NVC Utilities Committee Minutes of June 14, 2018 meeting, 2:30 p.m.

Committee members present: Chairman David Crofoot, Richard Brockway, Gordon Fuller, Michael Lannan. Absent: Judy Metcalf Also Richard McElhaney (Superintendant), Bill Paige (Operator), Mandy Everett

The Minutes of the May 10, 2019 meeting were approved unanimously.

Superintendant's Report:

There were no flow violations in April or May. With the start-up of the chlorination season, there were two positive fecal coliform tests in May (and two more in June)

In response to positive fecal coliform tests, the concentrations of chlorine were increased 3-4 fold and the sampling tubing was again thoroughly flushed and disinfected, however positive tests have persisted in the face of killing chlorine consultations. The situation was discussed with Denise Behr of the DEP on May 14. The possibility of laboratory error will be explored by sending duplicate samples for testing by both membrane filtration and by Colilert testing. The Utility will receive a notice of violation from the DEP.

Since Stevens Electric was unable to install the tablet feeder for dechlorination on schedule before the start-up of the disinfection season in May, our operator initially tried using calcium thiosulfate as a dechlorinating agent but could not achieve adequate contact time. He is now using Sodium Sulfite tablets lowered into the dechlorination tank. Current plan is for Stevens Electric to install the tablet feeder as soon as the parts are available, even if this takes place in the middle of the summer. This may require sealing off an area around the tanks for the two days required for installation.

The first two deadlines on the Compliance Schedule imposed by Consent Decree for year round decontamination have been met (Engineering study of Disinfection and Dechlorinaiton options, Engineering study to identify potential designs and locations for a new physical plant). The next deadline is October 31, 2019 when a preliminary design and location for the new physical plant must be selected.

In accordance with the views expressed at the May meeting, the consensus of the Utilities Committee is that the new plant should be an expansion of the current plant at the same site at the foot of Ruggles Park.

Crofoot moved that the Utilities Committee recommend this construction, envisioning a  $12 \times 14$  foot structure with full standing room, insulation, heating, ventilation, room for chemical storage and delivery, housing of pumps, monitoring devices, and back-up power. The building should be sited at a higher level on a

water resistant base to minimize the risks of storm damage. The appearance of the building should harmonize with other cottage style buildings in Ruggles Park. In discussion, concern was expressed about the need for reinforcement of the existing rip-rap south of the wharf to provide adequate protection to the buried tanks and to the treatment building. While raising the building 2-4 feet on a solid cement base will provide some protection from an extraordinary storm surge, one committee member felt that the motion should have included a requirement for reinforcement of the south shore rip-rap.

Vote: 3 in favor, 1 opposed.

Minority report: Mr. Lannon explained his negative vote by saying that he was in agreement with the consensus for building location but felt the south shore rip-rap should have been part of the motion.

Crofoot then moved that the Utilities Committee recommend reinforcement of the south shore rip-rap by the Village as a necessary pre-requisite for construction of the treatment plant.

Vote: 4 in favor, 0 opposed.

It was recommended that a Public Hearing be held between July 4 and our next meeting on July 19 to inform the public of new requirements of our wastewater license and plans for construction of a facility capable of year round chlorination/dechlorination. This is tentatively scheduled for Saturday, July 13 at 4 pm.

Water Department

The Cobe Road Water Main replacemnt by Farley Brothers will take place in September.

A third fire hydrant (following those at the corner of Park Row and Broadway and in Merithew Square) will be installed at about 763 Shore Road in the next week or so.

Bill Paige noted that the Town of Northport plans to repave Shore Road from the Community Hall southward with a 1.5 inch skim coat overlay. This will require building up the manhole sites for water and sewer along the roadway.

Meeting adjourned at 4:15 p.m.



## By e-mail only

## Utility Superintendent's Report

June 14, 2019

# Sewer Department

April 2019 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 29,783 compared to 26,757 gpd in 2018. Daily flow ranged from a low of 15,500 gpd to a high of 96,200 gpd during the month. Precipitation for the month was 5.53" versus 6.30" in 2018.

TSS and BOD $^5$  averaged 1.3 lbs. /day (5.9 mg/l) and 2.5 lbs. /day (11.8 mg/l), respectively compared to 1.4 lbs/day (5.9 mg/l) and 3.4 lbs/day (15.3 mg/l) 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, BOD<sup>5</sup> and fecal coliform (May thru Sept), daily for pH and settleable solids (S.S.), and twice per day for total residual chlorine (May thru Sept).

## Monthly Performance Table

Parameters	April	March	February	YTD Lo	YTD Hi	YTD Ave	2018 Ave	DEP Monthly Limit	Exceed- ances
Flow GPD	29783	15074	7029	7029	29783	16759	15,146	<63,000	0
Precip Inches	5.53	1.52	2.63	1.52	5.53	3.39	4.22	n/a	0
TSS lbs/day	1.3	0.8	0.8	0.8	1.3	1.0	1.97	<76	0
TSS mg/l	5.9	16.0	19.3	5.9	19.3	14.5	21.5	<145	0
BOD <sup>5</sup> lbs/day	2.5	1.5	1.6	1.5	2.9	2.1	5.10	<107	0
BOD <sup>5</sup> mg/l	11.8	30.0	37.3	11.8	37.3	27.5	60.4	<203	0
TSS% Removal	98.0	94.5	93.4	93.4	98.0	95.3	91.8	>50	0
BOD <sup>5</sup> Removal	95.9	89.7	87.2	87.2	95.9	90.6	77.9	>30	0
pH lo	6.5	6.7	6.7	6.5	6.7	6.58	6.7	>6.0	0
рН Ні	6.9	7.0	6.9	6.9	7.0	6.95	7.0	<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	na	na	na	na	na	na	0.02	<.052	0
F Col/100 ml	na	na	na	na	na	na	<1	<15-ave	0
F Col/100 ml	na	na	na	na	na	na	<1	<50-max	0

<u>Note</u>: The last exceedance for flow was **156 months ago (2/2006)**. The last exceedance for fecal coliform was 79 **months ago (8/2012)**. The last exceedance for BOD **was 54 months ago (9/2014)**. The **r**ecord annual average low for flow was 12,017 gpd in 2017.

### May 2019 Snapshot

The sewer Department experienced 3 exceedances for fecal coliform during the month – two for daily max and one for monthly average. The exceedances were believed to be a result of sample contamination whereas chlorine residuals were at concentrations and above what have been historically maintained to sufficiently disinfect and inactivate this test organism. Non-compliance Incident Reports were filed with DEP for each incident.

Flow averaged 11, 181. The report for precipitation as measured by the Belfast Water District (BWD) at their Little River Station was 3.32 inches.

#### Tablet De-chlorinator and Calcium Thiosulfate Solution

The initial trial with calcium thiosulfate as a de-chlorination agent was short lived. It was quickly determined by the operator that there was not enough contact time in the 500 gallon dechlorination manhole for it to work effectively. The operator as an alternative is temporarily hanging single tubes of dry sodium sulfite tablets below the water line of the dechlorination manhole until which time the contractor (Stevens) can install the Norweco dry chemical tablet feeder and manhole access door later on this summer.

#### **EPA Administrative Order on Consent**

The NVC has received the "Consent Order" from the EPA/DEP that it had requested in a letter dated January 30, 2019. The Order provides the NVC with interim effluent limits for dinfecting test organisms and a compliance timeline to construct a new physical plant to enable the NVC to meet the new year-round disinfection requirements of the recently renewed wastewater discharge license.

The existing wastewater treatment plant currently lacks adequate space, winterization and other utilities for the NVC operating staff to safely disinfect the wastewater discharge during the cold weather months. Consequently, the agreed upon timeline and interim effluent limits gives the NVC until December 31, 2020 to implement the applicable improvements to the plant and to fully comply with the revised year-round effluent limitations and monitoring requirements for fecal coliform and the newly established seasonal limitations for enterococci, the new and additional test organism to monitor for. Items 1 and 2 of the below timeline have been completed.

Accordingly, all parties agree that the NVC shall:

- 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).
- 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 also submit semi-annual progress reports summarizing its compliance with the provisions of this Consent Order on or before June 1<sup>st</sup> and December 1<sup>st</sup> of each year. Furthermore, whereas, the Consent Oder 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 final copy of the Consent Order was emailed to Utility Committee Members under separate cover.

## **Drinking Water Department**

## April 2019 Usage and Water Quality

Purchased water for the month averaged 15,018 gpd compared to 11,985 gpd in 2018. The weekly free chlorine residual in the drinking water ranged from 0.20 - 0.25 ppm/Cl<sup>2</sup> compared to the recommended goal of >.20 to <1.0 ppm/Cl<sup>2</sup>. 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 negative.

There were no leaks discovered or reported.

#### **Shore Road Fire Hydrant**

Bill Paige has scheduled EJ Prescott and Matt Brown Construction to install a new hydrant for the Shore Road location. Weather permitting, the new hydrant should be up and running on Friday, June 21, 2019. Shore Road residents in the vicinity of the hydrant are advised to notify their homeowner's insurance companies to take advantage of the potential for premium reductions with the additional fire protection coverage.