April 15, 2024

Don Hamera
U.S. Environmental Protection Agency – Region 7
Water, Wetlands and Pesticides Division
11201 Renner Boulevard
Lenexa, Kansas 66219

Re: Docket No. CWA-07-2017-0139
April Report

Dear Mr. Hamera,

This letter is intended to meet the requirements of Docket No. CWA-07-2017-0139 paragraph 36.

Work Related to SSO Elimination

Work Substantially Completed

1. *STEP 1 –April 2017*
2. *STEP 1.5 – April 2017*
3. *Equalization Basin Improvements – July 2018*
4. *Wastewater Treatment Plant (WWTP) Improvements – October 2021*
5. *STEP 2 – September 2022*

STEP 3A – Improvements to the Grease Lightning Lift Station (GLLS)

Bids were received on January 17, 2023 with Woodruff Construction being the low bidder at $6,557,300.00. Over the last six (6) months, Woodruff has continued to progress. As of the last pay application dated April 1, 2024 the project was 68% complete. The contract sets the substantial completion date at September 1, 2024 and the final completion at December 1, 2024.

The STEP 3A work includes:

- Increasing the capacity of the lift station to approximately 14.0 MGD on the existing footprint.
- Four (4), new, 250 hp submersible pumps are required to meet flow/head requirements.
- A 500 kW generator
- A new lift station building including:

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- Overflow/diversion structure to separate normal flows (to existing GLLS) and high flows (to new pump station)
- Coarse mechanical screening
- Dedicated electrical/control room

- Minor utility work including:
  - Flow metering and bypass structures on the existing 14" and proposed 24" force mains

STEP 3B – Grease Lightning Lift Station (GLLS) Forcemain Improvements
STEP 3B includes approximately 10,000 feet of new, wet-weather forcemain from GLLS to manhole SMH-16. Bids were received on January 17, 2023 with Boomerang Corporation being the low bidder at $2,947,984. Work began early February 2024, with testing of the pipe occurring the end of March 2024.

Collection System Improvements
The City has continued with annual cleaning and televising to prevent system back-ups. Several high flow/high FOG areas receive annual cleaning, while the rest of the community is inspected once every four to five years. In addition to cleaning and televising, the City has completed the following system improvements over the last six (6) months:

- New warning lights and alarms at Walton lift stations.
- Installed new pump at Hickory Knoll lift station

The City has also continued to limp along the operation of the grease lightning lift station. As reported in April 2023, the City experienced multiple pump failures at the GLLS in November and December 2022. The City finally has both the below-grade and back-up diesel pump rebuilt and onsite. No sanitary sewer overflows occurred within the last year because of lift station issues.

<u>Changes to Appendix A</u>
With your approval of the revised completion date to STEP 3, there are no requested changes to Appendix A.

There are continued supply chain issues for the GLLS project. Although half of the variable frequency drives are onsite, control panels and the generator is still an issue of concern. At this point, the Contractor does not believe it will impact substantial completion of the lift station but will delay programing and close-out of the project.

Scheduled Work

Work expected in the next six (6) months includes the following:

STEP 3A – Improvements to the Grease Lightning Lift Station (GLLS)

All exterior piping is complete, with exception of the final cross over between the old and new lift stations. The lift station building is enclosed, painted, and has completed MEP rough-ins. Process piping within the building is 60% complete. Over the next five (5) months until substantial completion, the contractor will complete the interior work within the lift station building. Process piping, gates, stairs and railings, and grating will all continue until the bar screen is delivered and install around mid-June 2024. A final tie-over cannot be made until the control panels arrive.

STEP 3B – Grease Lightning Lift Station (GLLS) Forcemain Improvements

Construction is complete. There are a few areas that do not meet minimum cover. The Contractor is working to grade those area to correct the issues. Otherwise, all that remains is seeding and clean-up.

Collection System Improvements

The City has no specific projects proposed for the next six (6) months. Crews will continue their cleaning and televising schedules.

The City will begin selection for an engineering firm for STEP 4. The City intends to handle STEP 4 in two stages.

1) STEP 4a – From GLLS to manhole 15-14 or slightly beyond. This will allow the City to relieve the bottle neck at 15-14. This stage will include preliminary design of all of STEP 4 and development of a hydraulic profile.
2) STEP 4b – From 15-14 to 9-1A. If increasing the pipe downstream of 15-14 and changing the pipe angle at 15-14 does not elevate the overflows at 9-1A, this stage will be constructed. The hydraulic profile in the first stage will be important to determine the extent of pipe replacement needed to keep sanitary sewer out of residential basements.

Summary of SSOs

There were two sanitary sewer overflows in the previous six (6) months. Both were related to sewer main blockages and were not associated with rain events. Attached is a copy of the press-release sent to the media and the Iowa Department of Natural Resources on 2/26/24. Additional overflows in early April 2024 are not accounted for in this letter. The location, gallons, and time of the SSO is listed below:

Manhole	Tributary	Start Date	Start Time	End Date	End Time	Gallons
14-45	Indian Creek	12/15/2023	Unknown	12/15/2023	Unknown	0.5 gpm
3-2	Crow Creek	2/26/2024	Unknown	2/26/2024	3:15 PM	15 gpm

Sincerely,
CITY OF FAIRFIELD

Melanie A. Carlson, PE & LEED AP
City Engineer

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Enclosures
cc: via Email
Shawn Worley (City of Fairfield)
Shane McCoin
Terry Jones (Iowa DNR Region 6)

S:\City Engineer\City Projects\Sanitary Sewer\EPA\April 2024\Report April 2024.docx

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Appendix A

ATTACHMENT A

APPENDIX A
SANITARY TRANSPORTATION AND ELIMINATION PROGRAM (STEP)
FAIRFIELD, IOWA

MILESTONE	**COMPLETION DATE**
STEP 1 – Trunk Sewer Improvements (Main Interceptor)	
1. Design and Bidding	August 2013 - April 2016
2. Land Acquisition/Easement Negotiations	September 2013 – April 2015
3. Construction	June 2016 – October 2017
4. Substantial Completion	April 2017
5. Final Completion	October 2017
STEP 1 – Wastewater Treatment Plant Improvements	
1. Design	2013 – December 2013
2. Land Acquisition/Easement Negotiations	September 2013 – December 2014
3. Bidding	February 2017
4. Contract Award	February 2017 – August 2017
5. Construction	July 2017 – October 2019
STEP 2A – Trunk Sewer Improvement (Golf Course)	
1. Preliminary Design/Environmental	August 2013 – July 2016
2. Final Design and Bidding	August 2016 – December 2016
3. Land Acquisition/Easement Negotiations	September 2016 – December 2016
4. Construction	January 2017 – October 2017
STEP 2B – Trunk Sewer Improvements (Lamson Woods)	
1. Preliminary Design	August 2013 – July 2016
2. Environmental	January 2016 – June 2018
3. Land Acquisition/Easement Negotiations	Jan 18 - April 19 ~~September 2017 – June 2018~~
4. Final Design and Bidding	Aug 16 - June 2019 ~~August 2016 – July 2018~~
5. Construction	Feb 2020 - December 2021 ~~August 2018 – December 2019~~
STEP 3 – Greased Lightning Lift Station and Force Main Improvements	January 2020 - August 2020
1. Pre-Design Secondary Flow Monitoring Study	~~January 2019 – September 2019~~
2. Design	January 2021 – December 2021
3. Bidding	January 2023 ~~January 2022~~
4. Construction	~~March 2022 – December 2023~~ March 2023 - December 2024

Red - Previously Requested

APPENDIX A
SANITARY TRANSPORTATION AND ELIMINATION PROGRAM (STEP)
FAIRFIELD, IOWA

MILESTONE	**COMPLETION DATE**
STEP 4 – Trunk Sewer Improvements (West Interceptor)	
1. Land Acquisition/Easement Negotiations	January 2024 – July 2025
2. Design	January 2025 – December 2025
3. Bidding	January 2026
4. Construction	March 2026 – December 2027
STEP 5 – Sanitary Sewer Rehabilitation	
1. Design	January 2029 – December 2030
2. Bidding	January 2030 January 2031
3. Construction	March 2030 – December 2031 March 2031 – December 2032

Appendix B

From: Shawn Worley
Sent: Thursday, February 29, 2024 1:13 PM
To: Jones, Terry [DNR]; Melanie Carlson
Subject: CITY OF FAIRFIELD SSO

Terry,

On February 26th at 14:00 the city of Fairfield wastewater treatment facility was notified of a possible sanitary sewer overflow. The manhole in question is 3-2 on the north east side of Fairfield. Upon arrival it was found that the manhole was indeed overflowing at an estimated 15 gallons per minute. Operator James Simmons called in the sso at 14:30 to report. The line had a blockage which was unclogged with the cities jet truck. The sso was relieved at 15:15. After the active sso was stopped and flow resumed the are affected was limed and cleaned. Approx. amount of discharge is undetermined. The discharge drained into a dry ravine that eventually leads to crow creek tributary.

Thank You
Shawn Worley

Sent from Mail for Windows