



City of Stevenson

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To: Stevenson City Council
From: Karl Russell, Public Works Director and Leana Kinley, City Administrator
RE: Sewer Plant Update
Meeting Date: February 20, 2020

Executive Summary:

This is an overview of items staff has been working on over the past month in line with the direction council gave to staff.

Overview of Items:

Plant Operations:

As of January 1st, 2020, Jacobs is no longer operating the WWTP. With the guidance of Ron Moeller Operations Services (RMOS) and the approval from D.O.E. City staff is operating and maintaining the WWTP. Ron Moeller began being involved in the day to day operations of the plant on December 16th and will continue to do so until January 24th. At that time Ron Moeller Operations Services will discuss the progress of city staff in operating and maintaining the WWTP and will decide the level of involvement RMOS shall have moving forward.

UPDATE: Steven Ogle and Pat Bailey from The Department of Ecology paid our wastewater treatment plant a visit on February 6th. They were very pleased with the efforts that have been made by staff to successfully operate the WWTP in a safe and efficient manner. So efficient that we are seeing a 62% reduction in the hauling of biosolids when compared to a year ago for the month of January. We are on track to see a reduction of 76% for the month of February when compared to February of last year. The reduction in hauling is a direct result of our efforts to maintain control of the suspended solids through a process called "constant MLSS". I could go on for a while about this process (please feel free to pull me aside to get the juicy details) but for information purposes, through running suspended solids tests with the recently purchased lab equipment, we are now able to know an exact number of solids to waste and transfer.

After interviewing staff, myself and Ron all parties felt comfortable with the decision to reduce Ron's time at the plant to one day a week with a daily check in via phone. This frequency will continue through March. I could not be prouder to be part of the team that has made the transition from contract management to operating our WWTP. In our discussions with D.O.E, Ron Moeller confessed that he thought that I may have been selling him "blue sky" in regards to the team that he would be working with when the idea of running our own plant was in its infancy. He would go on to mention to D.O.E. that I was spot on in regards to the knowledge and heart of the City Staff.

The plant continues to see marked improvement with the sidestreaming efforts of Backwoods Brewing, Walking Man and LDB, Inc.

The bid for the Immediate Improvements went to Stellar J in the amount of \$24,000 + tax. Work began on January 2nd and is slated to be done by the end of the month.

UPDATE: Immediate Improvements have been completed. We are now able to monitor P.H., Dissolved Oxygen, R.A.S. pumps and both influent/effluent flows in real time. This allows us to track trends and target events that could contribute to disruptions in plant processes.

The average monthly Influent BOD load has been:

2018

- January 675 lbs/day – No Effluent Violations
- February 1,793 lbs/day – No Effluent Violations
- March 1,099 lbs/day – BOD and TSS Effluent Violations
- April 991 lbs/day – BOD and TSS Effluent Violations
- May 1,265 lbs/day – BOD and TSS Effluent Violations
- June 1,124 lbs/day – No Effluent Violations
- July 920 lbs/day – Low pH Violation (one day)
- August 1,113 lbs/day – No Effluent Violations
- September 1,439 lbs/day – Low pH Violation (one day)
- October 1,072 lbs/day – No Effluent Violations
- November 1,032 lbs/day – No Effluent Violations
- December 807 lbs/day – No Effluent Violations

2019

- January 776 lbs/day – Solids washout from clarifiers on 29th and 30th, TSS and BOD Effluent Violations
- February 749 lbs/day – Solids washout from clarifiers on the 18th.
- March 803 lbs/day – Solids washout from clarifiers on March 13th, TSS Effluent Violation
- April 589 lbs/day – Solids washout from clarifiers on April 1st
- May 1,067 lbs/day – No Effluent Violations
- June 897 lbs/day – No Effluent Violations
- July 785 lbs/day – No Effluent Violations
- August 833 lbs/day – No Effluent Violations
- September 720 lbs/day – No Effluent Violations
- October 810 lbs/day – No Effluent Violations
- November 620 lbs/day – No Effluent Violations
- December 588 lbs/day- No Effluent Violations

2020

- January 417 lbs/day- No Effluent Violations

The current permit limit for Influent is 612 lbs/day and the current upgrades in the adopted General Sewer Plan call for a design max monthly BOD loading of 1,611 lbs/day.

WWTP Design:

Wallis Engineering presented the draft design and updated costs to council at the October 17th council meeting. It has been approved by DOE. The Kick off meeting for the final design phase took place on January 8th and we are on track for submittal to Ecology in June.

Staff is aware of an additional treatment method using media to increase the surface area for bugs within the aeration basin, allowing for faster treatment and increased capacity without increasing plant

footprint. There is a test being done with Clean Water Solutions and the cost difference currently estimated is dramatic. The clarifier at the WWTP developed “issues” unrelated to the MOB technology and it did hinder the test results. Repairs/adjustments to the clarifier will be performed and a new test will begin. Results of the test will take another two to three months. If successful, staff plans to research further.

Funding:

Responses to the request for information from the EDA application for lift station improvements and flood protection at the wastewater treatment plant have been submitted. The total project amount is \$5,068,000 and 80% would be covered by the grant and the remaining 20% will be covered by a USDA loan that the city is in the process of obtaining. One challenge is timing of the USDA loan and the EDA grant funding as each is wanting guarantee of the other funding prior to award.

The USDA application for the EDA match is being processed. A public hearing will take place at the February meeting to comply with their requirements of public notification of use of public funds.

Compliance:

The draft amendment to the Administrative Order is still in process. When it is finalized it will require additional testing.

The City’s moratorium on commercial connections above residential strength was extended for an additional year on November 14, 2019.

The contracts with Significant Industrial Users are still being negotiated. A change to the ordinance is presented at the February meeting to allow contracts with long-term tenants versus only property owners.

Action Needed:

Pat yourselves on the back for enabling City Staff to manage the WWTP. Thank you for having faith in us.