

Northport Village Corporation
Utilities Committee
November meeting: November 15, 2019, 2:30 at the Community Hall

Minutes:

Present: Chairman Crofoot, Metcalf, Fuller, Lannan (by phone), Superintendent McElhaney, Bill Paige
Absent: Brockway

The minutes of the October Meeting were not available for review.

Superintendent's report: The wastewater treatment plant showed full compliance with our license and no license violations. Flows were on average for September and BOD was 5.2 lbs/day, TSS 1.7 lbs/day. October's performance is similar pending the DEP's review.

The third item on the EPA compliance Schedule was performed in timely fashion with Completion of "Preliminary Design Plans for the new Chlorination Building. Copies have been forwarded to the DEP and EPA.

The chlorination plant was closed down at the End of October and will not be started again until April 2020. The DEP is now onboard with the EPA Administrative Order on Consent Timeline. Semi-annual reports will be submitted by Dick McElhaney to the EPA and DEP by December 1, 2019 and again every six months until completion of the project.

Dirigo Engineering's proposal for the final design of the New Utility Building was reviewed and was approved with the addition of a line to be sure that the design was ready by February 1st, 2020. This will allow plenty of time to put out bids for the project, which will be proceeding concurrently with the seawall construction project. This may require great cooperation between the two contractors chosen.

The proposal was then approved unanimously and signed by Chairman Crofoot.

The proposed budget for 2020 was carefully reviewed, line-by-line. There are still some great uncertainties to be resolved with regard to what sort of office staffing there will be, how billing will be performed and collected, and the line items for compensation for Bill Paige, Fern Barton, and Dick McElhaney will all be increased to account for increased hours of service due to the requirements of the new wastewater license.

This year the wastewater budget ran about \$27,000 in the red due to increased costs of chemicals, year-round treatment treatment, year-round chemical, and a pay raise for Fernie Barton. This shortfall will be made up this year by drawing the shortfall from reserves.

But the committee was in agreement that next year's budget must reflect at least an increase of \$30,000 and perhaps as much as \$36,000 when we will actually start doing year-round treatment in January 2021.

For a user base of 242 customers, this will amount to a \$150 increase for the entire year or a \$50 increase for each trimesterly billing. A letter will be sent with the March 2020 billing to explain the increased sewer rates (first increase since 2005) and public hearings will be held in June or July to explain the new wastewater building, the new license requirements, and the increased costs to the utility.

There is some hope that drinking water rates may decrease with the retirement of a bond, but such a decrease cannot be promised to offset the rising sewer rates. Water rate increases and decreases are overseen by the PUC. We did consider the possibility of only billing for metered water once a year at the end of the summer season. This would result in some savings for meter readings and clerical work. We will need to evaluate the savings on wages for that tax when offset against the cost of securing the necessary approval from the PUC for changing our terms and conditions. For seasonal households, the payment for the metered water is only a small part of the base rate. It may seem more of a hardship for year-round residents to get a lump-sum bill for a year's water, but it is again only a small fraction of the overall bill.

After a line-by-line review of the sewer and water budgets for 2020, Dick McElhaney was instructed to incorporate the changes, which will be approved by the Overseers at their January meeting.

The Utilities Committee does not plan to meet in December unless some emergency arises.

Adjourned at 4:45

Respectfully submitted,

David D. Crofoot, Chairman



November 15, 2019

Utility Superintendent's Report

Sewer Department

September Effluent Monitoring Data

The NVC Wastewater Treatment Plant (WTP) was in full compliance with its wastewater discharge license for the month. There were no license exceedances.

Flow averaged 5,210 gpd compared to 7,590 gpd in 2018. Daily flow ranged from a low of 3,500 gpd to a high of 8,800 gpd during the month. Precipitation for the month was 2.41" versus 5.43" in 2018.

TSS and BOD⁵ averaged 1.7 lbs/day (36.5 mg/l) and 4.9 lbs/day (96 mg/l), respectively compared to 2.3 lbs. /day (39.4 mg/l) and 5.2 lbs. /day (92.8 mg/l) for the same month in 2018.

See performance table below for this month's comparisons, averages, 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 (S. S.) and Fecal Coliform (April 15 - October 31, 5 days/week for pH; daily for total residual 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	September	August	July	YTD Lo	YTD Hi	YTD Ave	2018 Ave	DEP Limit	Exceedances
Flow GPD	5210	12235	14119	5210	29783	13,935	15,146	<63,000	0
Precip Inches	2.41	5.37	2.23	1.52	5.53	3.37	4.22	n/a	0
TSS lbs/day	1.7	5.5	5.1	0.8	5.5	2.3	1.97	<76	0
TSS mg/l	36.5	55.5	44.4	5.9	55.5	25.1	21.5	<145	0
BOD ⁵ lbs/day	5.2	16.5	17.1	1.5	17.1	6.0	5.10	<107	0
BOD ⁵ mg/l	96	182.5	150	11.8	182.5	67.6	60.4	<203	0
TSS% Removal	87.4	80.9	84.7	80.9	98.0	91.7	91.8	>50	0
BOD ⁵ Removal	66.9	37.1	48.3	37.1	95.9	76.8	77.9	>30	0
pH lo	6.5	6.5	6.5	6.5	6.7	6.55	6.7	>6.0	0
pH Hi	6.7	6.8	6.8	6.7	7.0	6.89	7.0	<9.0	0
S.S. ml/l	0.3	0.2	0.1	<0.1	0.2	0.1	<0.1	Report	0
TRC mg/l	<.01	<.01	.02	<.01	.03	.02	0.02	<.03	0
F Col/100 ml	<10	3.01	3.16	<1	<10	2.71	<1	<14-ave	0
F Col/100 ml	<10	<10	<10	<1	<10	6.31	<1	<31-max	0
Mercury ng/l	na	20.7	na	na	na	20.7	4.55	33.4	0

Note: The last exceedance for flow was **161 months ago (2/2006)**. The last exceedance for fecal coliform was **84 months ago (8/2012)**. The last exceedance for BOD was **59 months ago (9/2014)**. The record annual average low for flow was 12,017 gpd in 2017.
October 2019 Snapshot

The NVC WTP is expected to be in full compliance with its license limits pending the DEP's review of the NVC's discharge monitoring report. Flow during the month averaged 9,258 gpd. The report for precipitation as measured by the Belfast Water District (BWD) at their Little River Station was 6.67 inches.

EPA 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, secure approval of funding from the residents of NVC **(at their August 2019 or 2020 Annual Meeting)** for financing the new physical plant.
5. 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.
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.

Dirigo Agreement for Engineering Services for Final Design

A letter agreement from Dirigo Engineering to provide services for the Final Design of the year-round chlorination building was sent to committee members under separate cover for their review, approval and signature. Consideration should be given to complete the final design and bidding phase as quickly as possible to help insure the NVC receives as many competing bids as possible and to positively nail down a contractor to schedule the construction after Labor Day 2020 to meet the DEP/EPA January 1, 2021 deadline.

Drinking Water Department

September 2019 Usage and Water Quality

Purchased water for the month averaged 25,972 gpd compared to 24,155 gpd in 2018. The weekly free chlorine residual in the drinking water ranged from 0.08 - 0.10 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 and e-coli water sample test results were all negative. There were no leaks discovered or reported during the month.

Cobe Road Water Main Replacement Project

The project to replace the water main and six (6) water service connections on Cobe Road was substantially completed on November 8, 2019. Pending an issue regarding a payment request from the contractor to pay for temporary water service, the cost to complete the project is expected to be about \$3000 less than the bid price of \$99,945. Payment presumably will be drawn from the water Department's saving account. A retainage payment to the contractor in the amount of about \$4800 or 5% of the project cost will be withheld until the road on Cobe has had an adequate time to consolidate through the spring of next year and to address any unlikely water leaks that might occur in the pipeline before the one year warranty expires.

Proposed Sewer and Water Budgets for 2020

Updated drafts of the sewer and water budgets to correct long term payment amounts and include the actual income and expenses for 2018 have been sent under separate cover to Utility Committee members and others for further review and comment. The last rate adjustment to both sewer and water was in 2005.

Sewer

Due to the conditional requirements of the renewed wastewater discharge licenses to prepare and plan for year round disinfection/testing by January 1, 2021 and moreover, the expanded labor, chemical and testing costs added into the interim period for 2020, sewer expenses will exceed user fees by approximately 15% or more depending on how the costs for the office manager, financial officer, outside bookkeeping services and employee wages/benefits are all sorted out. Accordingly, this shortfall in funding for 2020 most likely will need to be covered by tapping into the sewer department's cash reserve account, borrowing and/or by raising user fees.

Water

There are no anticipated funding issues with the water department for 2020. Together with the retirement last year of the large bond to fund the interconnection pipeline with the Belfast Water District and an expanding customer base, the financial health of the water utility, barring any unforeseen circumstances, should be in excellent shape for years to come.

Maine Rural Water Association (MRWA) Proposal

As requested by the Utility Committee, a proposal from the MRWA has been sent to members under separate cover to assist the NVC with filing a PUC rate case to reduce the trimester base amount for water customers and to determine whether the NVC can, within the volumetric charges of the bill, issue a third and final trimester bill in November based upon a single annual meter reading.

Members at their meeting in September were pondering the option of reducing the water base rate to offset some of the potential increases in the sewer rate brought about by the new regulatory requirements and added expenses to fund, build, operate and work toward achieving year round disinfection facilities and water testing by the end of December 2020.