



Minutes of the NVC Utilities Committee

2:30 pm • August 14, 2020 • Zoom

Attendees:

David Crofoot: Chair
Judy Metcalf: Overseer
Janae Novotny: Overseer
Jeffrey Wilt: Overseer
Richard McElhaney: Utility Superintendent
Bill Paige: Village Agent

Meeting called to order at: 2:31 pm

Approval of Minutes: Judy M. motions to accept the minutes from the July 3rd meeting; Janae N. seconds; vote is unanimous.

Superintendent's Report:

Water consumption is very high. Felt to be related to dry conditions and lawn watering. Drinking water samples for lead and copper are acceptable and test results will be reported to participants.

There is a wastewater license exceedance for Enterococci for June, it exceeded 8. All other parameters were within allowable limits. Another bad sample in July, with exceedances for both fecal coliforms and for Enterococci. No operation or process problems causing test issues. It is the Superintendent's feeling that these exceedances are again a problem with the IDEXX colorimetric testing method and this is also the opinion of Jim Crowley of the Maine DEP who made a site visit. The very high levels of chlorine being used make it virtually impossible for bacteria to survive.

Wastewater Treatment Building Update:

Blane Casey Building Contractor was the low bidder. Dirigo sent qualifications, permits approved, contracts signed, and the project should begin by Labor Day.

Judy M. motions to approve Dirigo Engineering's letter of agreement to be signed by David as chair. Janae N. second. Vote is unanimous. David signed but was waiting for approval, Richard M. will forward to Tim at Dirigo.

Pre-construction meeting notice needs to be posted.

New Business:

Judy M. states that the PUC guidelines regarding water service after October 15th should be sent out as a notice. David will submit to Dan for posting, Judy will draft the notice.



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Janae N. is now an Overseer, Miles F. is no longer an Overseer. Need to have a community member to serve as the fifth member of the Utilities Committee. Those interested need to write their interest so the Committee can give a recommendation to the Overseers. While the Utilities Committee makes a recommendation, the President makes the appointment at the direction of the Overseers. Dan will be asked to post the opening on his website and it will be posted on bulletin boards.

Bill P. needs to consider finding someone to help him remove meters in the fall and the water department has funding to support this.

Billing Report:

Only received 57% of July billing by mid-August

Public Comments: None

Meeting Adjourned: at 3:15 pm

The next Utilities Committee Meeting is at 2:30 pm on Friday, September 11th

Sewer Department

June 2020 Effluent Monitoring Data

The NVC Wastewater Treatment Plant (WTP) reported one (1) license exceedance for exceeding the monthly average for enterococci. There were no other license exceedances.

April and May exceedances for enterococci which were performed using undiluted and dilutions of less than 1:10 with the IDEXX laboratories' Enterolert Test method were invalidated by MEDEP.

See performance table below for this month's comparisons, averages, geo-means for bacteria, year-to-date highs and lows, permit limits, and year-to-date (YTD) exceedances. Testing frequency is continuous for flow; weekly for TSS, BOD⁵, Settleable Solids, Fecal Coliform and Enterococci (April 15 – October 31); 5 days/week for pH; daily for total residual



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chlorine (April 15 – October 31); and annually for low level mercury. **TSS and BOD percent removal rates are based on assumed influent concentrations of 290 mg/l.**

Monthly Performance Table

Parameters	June	May	April	YTD Lo	YTD Hi	YTD Ave	2019 Ave	DEP Limit	Exceed-ances
Flow GPD	7040	12913	27243	7040	27243	13873	13917	<63,000	0
Precip Inches	2.81	3.70	4.39	2.66	4.39	3.23	3.76	n/a	0
TSS lbs/day	1.8	1.0	1.4	0.8	1.8	1.2	2.2	<76	0
TSS mg/l	36.0	13.0	6.7	6.7	36.0	15.6	23.4	<145	0
BOD ⁵ lbs/day	6.8	4.4	8.7	2.1	8.7	4.6	5.3	<107	0
BOD ⁵ mg/l	128.8	54.6	35.0	35.0	128.8	54.6	62.7	<203	0
TSS% Removal	87.6	95.5	97.7	87.6	97.7	94.6	92.2	>50	0
BOD ⁵ Removal	55.6	81.2	87.9	55.6	87.9	81.1	78.4	>30	0
pH lo	6.5	6.5	6.5	6.5	6.7	6.6	6.6	>6.0	0
pH Hi	6.7	6.7	6.8	6.7	6.9	6.9	6.9	<9.0	0
S.S. ml/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	Report	0
TRC mg/l	.03	.03	.02	.02	.03	.025	0.02	<0.3	0
Fecal Coliform	<10	<10	<10	<10	<10	<10	3.37	<14-ave	0
Fecal Coliform	<10	<10	<10	<10	<10	<10	6.81	<31-max	0
Enterococci	<10	na	na	<10	<10	<10	na	<8-ave	1
Enterococci	10	na	na	na	na	na	na	<54-max	0
Mercury ng/l	na	na	na	na	na	na	20.7	33.4	0

Note: The last exceedance for flow was **170 months ago (2/2006)**. The last exceedance for fecal coliform was **93 months ago (8/2012)**. The last exceedance for BOD was **68 months ago (9/2014)**. The record annual average low for flow was 12,017 gpd in 2017.

July 2020 Snapshot



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The NVC WTP will report two exceedances for enterococci and two exceedances for fecal coliform in spite of using the 1:10 dilution for both test organisms as suggested by DEP and the test laboratories. With the continuous heavy dosing of the effluent on a daily basis with chlorine concentrations at 10 times greater than the historical norm and way more than ample or about 20 hours of contact time, the NVC Sewer Department can only believe that a chemical or biological interference with this test method and/or the re-inoculation and regrowth of these test organisms in the De-Chlor Manhole is still possible. Jim Crowley of the MEDEP visited the plant on Friday, August 7, 2020 to acquaint himself with the plant's process for treatment and disinfection and could find no process related problems to offer. Jim suggested we do a side by side analysis with a sample taken from the Chlorine Contact Chamber and one dipped from the De-chlor Manhole for comparison of test results to shed more light on the possibility of re-inoculation and regrowth in De-chlor Manhole.

Flow during the month averaged 9,581 gallons per day or nearly half normal flows for a July. The report for precipitation as measured by the Belfast Water District (BWD) at their Little River Station was 2.13 inches.

Administrative Order on Consent Timeline Update

1. ~~By June 30, 2019, complete preliminary engineering study to present new physical plant options.~~ **Completed by Dirigo Engineering on April 12, 2019 – “Disinfection & Dechlorination Options Review”.**
2. ~~By August 31, 2019, complete preliminary resource assessment/planning to identify potential new locations for a new physical plant.~~ **Completed. Location options identified by Dirigo Engineering on April 12, 2019 – “Disinfection & Dechlorination Options Review”.**
3. ~~By (or before) October 31, 2019, select location and finalize preliminary design to support the NVC effort to secure funding for the new physical plant (select location by Labor Day 2019).~~ **Completed – “Preliminary Design Plans for the Chlorination Building”**
4. ~~By (or before) September 30, 2020 complete final design and resource assessment/planning to support land use permitting and formation of construction contract documents for the new physical plant.~~ **Completed by Dirigo Engineering on April 6, 2019 – “Project Drawings for the New Chlorination Building”**
5. **By (or before) September 30, 2020, secure approval of funding from the residents of NVC (at their August 2019 or 2020 Annual Meeting) for financing the new physical plant.**
6. **By (or before) December 31, 2020, complete construction of new physical plant.**

The NVC must submit semi-annual progress reports summarizing its compliance with the provisions of this Consent Order on or before June 1st and December 1st of each year. Furthermore, whereas, the Consent Order requires a specific action to be performed within a certain time frame, NVC shall in addition submit a written notice of compliance or non-compliance within 14 days of each deadline. The first of two progress reports for 2020 was submitted to EPA/MEDEP on



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June 1, 2020. The NVC asked the EPA/DEP to consider extending the deadline one year to complete the construction of the chlorination building in the event the current year end deadline could not be met.

Sent via email, the EPA and MEDEP, in a letter submitted to the NVC Superintendent on July 28, 2020, agreed to extend the Order deadline to construct the new building to January 1, 2022 if necessary while at the same time opining that the NVC “should make every effort to comply with the original schedule in the ORDER” of December 31, 2020. Copy of this letter is attached.

New Chlorination Building Project

Receiving only one (1) \$283K bid and failing to accept this bid, the Utility Trustees requested Dirigo Engineering to send out a second bid request for the project to a larger range of potential contractors. On June 30, 2020, the NVC received three (3) bids that ranged between \$227,650.00 and \$345,507.00. On July 3, 2020, Utility Trustees voted unanimously to award the construction of the building to Blane Casey of Augusta, Maine for \$227,650.00. The project tabulation, list of relevant projects and the letter regarding the award from Dirigo was forwarded to the Trustees under separate cover on July 2, 2020 and is attached herewith with this report as well.

The executed contract agreement between Blane Casey and the NVC and notice to proceed was completed on August 6, 2020. Copy of this agreement was sent to the Utility Trustees and Treasurer on the same day under separate cover. Casey must now send Dirigo material submittals for approval before work can begin. A pre-construction meeting with NVC staff will be tentatively scheduled in early September in preparation for the start of the construction project after Labor Day.

Dirigo Engineering Letter of Agreement (LOA)

Attached herewith is Dirigo Engineering’s LOA to provide engineering oversight during the construction phase of the new Chlorination Building Project.

Drinking Water Department

June 2020 Usage and Water Quality



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Due to the drought, heat and extra garden and lawn watering, purchased water for the month was up remarkably year over year averaging 39,726 gpd compared to 26,984 gpd for the same month in 2019. The weekly free chlorine residual in the drinking water ranged from 0.27 - 0.30 ppm/Cl² compared to the recommended goal of >.20 to <1.0 ppm/Cl². The EPA maximum concentration level (MCL) not to be exceeded for chlorine residual is 4.0 ppm. The monthly total coliform and e-coli water sample test results were both negative.

2020 Lead and Copper Test Results

10 residents within the core of the Village participated in this year's testing of their drinking water for lead and copper. Lead concentrations ranged from 0.5 ug/L – 2.7 ug/L compared to the allowable limit of 15 ug/L. Copper concentrations ranged from 0.055 mg/L – 0.15 mg/L compared to the allowable limit of 1.3 mg/L. EPA and the Maine Drinking Water Program require the NVC to test for lead and copper every three years. A special thank you to those customers who participated.

Status of Utility Bill Collection

See attached_report. As of August 10, 2020, and inclusive of the March and the July 15 billing period, Amy Eldridge reports that the outstanding utility balance for both departments is \$62,394 compared to charges of \$144,645 or 57% of collections. See her attached report.

Meeting minutes submitted by Nina Richard.