

Minutes of the NVC Utilities Committee  
Friday, January 10, 2020  
NVC Community Hall

The meeting convened at 2:30 p.m.

Present: Committee members Crofoot, Fuller, Lannon, Metcalf; Superintendent McElhaney, Village Agent Bill Paige, Overseer Miles Frieden

Review of **2020 Budgets for the Water and Sewer Utilities.** (Copies will be provided to the Overseers for their January 11, 2020 meeting)

The **Water Budget** was approved unanimously: Motion by Fuller, 2<sup>nd</sup> by Metcalf.

The **Sewer Budget** reflected a 28% increase in anticipated costs due to issues of compliance with our revised wastewater license, which requires year-round disinfection. The cost increases include increased hours for Fernie Barton, increased testing expenses and increased costs of chemicals.

This will require an increase in sewer rates of \$165 per year or \$55 per trimesterly billing.

The Committee recommended increasing line 4010 to \$40,250 to reflect these cost increases in 2020 and 2021.

The Committee also recommended decreasing line 6205 for rental of the laboratory building from \$3000 to zero. (Reasoning: the laboratory building was paid for by the water users (not the Village) and is currently used by both the Water and Sewer Utilities. The Committee felt it was inappropriate for the Utilities to pay this rental fee.

With these two modifications, the Committee voted unanimously to approve the Sewer Budget-moved by Metcalf, 2<sup>nd</sup> by Lannon.

The budgets will be presented to the Overseers for approval on Sunday, January 11, 2020.

**Superintendent's Report** (Appended). The report was reviewed in detail. There were no surprises and no license violations.

Dick McElhaney reported that Fernie Barton had been hospitalized but was now recovering well.

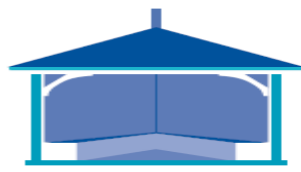
During his absence, Bill Paige has been taking on his responsibilities for sample collection and surveillance of the pump stations and wastewater treatment plant. Fernie's absence will go on for at least another week.

The Trustees instructed the Superintendent to assure that Fernie receive any payment due for unused vacation time in 2019. The Trustees reinforced that the time that Fernie is out now will be paid for under his paid time out/vacation policy.

A **recap of the November utility billing** was presented. There are a total of 30 accounts past due. Shut off notices have been sent to 12 year-round customers while 18 seasonal customers received letters notifying them that their water would not be turned back on in the Spring until outstanding bills are paid.

Meeting adjourned at 4:30 pm.

Respectfully, submitted,  
David Crofoot, Chairman



January 10, 2019

## Utility Superintendent's Report

### Sewer Department

#### November 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 13,323 gpd compared to 27,526 gpd for the same month in 2018. Daily flow ranged from a low of 5,400 gpd to a high of 28,000 gpd during a heavy rain event. Precipitation for the month was 3.56" versus 7.0" in 2018.

TSS and BOD<sup>5</sup> averaged 1.6 lbs/day (17.8 mg/l) and 2.8 lbs/day (30.3 mg/l), respectively compared to 1.8 lbs. /day (8.3 mg/l) and 4.1 lbs. /day (21.8 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, BOD<sup>5</sup>, 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               | November       | October | September | YTD Lo | YTD Hi      | YTD Ave      | 2018 Ave | DEP Limit         | Exceedances |
|--------------------------|----------------|---------|-----------|--------|-------------|--------------|----------|-------------------|-------------|
| Flow GPD                 | <b>13323</b>   | 9258    | 5210      | 5210   | 29783       | <b>13454</b> | 15,146   | <b>&lt;63,000</b> | 0           |
| Precip Inches            | <b>3.56</b>    | 6.67    | 2.41      | 1.52   | <b>6.67</b> | <b>3.69</b>  | 4.22     | <b>n/a</b>        | 0           |
| TSS lbs/day              | <b>1.6</b>     | 1.5     | 1.7       | 0.8    | 5.5         | <b>2.16</b>  | 1.97     | <b>&lt;76</b>     | 0           |
| TSS mg/l                 | <b>17.8</b>    | 23.8    | 36.5      | 5.9    | 55.5        | <b>24.32</b> | 21.5     | <b>&lt;145</b>    | 0           |
| BOD <sup>5</sup> lbs/day | <b>2.8</b>     | 4.0     | 5.2       | 1.5    | 17.1        | <b>5.53</b>  | 5.10     | <b>&lt;107</b>    | 0           |
| BOD <sup>5</sup> mg/l    | <b>30.3</b>    | 84      | 96        | 11.8   | 182.5       | <b>65.66</b> | 60.4     | <b>&lt;203</b>    | 0           |
| TSS% Removal             | <b>93.9</b>    | 91.8    | 87.4      | 80.9   | 98.0        | <b>91.9</b>  | 91.8     | <b>&gt;50</b>     | 0           |
| BOD <sup>5</sup> Removal | <b>89.6</b>    | 71.0    | 66.9      | 37.1   | 95.9        | <b>77.42</b> | 77.9     | <b>&gt;30</b>     | 0           |
| pH lo                    | <b>6.6</b>     | 6.5     | 6.5       | 6.5    | 6.7         | <b>6.55</b>  | 6.7      | <b>&gt;6.0</b>    | 0           |
| pH Hi                    | <b>6.9</b>     | 6.8     | 6.7       | 6.7    | 7.0         | <b>6.88</b>  | 7.0      | <b>&lt;9.0</b>    | 0           |
| S.S. ml/l                | <b>&lt;0.1</b> | 0.3     | 0.3       | <0.1   | <b>0.3</b>  | <b>0.11</b>  | <0.1     | <b>Report</b>     | 0           |
| TRC mg/l                 | <b>na</b>      | <0.03   | <.01      | <.01   | <b>.03</b>  | <b>0.02</b>  | 0.02     | <b>&lt;.0.3</b>   | 0           |
| F Col/100 ml             | <b>na</b>      | <10     | <10       | <1     | <10         | <b>3.37</b>  | <1       | <b>&lt;14-ave</b> | 0           |
| F Col/100 ml             | <b>na</b>      | <10     | <10       | <1     | <10         | <b>6.81</b>  | <1       | <b>&lt;31-max</b> | 0           |
| Mercury ng/l             | <b>na</b>      | na      | na        | na     | na          | <b>20.7</b>  | 4.55     | <b>33.4</b>       | 0           |

**Note:** The last exceedance for flow was **163 months ago (2/2006)**. The last exceedance for fecal coliform was **86 months ago (8/2012)**. The last exceedance for BOD was **61 months ago (9/2014)**. The record annual average low for flow was 12,017 gpd in 2017.  
December 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 19,016 gpd. The report for precipitation as measured by the Belfast Water District (BWD) at their Little River Station was 4.53 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 1<sup>st</sup> and December 1<sup>st</sup> 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 six month progress report was submitted to EPA/MEDEP November 30, 2019. Copy of this report was sent to committee members under separate cover.

#### Chlorination/De-chlor System

The safety net for the new de-chlorination manhole top was installed by Stevens Pump and Electric in December. The \$600 retainage amount was accordingly released to have them paid in full.

## Drinking Water Department

### November 2019 Usage and Water Quality

Purchased water for the month averaged 15,608 gpd compared to 11,565 gpd for the same month in 2018. The weekly free chlorine residual in the drinking water ranged from 0.07 - 0.22 ppm/Cl<sub>2</sub> compared to the recommended goal of >.20 to <1.0 ppm/Cl<sub>2</sub>. 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. A 7 gpm leak for the last six days of the month of November is included in the monthly total and average of water purchased from BWD.

### Proposed Sewer and Water Budgets for 2020

Revised sewer and water budgets for 2020 are included with this report under separate cover for one last review before sending it on to the Overseers for their review, comments and approval. The last rate adjustment to both sewer and water was in 2005.

#### Sewer

Due to the unanticipated 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 to comply with this regulatory order, estimated sewer expenses will exceed user fees by approximately 29%. Accordingly, this shortfall in funding for 2020 most likely will need to be covered by raising user fees by 27% or by \$150/year or \$50/trimester for each customer. The user fee increase is included in this revised budget for sewer.

#### 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.

