April 13, 2021

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 2021 Report

Dear Mr. Dillard,

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

Work Related to SSO Elimination

Wastewater Treatment Plant (WWTP) Improvements and Equalization Basin

The original scope of work and the additional repairs to the final clarifiers are complete. Programing continues to be fine-tuned, along with learning to operate the treatment plant under low flows. Flows continue to remain low with the storm water pumps only running a total of 3.4 hours since October 2020.

STEP 2 Conveyance Improvements

The project was let on November 26, 2019 and was awarded to Maxwell Construction from Iowa City, Iowa. Despite a snowy winter, the project has made good progress. A majority of the pipe is installed and tested. As of April 1, 2021, the project was 75% complete, with mainly the smaller connecting lines remaining. 15% of the 18" sanitary sewer remains to be installed, along with 50% of the 8", 65% of the 6", 30% of the 48-inch diameter manholes, and 100% of the lining. The project is generally on schedule for the substantial completion date of June 10, 2021.

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

Engineering selection has occurred and McClure Engineering Company will be completing the design for this project.

The STEP 3A work includes:

- Increasing the capacity to approximately 14.0 MGD on/near existing GLLS footprint.

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- Four (4), new, 250 hp submersible pumps are required to meet flow/head requirements.
- Move an existing 750 kW generator from the wastewater treatment plant to the GLLS site.
- 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 – Improvements GLLS Forcemain
Engineering selection has occurred and McClure Engineering Company will be completing the design for this project. The project includes approximately 10,000 feet of new, wet-weather forcemain from GLLS to manhole SMH-16.

Collection System Improvements
The City continues to focus on plant operation. However, regular maintenance within the collection system has continued. City work within the last six months has included:

- Outfitting a secondary camera vehicle.
- Upgraded the electrical system at two Walton Lake pump stations.
- Decreasing permit fees from approximately $350 to $0 for existing sanitary sewer services to promote replacement and repairs to existing service lines.

<u>Changes to Appendix A</u>
There are no required changes to Appendix A.

<u>Scheduled Work</u>
Work expected in the next six months includes the following:

WWTP Improvements
Very little work remains. Within the next six months, all programing issues should be resolved, punch list items completed, and the project accepted as final.

STEP 2 Conveyance Improvements
Work will continue over the next six months. The contractor is on schedule to meet the substantial completion date of June 10, 2021. There is additional clean-up work, including paving, which may drag the project into the fall months. However, the new pipe will soon be fully operational.

STEP 3
Design of STEP 3A and 3B will begin soon. Within the next 6 months we will have a good idea of the needed land acquisition. Land acquisition will be the largest hurdle in meeting the deadlines of Appendix A.

Collection System Improvements
In the next six months the City plans to continue to clean and televise the sanitary sewer collection system. The City also intends to bid sanitary sewer lining.

The City's 5-year Capital Improvements Plan and 2021-2022 budget was approved in March 2021. Below are the conveyance improvements included in the 2021-2022 budget:

- $110,000 for contracted pipe lining and manhole rehabilitation.
- $100,000 for in-house point repairs
- Point repairs in drainage area 13 and 14.
- Design of STEP 3A and 3B improvements.

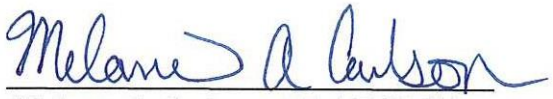
<u>Summary of SSOs</u>
There were no sanitary sewer overflows due to a rain event or snow melt in the previous six months. Over the last 6 months, the largest rain-fall event was a 10-year, 30-minute storm. The only overflow was due to a collapsed sever main. Attached is a copy of the press-release sent to the media and the Iowa Department of Natural Resources. The location, gallons, and time of the SSO is listed below:

Manhole	Watershed	Start	End	Gallons
2-53	Crow Creek	8:45 AM	2:46 PM	10,830
			TOTAL	**10,830**

<u>COVID - 19</u>
Although not required by Docket No. CWA-07-2017-0139, we would like to document the potential delay and other side effects caused by the ongoing public health crisis. We are happy to report staff and contractors have been relatively unaffected. Several staff hours were lost over the last six months due to exposure to positive COVID cases

outside of work. This decrease in hours, along with internal efforts to decrease the risk of exposure to employees, has limited the amount of work completed by City staff. Additionally, there was no further progress on grease trap inspections due to limiting exposure. However, at this point, there are no changes needed to Appendix A related to these delays.

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

Green - Requested October 2019

Blue - Requested April 2019

Red - Requested October 2018

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

Attn: DNR FO6

The City of Fairfield experienced one sanitary sewer overflow on December 8, 2020. The cause was due to a collapsed 12 inch sewer main. Results of the overflow is listed below.

Manhole 2-53 Start Time: 0845 12/8/2020

End Time: 1446 12/8/2020

Gallons: 10,830

Discharged to tributary of Crow Creek

Clean up: Lime

The City of Fairfield's Wastewater Department discovered manhole 2-53 was overflowing at 8:45 am on Tuesday, December 8, 2020. Upon discovery the department went down stream to manhole 2-51 to check flow for a blockage and saw that there was very little flow in the manhole. The Department's cleaning and televising crew came out and jetted up the line but kept hitting something and couldn't make it manhole 2-53.

When the line was televised it was discovered that a portion of the 12 inch main had collapsed 117 feet from manhole 2-51. After the crew realized that the problem could not be resolved by jetting the line one of the operators called the DNR to report the overflow at 10:45 am and spoke to Ben Stracuzzi. Drish construction was contacted to do the repair and they were onsite around 1:00 pm.

Samples were taken at the source of the overflow at 12:00pm and downstream at 12:30pm. TSS and BOD5 were ran at the Wastewater Treatment's lab and the E. Coli samples were taken the Ottumwa's Wastewater Treatment facility's lab.

Drish construction got the blockage free at 2:45 pm and as soon as it was free manhole 2-53 began going down and was no longer overflowing at 2:46 pm.