

NORTHPORT VILLAGE CORPORATION - UTILITIES DEPARTMENT
February Meeting

February 13, 2014

Present: D. Crofoot, Chmn, Denis Wang, Ned Lightner,(J.Metcalf, and M. Brockway by phone), Dick McElhaney, Bill Cressey, Billy Paige

Minutes of the January Meeting (as amended to include the positive test for mercury) were approved.

Discussion of Financials: Presented by Bill Cressey.

Both Utilities finished the year with small positive balances: \$5581 for Sewer and \$1451 for Water.

Nothing of note in February Budget vs Actuals except for high percentages spent in lines 6000s and 6000W for office expenses. Bill Cressey will look into this discrepancy.

Cressey recommended that the balances in the two sewer CDARS accounts--lines 1010S (Sewer Sinking Fund) and 1011 S (Sewer Operating Fund)-- be merged into a single sweep account when the CD's mature. The Balances in lines 1010W and 1011W should similarly be merged into a single sweep account as well.

The Committee approved this recommendation 5-0.

Superintendent's Report:

Wastewater Treatment Plant

December 2013 Effluent Monitoring Data

The NVC Wastewater Treatment Plant was in full compliance with its discharge license in December. There were no license exceedances.

December flow averaged 8600 gpd compared to 7300 gpd in 2012 and 18800 gpd in 2011. Daily flow ranged from a low of 1,800 gpd to a high of 33,300 gpd. Precipitation during the month measured 2.43" versus 3.93" in 2012 and 3.65" in 2011.

TSS and BOD⁵ averaged 1.0 lbs/day (11.2 mg/l) and 6.0 lbs/day (41.8 mg/l), respectively compared to 1.1 lbs/day (20.6 mg/l) and 2.1 lbs/day (57.8 mg/l) in December of 2012.

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 and fecal coliform (May thru Sept), daily for pH and settleable solids, and twice per day for total residual chlorine (May thru Sept).

Performance Table

Parameters	December	November	YTD Lo	YTD Hi	YTD Ave	2012 Ave	DEP Monthly Limit	Exceed-ances
Flow GPD	8584	11180	2132	15300	9602	11004	<63000	0
Precip Inches	2.43	5.73	.86	6.19	3.26	3.87	n/a	0
TSS lbs/day	1.0	0.5	.4	6.0	1.9	2.7	<76	0
TSS mg/l	11.2	24.0	9.7	49.0	25.7	26.4	<145	0
BOD ⁵ lbs/day	6.0	1.9	1.2	27.2	7.0	7.8	<107	0
BOD ⁵ mg/l	41.8	89.3	20	166	80.2	77.6	<203	0
TSS% Removal	96.1	91.7	83	96.7	91.1	90.6	>50	0
BOD% Removal	85.6	69.2	42.6	93.1	70.8	74.0	>30	0
pH lo	6.8	6.8	6.7	6.8	6.8	6.7	>6.0	0
pH Hi	7.0	7.0	6.9	7.0	7.0	6.9	<9.0	0
S.S. ml/l	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	Report	0
TRC mg/l	na	na	.02	.02	.02	.02	<.052	0
F Col/100 ml	na	na	<1	<4.6	<1.4	<4.4	<15-ave	0
F Col/100 ml	na	na	<1	<10	<1.6	<11.4	<50-max	0

Note: The last exceedance for flow was **93 months ago (2/2006)**. No exceedance for pH, TRC, TSS and BOD⁵ has occurred for **99 months (8/2005)**. The last exceedance for fecal coliform was **16 months ago (8/2012)**.

January 2014 Snapshot

The NVC Wastewater Treatment Plant was again in full compliance with its discharge license in January. Flow during the month averaged 26,135 gpd. The report for precipitation as measured by the BWD at the Little River Station was 5.67 inches.

Sewer Improvement Projects (SIP)

WARRANTY ITEMS – Waiting for Sargent to repair the damaged water service line from the Yacht Club to the Wharf – Sargent Corp has countered the NVC’s latest proposal to the release of the retainage payment with the following:

“If the board releases the \$1,200 payment now Sargent will agree to perform the inspection of the waterline prior to May 1, 2014, but as stated in our letter if the cause of the problem is due to an issue not related to the work performed by Sargent the board must agree to pay us for the repair on a T&M basis.”

The Sewer Department responded that the Department would recommend that the NVC Board accept Sargent’s proposal and/or alternatively offer Sargent a second option of allowing the NVC to keep the \$1200 retainage payment to make the repair themselves and consider hiring Sargent to bid on the replacement of the water service line to the wharf if this is their choice rather than to repair what is an old and troublesome patchwork of a water line.

Here now comes the NVC Sewer Department to recommend to the Board that they accept Sargent's proposal to choose the alternative option as worded below:

“Sargent will agree to the alternative proposal of allowing NVC to keep their \$1,200 of retainage if Sargent is released of all current and future obligations related to the water line service to the wharf. If the board would like to have Sargent submit a price to replace the water line in the future we would be happy to submit a proposal. If the board accepts any proposal from Sargent the work will be performed under a new contract and be unrelated to any work previously performed.”

Effluent Mercury Excursion

Two January retest samples of the treatment plant effluent analyzed for mercury tested at concentrations that were a few points above the method detection level of .03 ng/L Hg. The two mercury concentrations were back in line with the normal levels that have been typically reported to DEP over the last 15 years. One ng/L is the equivalent of one part per trillion.

The retest samples were performed at the request of the DEP after the NVC reported a concentration of mercury from a November 2013 sample that exceeded the interim maximum limit of 50.1 ng/L Hg. DEP established interim limits for the NVC discharge on May 23, 2000.

Short of a possible lab or sampling error or someone intentionally flushing mercury down the drain, no cause for the November excursion has been identified and therefore the result appears to be an isolated incident rather than the beginning of a trend of concern. The NVC is required to test for mercury annually and sends its samples to the University of Maine Orono to conduct the tests.

Shore Road Dedicated Simplex Pump Stations

Stevens Electric and Pump has installed 50 watt condensation (heat) strips inside the control panels of the three simplex pump stations on Shore Road. The Department is hopeful that with the addition of a little heat inside the panels that it will stop the pumps from sometimes tripping out during the times when ambient temperatures plummet to below zero.

2009 Wastewater Discharge Permit/License Renewal Application

The DEP has forwarded a NVC question over to EPA for an answer on whether or not it will become necessary for the NVC to re-file in 2014 its 2009 renewal application for a new wastewater discharge license. EPA has still not acted upon the 2009 NVC/DEP renewal request.

Maine wastewater discharge licenses and EPA 301(h) permits which have provided the NVC with a waiver from the secondary treatment requirements are supposed to be

renewed every five years. The NVC since 2009 has been operating on the license conditions of an expired 2004 permit.

Water

December 2013 Usage and Water Quality

Water consumption during December averaged 13,289 gpd compared to 12,442 in 2012 and 12,373 in 2011. The year over year increase was due to a busted water line inside a vacant Bluff Road home after a long power outage. Approximately 60,000 gallons of water leaked from the home's second floor plumbing over a two week period causing thousands of dollars damage before it was finally discovered and the street valve turned off.

The average weekly chlorine residual in the drinking water was .23 ppm/Cl² compared to the recommended level of >.20 to <1.0 ppm/Cl². The monthly coliform test result was negative. The NVC serves its customers with pre-chlorinated water it purchases from the Belfast Water District.

The New "Lead-Free" Standard

The NVC Water Department is in position to comply with the new "lead free" standard which went into effect January 4, 2014. Consequently all new service water lines and main extensions put into use after January 4th, including new pipes, fittings and plumbing fixtures must contain less than 0.25% lead.

The standard pertains to all components in contact with potable water. Manufacturers, retailers, and water utilities cannot sell or install products intended for potable water use unless they meet the new "lead free" standard. Congress has exempted fire hydrants from the standard.

Discussion:

Sewer flow in January was unusually high; this was felt to be due to high precipitation and a sustained thaw.

The Committee voted to accept the following proposal with regard to the retainage item in our contract with Sargent:

"Sargent will agree to the alternative proposal of allowing NVC to keep their \$1,200 of retainage if Sargent is released of all current and future obligations related to the water line service to the wharf. If the board would like to have Sargent submit a price to replace the water line in the future we would be happy to submit a proposal. If the board accepts any proposal from Sargent the work will be performed under a new contract and be unrelated to any work previously performed."

In response to the high mercury level noted from a dip sample of sewer effluent in November, two more samples were sent for analysis. The mercury levels were back to their usual levels of 4-6 parts per trillion. The University of Maine lab feels that there was no error in their initial analysis. We must regard the isolated high mercury reading as an isolated aberrancy. Review our system reveals that two of fifteen pumps have mercury switches. These will be replaced when Stevens comes to perform annual maintenance in the spring. We discussed sending out an informational flyer to customers with the May billing to caution against the introduction of any hazardous pollutants into our wastewater system (medications, broken thermometers, batteries, oils).

With regard to the EPA Waiver, Dick McElhaney has been in contact with the EPA. There is no need to send in a new application (since our application from five years ago has still not been approved), but Doug Corb sent out a questionnaire to be filled out describing any significant changes to the system. Dick McElhaney will fill this out describing the effects of our I&I remediation on flow rates and the extension of our outfall into deeper water resulting in a change in our dilution ratio from 4:1 to 480:1.

An application for a sewer permit involving a lot of record in the core village between Main and Maple Streets with the addition of 2 (possibly 5) bedrooms. There is ongoing litigation with regard to the validity of the building permit. At any rate, this application meets the standards for approval (capacity, adjacency to the sewer system).

This application was approved with 3 votes in favor, one abstention (E. Lightner), and one recusal (J. Metcalf).

Next Meeting: March 7, 2014.

Adjourned at 3:15 pm.