint it will need to be grouted and soon after the pipe relined- which can cost \$120 per linear foot. If it is an actual collapsed pipe, you will have to dig it up and do a as spot repair will need to be done, and if it is in a major roadway it can be very expensive to do, as you have to cut and replace the asphalt. If this could lead to major structural failure, it will have to be repaired as water finds the path of least resistance and it will only continue to get worse. Everything is situational that is why we need to CCTV lines to determine the best course of action. If you want to reline a pipe, there are standards on how much the pipe can be off set for the lining to work and be guaranteed by the installer. If the offset is too much, then you cannot reline the pipe and more than likely it would have to be replaced. D. Wilson said you must be mindful if you reline a section of pipe as you could reduce the flow capacity. T. Donoghue called what they have been finding the low hanging fruit. T. Donoghue would like to do a presentation for the Board of before and after pictures of the grouting and concrete work, and how they stop I & I from entering the collection system. T. Donoghue described when they find weepers or a gusher in a manhole cone- that could add 5-10 gallon per minute in flow but when it rains it could jump up to 20-25 GPM, so stop it will protect hydraulic capacity. If you have 600 manholes, and 20 % are leaking 10-20 GPM, that can add up to hundreds of thousands of gallons of water entering the collection system, C. Bratina asked how the RST polymer mixing station is doing. T. Donoghue said it is doing fine, and it is running very well. They did order a new filter belt, as the current one is over 5 years old, and it has a long lead time. We did increase the polymer dosage- as we are getting better settling in the primary tanks, so the sludge is thicker going into the BST so they has to increase the polymer dosage, C. Bratina asked what is the percent solids that we are pumping from the primary tanks. T. Donoghue said it is between 2.3-2.9% as Woodard & Curran has asked for this data. Ideally we would like to be pumping 3-4& solids to the BST, when we are dialed in

the drum thickener can process up to 13,000 gallons a day, which is why the levels in the two tanks are low. C. Bratina asked if we are seeing a reduction in polymer usage, T. Donoghue stated he has ordered less than by this time last year, plus we are tracking the exact running hours now so the through put in gallons is more precisely documented. The bottom line is if we run the thickener less days per week, we need less trucks to remove it and we save money. C. Bratina asked if the level sensors are installed in the BST and FST tanks. T. Donoghue said they have been since last year. This is how we are better able to track through put using the level off the meter. S. Post asked what the status of the UV system is. T. Donoghue answered it is off, as the disinfection season ended in September. We did order the new UV intensity sensor and we will install it and see if everything works properly. The consensus of the Board is to wait until Woodard and Curran finish the study before we consider going out to bid for a new UV system, so we will not have one for the 2024 disinfection season. D. Wilson mentioned that the food resiliency study must be completed first, before any talk of other new equipment as this increased the cost of Torrington plant project by 30%. Woodard & Curran thought they could only use FEMA data and that they would not need to run any modeling, which was the wrong assumption, as in Litchfield it is only north of Bantam Lake. The main issue is with our NPDES permit renewal as we are supposed to be recording UV dose. If we can get the UV intensity sensor to be accepted on an interim basis, we will have that noted in the permit renewal. We know we have no issues with proper disinfection, as even when we push the unit beyond it design capacity it still keeps us in compliance. C. Bratina said it would be good for Woodard & Curran to know what our peak hourly flow is and will be over the next 20 years, so they can properly size the new UV unit. We have been collecting this data daily from the flow reports and entering into Wims. T. Donoghue said we have been recording the minimum and instantaneous max flow, but it was C. Bratina who recommended to record the average peak hourly flow number, as this is a more honest number of what the plant is handling for flow. We still have the ARPA money waiting to be used, but we need get the other things done first. C. Bratina said if the plant was to flood we don't want to damage a new UV unit before we have the study. If we need to raise the UV unit a foot, it is cheaper to fix any issues first. C. Bratina asked about the injury. T. Donoghue said that we had one injury, which was a bee sting. The next day the employee had swelling on his arm so we sent him to AFC, so it was reported to CIRMA.

13) Financial Report: T. Donoghue reported that we are a little ahead in expenses compared to last year, but that is due to all the collection system work we have done with Green Mountain and the Pro-Rings and we are taping on the brakes now, but we have the outstanding bill for the CCTV work to come in and we spent \$3,500 for the new filter fabric on the drum thickener, and a new TWAS hose for \$1,100. Five years ago this hose was \$800. We also spent \$1,100 on FOG degreaser product that we can use in the septage tank and possibly when jetting too. We did a demo at one of the pump station and this product dissolve hardened FOG back into solution. We have to do some testing we want to grab a sample of the product after it removes the grease, to see what the FOG concentration might be. In regards to electricity we have plateaued with our energy efficiency and we hoped to save up to \$30,000 in energy cost. We have no revenue report to share, as we still have to work on creating it, as Munis makes this challenging. H. Bunnell is not working on this as of yet.

**14) Old Business:** None presented.

#### 14) Adjournment:

**Motion:** C. Bratina moved to adjourn the meeting at 9:00 PM. S. Post seconded and there was no discussion. All members voted "aye' and the motion passed

Terrence Donoghue Interim Recording Secretary