



Gallatin Public Utilities

Water ♦ Sewer ♦ Natural Gas

April 28, 2017

Manager, Enforcement and Compliance Section
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
312 Rosa L. Parks Avenue
Tennessee Tower – 11th Floor
Nashville, TN 37243

Manager, Nashville Environmental Field Office
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
711 R.S. Gass Boulevard
Nashville, TN 37243

Re: Agreed Order - Case No. WPC11-0066
Docket No. 04.30-116140A
Item No. 9 - Submittal of Annual Report
Sumner County, Tennessee

Ladies and Gentlemen:

In accordance with the provisions of the Agreed Order, referenced above, Item Number 9 – Annual Report submittal, below is the annual report for your review and approval. A copy of this annual report is also being placed on our website in the Public Document Repository.

Sanitary Sewer Overflow Response Plan (SSORP):

Our Sanitary Sewer Overflow Response Plan was approved by the Tennessee Department of Environment and Conservation (TDEC) on November 7, 2013, and fully implemented as of January 27, 2014.

We experienced a total of seven (7) sanitary sewer overflows during 2016. The seven sanitary sewer overflows occurred at two locations (4 at the Bulls Creek Lift Station and 2 at the Number 1 Lift Station). Of these overflows, 6 were rainfall related and 1 was pump station mechanical failures (power or controls). Our service area experienced approximately 46 inches of precipitation during

2016. Sanitary sewer overflows have decreased approximately 86% since a high of 51 during 2013 and have been decreasing each year.

Corrective Action Plan/Engineering Report (CAP/ER):

A draft Corrective Action Plan/Engineering Report (CAP/ER) was submitted to the Tennessee Department of Environment and Conservation (TDEC) for review and approval on November 13, 2012. The CAP/ER was approved by the Department on December 13, 2012. As indicated in the CAP/ER there are currently several projects in the various stages of design and construction, these include the following:

Bull's Creek Lift Station

Our engineering firm (James C. Hailey and Associates) has completed the design of a replacement for the Bull's Creek Lift Station. This project is being designed as an upgrade to the lift station to increase capacity and to eliminate rainfall related sanitary sewer overflows at this location. The new station has a design capacity of 4.5 MGD (current station's capacity is 1.5 MGD); and will include: a wet pit/dry pit design, 3 – 125 HP pumps, VFD controls, a JWC Environmental Grinder Unit, an emergency stand-by generator with automatic transfer switch, and a second 18" diameter ductile iron force main to the WWTP. This project was originally scheduled to bid in the summer of 2016. The funding for the project has been approved and is in place, the easements for the project have been acquired; however we have been waiting for over 20 months for approval documents from the US Army Corp of Engineers. This project is now scheduled to bid as soon as we receive notice from the USACE that they have approved the project.

Projects Completed

Since 1990 we have completed 6 major sanitary sewer rehabilitation projects totaling over \$5,859,670.00. These projects have replaced over 94,290 linear feet (17.9 miles) of aging sanitary sewer mains, 924 sanitary sewer services (over 23,015 linear feet of sewer service), 169 manholes, and 2,100 vertical feet of manhole rehabilitation. This is in addition to the \$29,772,935.00 for upgrades to the Gallatin Wastewater Treatment Plant; and over \$6,217,000.00 in sanitary sewer pump station upgrades and replacements.

Contract 212 – 2012 Sewer System Rehabilitation – Phase 1, Phase 2, Phase 3

Construction has been completed on Phase 1 (\$1,700,000.00), Phase 2 (\$400,000.00), and Phase 3 (\$500,000.00) of the project. This project replaced approximately 58,080 linear feet of 6" to 24" gravity sewer main with HDPE pipe, replaced 554 sanitary sewer services, replaced approximately 13,200 linear feet of sewer service pipe, rehabilitated and epoxy coated 2,100 vertical feet of sanitary sewer manholes.

Number 1 Lift Station

Construction is completed on the upgrades for the Number 1 Lift Station (\$720,000.00). The construction and upgrades will include the following:

1. Replacement of two communitors with a high capacity JWC Environmental Grinder Unit
2. Replacement of the automatic transfer switch for the emergency generator and a comprehensive upgrade to the electrical and control systems
3. Installation of a wet well aeration and odor control system
4. Installation of a new automatic gate at the influent to the pump station
5. Other modifications to improve the reliability and capacity of the station
6. A climate control system is also being installed to improve the performance and reliability of the variable frequency drives in the pump station.

Rankin Branch CCTV Inspection

Compliance EnviroSystems, LLC was contracted in 2016 to perform a CCTV and Sonar inspection and evaluation of the Rankin Branch Trunk Sewer, which consisted of approximately 5,700 linear feet of 30" – 36" sanitary sewer main connected to the Rankin Branch Pump Station.

Capacity, Management, Operations, and Maintenance (CMOM) Plan:

A draft Capacity, Management, Operations, and Maintenance (CMOM) plan was submitted to the Tennessee Department of Environment and Conservation for review and approval on January 15, 2013. We continue to work on the evaluation of our sanitary sewer collection system pending final approval of this plan.

We have in place a system to monitor and evaluate sanitary sewer system flows utilizing a network of 13 permanent flow monitors. This network of flow monitors, strategically located throughout our sanitary sewer collection system (see attached map), provides us with the ability to monitor flows in our collection system on a "near" real time basis; while also providing a monthly report of the wastewater flows in the collection system. This information is utilized to identify areas of the sanitary sewer collection system with flow volumes that warrant additional inspection and evaluation. The data is also utilized to evaluate the effectiveness of our on-going sanitary sewer system modernization and rehabilitation efforts.

Our crews completed the hydraulic cleaning and CCTV inspection and evaluation of approximately 78,178 linear feet (14.8 miles), or approximately 7%, of sanitary sewer mains in 2016. The total amount of sewer mains inspected in 2016 is down due to the military deployment of our CCTV Inspection Technician and turn over in the position during the year. To date we have completed the hydraulic cleaning and CCTV inspection of over 973,553 linear feet (approximately 86.5%) of the sanitary sewer system. Our crews also performed 325 manhole inspections in 2016, with a total of approximately 3,907 (77%) of our 5,106 manholes having been inspected.

We have an on-going right-of-way clearing program in place; to date our crews have cleared in excess of 124 miles of right-of-way, with 5.27 miles (27,832 feet) cleared in 2016.

Please do not hesitate to contact me should you have any questions or require any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Kellogg', with a large, stylized initial 'D' and a long, sweeping horizontal stroke extending to the right.

David T. Kellogg
Assistant Superintendent
Gallatin Public Utilities