October 9, 2022

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
October 2022 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*

Additional Wastewater Treatment Plant work

The City has worked with USDA Rural Development to replace or repair additional treatment components which were not included in the original wastewater treatment plant project. The replacement of two existing final clarifiers has been completed. The 2013 sludge storage tank was found to have significant corrosion when inspected during the wastewater treatment plant project. Replacement of this tank is almost complete, with testing scheduled for the week of October 17, 2022.

STEP 2 Conveyance Improvements

This project has been complete and operational since July 2021. Clean-up remains, but the portion related to SSO elimination is complete. Substantial completion was postdated September 2021, with the Fairfield City Council accepting the project as final in September 2022.

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STEP 3 – Improvements to the Grease Lightning Lift Station (GLLS) (3A) and GLLS Forcemain Improvements (3B)
Drawings and specifications are complete, with the IDNR construction permit having been obtained. Land acquisition is almost complete. Upon USDA concurrence with the construction documents, the project will be bid.

The STEP 3A work includes:

- Increasing the capacity to approximately 14.0 MGD on existing GLLS 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:
    - 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 includes approximately 10,000 feet of new, wet-weather forcemain from GLLS to manhole SMH-16.

Collection System Improvements
Regular maintenance to prevent back-up related overflows has continued. City work related to SSO elimination within the last six months has included:

- Cleaned and televised the remainder of Zone 14 and all of Zone 18.
- Cleaned and televised parts of Zones 4, 6, 8, and 10.
- Replaced 14 manhole rings and covers.
- Installed new pumps at Walton Lift Station #5.
- Rebuilt the electrical cabinet at Walton Lift Station #7.
- Rebuilt one pump at 34 lift station.
- Replaced 30 feet of sanitary sewer between manholes 8-45 and 8-43 on Merril Avenue/Iowa Highway 1.
- Lined nearly 3500 feet of 8-inch and 12-inch sanitary sewer.

Changes to Appendix A

Despite slight changes in the start time of STEP 3a and 3b, there is no requested change to the completion date of STEP 3 at this time. However, lead times have been a significant issue on similar projects. The current estimated lead times on the standby generator and electrical control panels for STEP 3a could push the completion date back by six (6) to twelve (12) months. Ductile iron pipe is seeing delays of six (6) to eighteen (18) months. By April 2023, STEP 3 will be bid and a contractor will be under contract. Any changes to the completion date can hopefully be submitted at that time; however, it may take until the October 2023 report to fully understand the effects of ongoing supply chain issues.

Scheduled Work

Work expected in the next six months includes the following:

STEP 2 Conveyance Improvements

Clean-up and seeding remain; however, the project is substantially complete.

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

With bidding of the the project approaching soon, it is hopeful some work will have started by April 2023.

Collection System Improvements

In the next six months the City plans to finalize the lining project. The City will also continue to resolve sources of inflow and infiltration, including one for a 12 unit apartment complex. Depending on the winter conditions, staff will work to abandon parts of STEP 1 and STEP 2 while the ground is frozen. Additionally, staff will continue to maintain the existing lift stations, keeping them operational and preventing bypasses. 34 lift station had both pumps fail this summer, with only one being able to be rebuilt. Supply chain issues will significantly delay the City's ability to have two pumps at this location, therefore maintenance of the remaining pump is critical.

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Summary of SSOs

There were no sanitary sewer overflows in the previous twelve (12) months. Further, there have been no overflows on the east side of the collection system, since STEP 2 has been operational (July 2021).

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
Alex Potter (McClure Engineering Company)
Stephen Pedrick (French-Reneker-Associates)
Shawn Worley (City of Fairfield)
Shane McCoin
Terry Jones (Iowa DNR Region 6)

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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	~~September 2017 – June 2018~~
4. Final Design and Bidding	~~August 2016 – July 2018~~
5. Construction	~~August 2018 – December 2019~~
STEP 3 – Greased Lightning Lift Station and Force Main Improvements	
1. Pre-Design Secondary Flow Monitoring Study	~~January 2019 – September 2019~~
2. Design	January 2021 – December 2021
3. Bidding	~~January 2022~~
4. Construction	~~March 2022 – December 2023~~

Jan 18 ~~- Dec 18 -~~ April 2019

Aug 16 ~~- Dec 18 -~~ June 2019

Feb 2020 - December 2021

January 2020 - August 2020

January 2023 ~~May 2022~~

March 2023 ~~July 2022~~

Green - Requested October 2019

Blue - Requested April 2019

Red - Requested October 2018

Orange - Requested October 2021

Purple - Requested October 2022

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