

City of Harlowton
Preliminary Engineering Report (PER) for Wastewater project
April 10, 2018 6:00pm
Harlowton Public Library

Gary Swanson of Robert Peccia and Associates facilitated the public meeting. This is the second public meeting for the PER wastewater project.

The purpose of the meeting was to inform the public of the problems and regulatory issues with the current wastewater system in Harlowton. Discussion of possible resolutions to these problems, preliminary cost estimates, impacts on user rates, funding options, and potential project schedules were discussed.

Gary Swanson provided handouts outlining the discussion. He also provided two draft copies of the PER for the city's review. This plan will need to be formally adopted along with the environmental assessment by resolution at the next council meeting.

The current lagoons are about 20 years old. MDEQ compliance issues started in 2004. A discharge permit was issued in 2009 and expired in 2014. In 2011 Harlowton entered into an administrative order on consent (AOC) with MDEQ to extend the compliance schedule. The city agreed to complete a PER by May 2012 and do the recommended improvements by September 2014. The wastewater PER and funding applications were completed in 2012 and the collection system infiltration/inflow project was completed in October 2014. That project replaced or lined about 11,000 feet of wastewater collection pipe. The replacement of wastewater collection pipes reduced ground water infiltration significantly. The 2014 discharge permit was finally issued and became effective September 2017.

There have been periodic violations of the new permit relating to PH, e.coli and chlorine discharge. In order to comply with MDEQ requirements, the city has contracted with RPA to develop a new PER to identify current issues. The city has received planning grants from DNRC, TSEP and USDA Rural Development for this PER. Funding applications for the lagoon improvements will be submitted around May 2018.

The Musselshell River has been listed as impaired for e.coli. Jim Kalitowski commented that upriver from Harlowton many residences/ranches dump sewage directly into the river.

Preliminary information suggests that the most important issues to correct in the wastewater system are installing a disinfection system and sludge removal. In addition the collection system still has over 44,000 feet of aged and possibly undersized sewer mains. If the sewer mains are under 8 inch lines, they cannot be lined and would have to be replaced, which is more expensive than lining.

The current recommended solution to the disinfection system would be to install either a UV disinfection system or a de-chlorination system. A de-chlorination system involves the addition of Sodium Bisulfate to neutralize the chlorine. Benefits and disadvantages of both a UV disinfection system and de-chlorination system were discussed. Estimates for UV disinfection are around \$990,000 plus annual operating and maintenance costs of around \$15,700 per year. Estimates for chlorination/de-chlorination system are approximately \$657,000 with annual operating and maintenance costs of \$25,500. Sludge removal will cost

around \$388,500. Jim Kalitowski asked where the sludge would get hauled. Gary commented that the process is contracted out and that contractor is responsible for finding land application sights for the waste. As DEQ regulation continue to change, future improvements for the sewer system may include new headworks to screen or macerate trash that is in the sewer, upgrading of the aeration system, relining the lagoons, ceasing to discharge into the river and installing a land application system or oxidation ditch. Rob Elwood asked what other cities of Harlowton's size do. Gary commented that each city's needs differ; however larger cities tend to have mechanical plants. A town of our size recently upgraded to a new aeration system, covered lagoon to improve bacteria action, and added a nitrate box. Paul Otten asked about the cost of a new lagoon liner. Gary commented the current cost is approximately \$1.20 per square foot installed, so for the city's lagoons it would cost approximately \$400,000. Gary also commented that the DEQ's requirements for sewer systems changes frequently. He hoped that the DEQ will continue to be cooperative and understanding of small town finances and dynamics.

RPA's recommends phase one improvements to include sludge removal and one of the disinfection alternatives. Most systems in Montana are converting to UV disinfecting systems.

Funding options for these improvements are USDA Rural Development which does low interest loans and partial grants; TSEP which does grants; DNRC RRGL which does grants; SRF which does low interest loans and partial grants; and CDBG which does grants. User rates could potentially go up \$5.32 to \$11.42.

As TSEP funding for the city's water system project was "postponed" for 2018, the city would be basically competing for TSEP funds for a water project and the sewer project. TSEP ranking is highly based on health and human safety. Ian felt that the sewer project would not rank as high as the city's water project.

Potential phase 1 project schedule would be:

Complete the PER	May 2018
Funding Applications	May 2018
Secure Funding	March 2019
Design Phase 1	September 2019
DEQ Approval	October 2019
Awards Bids	December 2019
Construction	March - September 2020

Gary commented that the city has approximately 7 times the normal BOD and 10-20 times the normal TSS discharged into the system. It is suspected that certain users in the city are higher "load" customers. Ian will try to do some specific sampling to identify these users. Typical higher "load" users are rest areas, truck stops, gas stations, RV dump stations, and restaurants. These users should be expected to contribute more in paying (higher user rates based on business type) or be required to install some sort of "pre-treatment" to the waste prior to discharge into the city's system. In addition, the suggestion was made to possibly install manholes to help identify undersized sewer mains in order to get a more accurate cost estimate when it comes time to replace or line the remaining sewer mains.

Meeting adjourned at 7:06 pm.

Present:

John Anderson, Frank Brouillette, Rob Elwood, Jim Kalitowski, Ron Teig, Charley Bennett (via telephone), Ian Reed, Paul Otten, Kathie Newland, Dan Edwards, Lauri Teig (arrived 6:24), Michael DeBorde (arrived 6:40)

Paul Otten, Mayor

Kathie Newland, Clerk