

MINUTES
OPERATIONS & ENGINEERING COMMITTEE MEETING
MARCH 10, 2020

Attendants: Messrs. Boland, Cherico, DiSantis, Hurst, Kester, Knapp, Kochubka, Lucas, Monaghan, Mullen, Pisani, Willert, and Mesdames Cummings, and Sage.

1. ROLL CALL: Eight members of the DELCORA Board of Directors were present at the meeting constituting a quorum.

The following were present for the bid opening: Estelle Rouse of Mor Construction, Robert Munro of Joy Services, Inc. of Joy Services, and John Brientnal of Deerfield Mowing. There were no other members of the public present.

2. PLEDGE OF ALLEGIANCE: All parties present at the meeting recited the Pledge of Allegiance.

3. BID OPENINGS:

- Contract No. P2020-01 – Lawn Mowing and Maintenance

Mr. Hurst stated that there were two bids received.

<u>TOTAL BID AMOUNT</u>	
Joy Services, Inc.	\$ 39,985.00
Deerfield Mowing and Property Maintenance	\$ 27,940.00

Mr. Mullen stated that these bids will be reviewed by Staff and our Solicitor's office, and consideration of award will be placed on the agenda for the March 17th Board meeting.

- Contract No. P2020-02 – Sewer Lateral Cleaning (Part A) and Maintenance (Part B) Services

Mr. Hurst stated that there was one bid received.

<u>TOTAL BID AMOUNT</u>	
Mor Construction Services, Inc.	\$ 253,820.00

Mr. Mullen asked if this contract was advertised. Mr. Hurst stated that yes, DELCORA followed the typical bid procedures. It was advertised in the paper and solicited for bids.

Mr. Mullen stated that this bid will be reviewed by Staff and our Solicitor's office, and consideration of award will be placed on the agenda for the March 17th Board meeting.

- Contract No. TC-2001 – C – Incinerator Maintenance and Emergency Repairs 2020

Mr. Hurst stated that there was one bid received.

TOTAL BID AMOUNT

Industrial Furnace Company, Inc.

\$686,750.00

Mr. Mullen stated that this bid will be reviewed by Staff and our Solicitor's office, and consideration of award will be placed on the agenda for the March 17th Board meeting.

4. MONTHLY REPORT – DIRECTOR OF OPERATIONS & MAINTENANCE: Mr. DiSantis highlighted certain items in the written report. Mr. DiSantis reported that the flow for the month of February was a little higher than January at 36.15 MGD. Mr. DiSantis also reported that there were no violations at the W RTP for the month of February. Some additional highlights were that Solids Handling did very well this month with 68.63 dry tons/day processed; the average cake solids were 23.61% along with a low amount of polymer and gas being used in February. Mr. DiSantis stated that DELCORA did receive 99% of the flow from the Central Delaware Pump Station. Mr. DiSantis also reported that there were four reportable incidents during the month of February. Two incidents were for emissions. One incident was caused by the failure of a pressure sensor on the utility water system, the other emissions incident was an operations issue. The other two reportable incidents were for sanitary sewer overflows. One was a wet weather overflow at the SDCA's Beech Street Pump Station caused by excessive flows to the station. Mr. DiSantis stated that the Engineering Department is working with Catania Engineering and Southern Delaware County Authority to design a new force main which would alleviate the overflows at this pump station. Mr. DiSantis reported that the other SSO was due to Chester Water Authority inadvertently striking a force main at the Feltonville Pump Station. DELCORA staff repaired the damage very quickly and the line was put back into service. Mr. DiSantis stated that there was one violation at the Pocopson Preserve Facility due to exceeding the Total Suspended Solids limit due to excessive algae which is typical on the stabilization pond plants. Mr. DiSantis stated that all remote facilities were inspected by DEP in February and no violations were noted. Mr. Kester asked why the Darby Creek flow was so high. Mr. DiSantis stated that this is the largest pump station and that the daily average flow is high due to the pump station serving a densely populated area. Mr. Kester asked if DELCORA receives that flow. Mr. DiSantis stated currently that flow goes to PWD. Mr. DiSantis had no further comments on his written report. The Committee had no additional questions regarding the written report.

5. MONTHLY REPORT – DIRECTOR OF ENGINEERING: Mr. Hurst highlighted certain items in the written report. Regarding the W RTP Plant Upgrade project, he reported that this month the last secondary clarifier to be upgraded was put online. There was flow testing done on this clarifier and it did very well. Mr. Hurst also reported that there was a planned shut down at the plant to bring the Substation 1 online and that

marked the final step in a long process to bring three new substations up to date. Mr. Hurst also reported on the CSO and LTCP that there was a meeting last week and was widely attended by DELCORA, PADEP, and EPA personnel. Mr. Hurst stated that it was a successful meeting, and that DELCORA is optimistic that we will receive LTCP approval later this year. Mr. Willert extended thanks to the Engineering Department and Operations Department in their work with the PADEP and EPA in the Long Term Control Plan process. Addressing Design Item #2, ESA Alternatives, Mr. Hurst stated that this project addresses moving DELCO flows away from Philadelphia and directing it to Chester. He stated that the design phase is underway and that they are conducting surveys and doing aerial flyovers to finalize routes of the pipeline. Mr. Hurst reported that they are starting the process of closing out the value engineering process. The purpose of the process is to determine/validate the design concepts. Mr. Hurst stated that he had no further comments on his written report. The Committee had no questions regarding the written report.

6. MONTHLY REPORT – ENGINEERING ADVISOR: Mr. Kochubka highlighted several on-going projects on the written report, which had been provided to all Board members in advance of today's meeting. He stated that work has begun on the Annual Chapter 94 Report due by the end of March to the PADEP. One report is required for the Western service area and one for the Eastern service area. The Eastern service area report is sent to the Philadelphia Water Dept. for inclusion in their Chapter 94 report submission to the PADEP. Mr. Kochubka stated that the Eastern Service Area Report is completed and has been submitted to the Philadelphia Water Dept and there is a draft of the West report that is being reviewed by staff but will be complete by the end of the month. Regarding the Annual Stormwater Modeling, Mr. Kochubka stated that this is a monthly report of discharges from the Combined Sewer Overflows (CSO) in the CSO system. An annual report is prepared and included in the annual Chapter 94 report. The monthly report was completed last month, and the annual report is currently being prepared. That report includes precipitation data for the month, the number of overflows and volume to the outfalls. Mr. Kochubka also reported on the Metering Program. A monthly report is generated using data collected from over 100 flow meters throughout Delaware County to support the billing to the other county authorities and municipalities. Mr. Kochubka reported on the Force Main Test Coupons and ARV Repair they are still waiting on some materials to come once material is in construction will be started on one of the Air Release Valve locations, it will then be monitored, and the construction will happen on the other ARV locations. Mr. Kochubka had no additional comments to the written report. The Committee had no questions regarding the written report.

7. CHANGE ORDERS: Mr. Mullen stated that there were no Contract Change Orders at this time.

8. REQUEST FOR APPROVAL OF CONTRACT CLOSE-OUT & FINAL PAYMENT:

- Contract No. TC-1608-C – Solids Handling Upgrade – Part A – General (Allan Myers)

Following a brief overview by Mr. Hurst, it was the consensus of the Committee to recommend Board approval of the above contract close-out. This item will be placed on the agenda for the March 17th Board meeting.

9. AUTHORIZATION FOR PROFESSIONAL SERVICES:

- A. Greeley And Hansen – Proposal Dated March 6, 2020 – For Professional Engineering Services For Assisting In Responding To USEPA Comments On Combined Sewer Overflow Long Term Control Plan – Total Amount Not To Exceed \$200,000.00 (Capital Funds)

Mr. Hurst stated that this proposal is for further work on the Long Term Control Plan to answer questions from the USEPA.

- B. Catania Engineering – Proposal Dated February 7, 2020 – For Professional Engineering Services For Additional Work Associated With The Review Of Sewage Planning Modules For 2019 – Total Additional Amount Not To Exceed \$2,850.00 (Operating Funds)

- C. Catania Engineering – Proposal Dated February 7, 2020 – For Professional Engineering Services For The Review Of Sewage Planning Modules For 2020 – Total Amount Not To Exceed \$15,000.00 (Operating Funds)

Mr. Hurst stated that Catania Engineering does work for DELCORA to review the submitted Sewage Planning Modules. DELCORA signs off on conveyance and treatment capacity for new connections.

It was the consensus of the Committee to recommend Board approval of the above proposals. These items will be placed on the agenda for the March 17th Board meeting.

10. AUTHORIZATION TO ADVERTISE FOR BIDS: Mr. Mullen stated that there were no Authorizations to Advertise for Bids at this time.

11. ENGINEERING ADVISOR APPOINTMENT:

- Engineering Advisor Services For The Second Quarter 2020 – Weston Solutions, Inc. – Total Amount Not To Exceed \$2,500.00 Per Quarter

Following discussion, it was the consensus of the Committee to recommend Board approval of the above Advisor Appointment. This item will be placed on the agenda for the March 17th Board meeting.

ADJOURNMENT: It was moved by Mr. Lucas, seconded by Mr. Kester, and unanimously carried to adjourn the regular meeting at 4:05 p.m.



Inter - Office Memorandum

To: Robert J. Willert, Executive Director
From: Michael J. DiSantis, Director of Operations and Maintenance
Subject: Board Report for the March 10, 2020, O & E Committee Meeting
Date: March 6, 2020

- I. PROCESS INFORMATION – There were no violations at WRTP during the month. Please note that cBOD data is through 2/27. February data points of interest are:

A.	<u>Liquid Process Averages:</u>	<u>Month:</u>	<u>YTD:</u>
1.	Flow	36.15 MGD	35.60 MGD
2.	TSS	19 mg/L	17 mg/L
3.	cBOD ₅	14 mg/L	12 mg/L
4.	cBOD ₂₀ % Removal	95.30%	96.2%
5.	cBOD ₂₀ Loading	6,331 lbs.	5,358 lbs.
B.	<u>Solids Processing:</u>	<u>Month:</u>	<u>YTD:</u>
1.	Dry Tons Treated -	1,990.20	2,026.00
2.	Dry Tons/Day -	68.63	67.54
3.	Total Gallons Pumped -	12,287,414	12,226,417
4.	Average Feed Solids -	3.90%	4.00%
5.	Average Cake Solids -	23.61%	23.27%
6.	Pounds of Polymer/DT -	178.28	186.49
7.	MCF/DT -	3.03	3.98
8.	Monthly Cost/DT -	\$29.16	\$33.87

C. Station Meter Readings: (Total flow values are in mg and daily flow is in mgd.)

February 2020	Total Flow	Daily Avg	High Daily	Low Daily
Darby Creek	548.35	18.91	23.92	17.03
Muckinipates	125.59	4.33	6.34	3.69
Central Delaware	281.69	9.71	13.54	8.51
Chester	227.78	7.85	12.51	6.37
Marcus Hook	22.84	0.79	1.37	0.61
Eddystone	10.98	0.38	0.51	0.33
Naamans Creek	63.35	2.18	3.08	1.90
Chi Pit	14.61	0.50	0.92	0.38
Chester-Ridley	131.22	4.52	5.47	4.09
Edgmont	3.43	0.12	0.13	0.11

II. MONTHLY FACILITY ACTIVITIES

A. Operations Highlights/Key Events

1. W RTP received 99% of the flow from the Central Delaware Pump Station.
2. There were four reportable incidents during the month. Two incidents were for emissions. One incident was caused by the failure of a pressure sensor on the utility water system. As part of our safety fail safes, the loss of utility water automatically shuts down sludge feed to an incinerator and opens both the short stack and the emergency bypass stack for the incinerators. The sensor was replaced and normal operation resumed. The other emissions incident occurred when autogenous conditions led to excessive temperatures which in turn caused the short stack to open in accordance with NFPA temperature limits. This was remedied by performing a complete burnout after which normal operations resumed. The other incidents were for sanitary sewer overflows (SSOs). There was a wet weather overflow at SDCA's Beech Street Pump Station caused by excessive flows to the station. Design is underway for a new force main from the station which is expected to alleviate these overflows. The other SSO was a dry weather overflow that occurred when CWA inadvertently struck our Feltonville Pump Station's force main. Our staff repaired the damage and the line was put back into service.
3. Similar to last month, in February there was a normal amount of rainfall which resulted in typical average daily flows in the system. Due to on-going construction, there continues to be multiple tank outages, process interruptions, and operation of interim equipment. Overall, plant performance met permit parameters and operational targets. Primary clarifier performance was very good with 70% total suspended solids (TSS) removal during the month. The gravity belt thickener (GBT) performance continued to meet the cake solids operational target with filtrate TSS being slightly over the target of 100 mg/L at 110 mg/L. The addition of phosphoric acid for nutrient deficiency continued as needed. In

solids handling, incinerator up time was 76% for the month due to planned maintenance. This resulted in 24 loads being hauled to compost during the month. Operational and budgetary targets for polymer and natural gas usage were not only met but were also lower than last month, leading to a reduction in processing costs. Chemical addition for H₂S reduction at the belt filter presses continued while the engineering for a permanent ventilation solution remains in progress. In remote operations, there was one violation at the Pocopson Preserve facility for exceeding the monthly TSS limit. Excessive algae continues to be an issue and we have done a variety treatment techniques to address the issue. It is expected that this will resolve as a result of our efforts and as we approach seasonal change. Lastly, during February, all remote facilities were inspected by DEP. No violations were noted at any of the facilities.

B. Maintenance Highlights/Key Events

1. There were no system failures during the month. In addition to routine plant, pump station, remote system, and collection system O&M; work on multiple in-house projects, support of capital projects, new system start-up, and troubleshooting new equipment start-up issues remains a significant focus of the maintenance departments during the month. Central Maintenance also worked on belt filter press repairs, incinerator and related systems repairs, inventory control, the integration of new equipment and the creation of related PM tasks into the Infor system, primary clarifier repairs, various pump repairs, and providing labor to support plant operations. In addition to routine tasks and support of plant and remote operations, Sewer Maintenance's focus remained on area line cleaning and televising, asset identification work, I&I investigation and remediation work, air relief inspections and maintenance, metering support, various line repairs/replacements in our service area, and the continued support of capital projects, WRTP and remote facility operation, and sludge receiving operations.

C. Trucked Waste Business

1. During the month, 26.4MM gallons were received. The projected revenue for the month is expected to meet our monthly target.

MJD:
attachments (NPDES DMR/Strategic Plan Reports)

cc: M. Warholic
C. Lenton
W. Smith
C. Mariani
S. Gober
File

Cummings, Meghan

From: depgreenporthelpdesk@state.pa.us
Sent: Thursday, February 27, 2020 11:25 AM
To: DiSantis, Michael; DiSantis, Michael; Raymond Rios; Piro, Ian; Mariani, Chris; Petrova, Mihaela; Cartafalsa, James
Subject: Your eDMR Report Has Been Received For Permit No. PA0027103

This email is to confirm that the following report was received by DEP through the eDMR system:

Facility Name: DELCORA STP
Permit Number: PA0027103
Report Frequency: Monthly
Report Type: DMR
Reporting Period: 01/01/2020-01/31/2020
Report Due Date: 02/28/2020

Submitted By: Michael DiSantis
Submission Id: 195473
Submission Status: Received
Submission Type: Original

To view the details of this report, access the eDMR system through DEP's [GreenPort](#) and select the link for View/Revise Submitted.



DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY
P.O. Box 999 • Chester, PA 19016-0999

February 27, 2020

SUBMITTED ONLINE VIA PADEP eDMR SYSTEM

William Collins
Water Quality Specialist – Water Management
PA Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

Dear Mr. Collins:

Enclosed are DELCORA's Discharge Monitoring Report, Laboratory Data Reports, and CSO Report for January 2020.

All parameters were in compliance during the month. Parameter averages for January 2020 were: Flow – 35.05 MGD; cBOD₅ – 10 mg/L; TSS – 15 mg/L; cBOD₂₀ % removal – 95.28%; and cBOD₂₀ – 4,829 lbs/day.

Should any further information be required concerning this report, please contact me at 610-876-5523, ext. 264.

Respectfully submitted,

Electronically signed & submitted

Michael J. DiSantis
Director of Operations and Maintenance

MJD:mc
enclosures

cc: w/enclosures
US EPA - NPDES DMR (3WP42) – can access through DEP website
Delaware River Basin Commission – can access through DEP website
C. Mariani via email with server link
File



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
DISCHARGE MONITORING REPORT (DMR)

NAME: DELCORA
 ADDRESS: 100 EAST FIFTH STREET P.O. BOX 999, CHESTER PA, 19015-0999
 FACILITY: DELCORA STP
 LOCATION: 3201 W FRONT ST, CHESTER PA, 19013-1823
 STAGE: Final Effluent

PA0027103
 PERMIT NUMBER

001
 OUTFALL NUMBER

Reporting Frequency: Monthly
 DMR Effective From: 01/01/2020
 DMR Effective To: 01/31/2020
 Permit Expires: 04/30/2018
 Permit Application Due: 11/01/2017
 No Discharge: ☐

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2020	01	01	2020	01	31

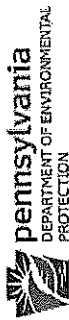
FROM

PARAMETERS REPORTED VALUES

PARAMETER	QUANTITY OR LOADING			QUANTITY OR CONCENTRATION			SAMPLING FREQUENCY	SAMPLING TYPE
	VALUE	UNITS	VALUE	VALUE	UNITS	VALUE		
pH (00400)	Sample Measurement Permit Requirement	***	6.51	***	6.53	S.U.	1day	Grab
Total Suspended Solids (00520)	Sample Measurement	***	6.0	***	8.0	MAX	1day	Grab
	Permit Requirement	***	15.0	***	15.0	***	1day	24-Hr Composite
	Sample Measurement Avg Mo	6379	15.0	***	45.0	Way Avg	1day	24-Hr Composite
Oil and Grease (00560)	Sample Measurement	***	***	***	***	***	1day	Grab
	Permit Requirement	***	***	***	5.0	***	1day	Grab
	Sample Measurement Avg Mo	5500	***	***	30.0	MAX	1day	Grab
Ammonia-Nitrogen (00610)	Sample Measurement	***	***	***	10.02	***	1week	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1week	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	1.815	***	1week	24-Hr Composite
Nitrite as N (00616)	Sample Measurement	***	***	***	***	***	2month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	2month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	1.815	Monitor & Report Daily Max	2month	24-Hr Composite
Nitrate as N (00620)	Sample Measurement	***	***	***	***	***	1week	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1week	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	2.02	Monitor & Report Daily Max	2month	24-Hr Composite
Total Kjeldahl Nitrogen (00626)	Sample Measurement	***	***	***	***	***	1week	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1week	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	15.39	Monitor & Report Avg Mo	2month	24-Hr Composite
Cyanide, Total (00720)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	0.14	***	1month	24-Hr Composite
Chlorobromomethane (34306)	Sample Measurement	***	***	***	***	***	1month	Grab
	Permit Requirement	***	***	***	***	***	1month	Grab
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Cadmium, Total (01027)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Copper, Total (01042)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Lead, Total (01051)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Zinc, Total (01052)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Dichlorobromomethane (32101)	Sample Measurement	***	***	***	***	***	1month	24-Hr Composite
	Permit Requirement	***	***	***	***	***	1month	24-Hr Composite
	Sample Measurement Avg Mo	***	***	***	***	***	1month	24-Hr Composite
Flow (60060)	Sample Measurement	***	***	***	***	***	1month	Grab
	Permit Requirement	***	***	***	***	***	1month	Grab
	Sample Measurement Avg Mo	35.05	***	***	***	***	Continuous	Metered
Total Residual Chlorine (TRC) (60060)	Sample Measurement	***	***	***	***	***	Continuous	Metered
	Permit Requirement	***	***	***	***	***	Continuous	Metered
	Sample Measurement Avg Mo	60.76	***	***	***	***	1day	Grab

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
DISCHARGE MONITORING REPORT (DMR)

Total Dissolved Solids (TDS)	Sample Measurement Permit Requirement	***	***	***	***	543 Monitor & Report Avg Mo	739 Monitor & Report Daily Max	mg/L	24-Hr Composite 24-Hr Composite
Fecal Coliform (74056) (Oct-Apr)	Sample Measurement Permit Requirement	***	***	***	***	14 Geo Mean	307.6 90% SAMPLES	No./100 ml	Grab Grab
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) (60062)	Sample Measurement Permit Requirement	3219 7000 Avg Mo	5268 10500 Wdy Avg	Isday	Isday	10.0 Avg Mo	14.0 Wdy Avg	mg/L	24-Hr Composite 24-Hr Composite
BOD, carbonaceous 20 day, 20 C (60067)	Sample Measurement Permit Requirement	4829 10500 Avg Mo	***	Isday	Isday	***	***	***	24-Hr Composite 24-Hr Composite
Facility Sampling Point Comments									



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
DISCHARGE MONITORING REPORT (DMR)

NAME: DELCORA
ADDRESS: 100 EAST FIFTH STREET P.O. BOX 999, CHESTER PA, 19016-0999
FACILITY: DELCORA STP
LOCATION: 3201 W FRONT ST, CHESTER PA, 19013-1829
STAGE: Percent Removal

PA0027103
PERMIT NUMBER

001
OUTFALL NUMBER

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2020	01	01	2020	01	31

Reporting Frequency: Monthly
DMR Effective From: 01/01/2020
DMR Effective To: 01/31/2020
Permit Expires: 04/30/2018
Permit Application Due: 11/01/2017
No Discharge: ☐

PARAMETERS REPORTED VALUES

PARAMETER	QUANTITY OR LOADING		QUANTITY OR CONCENTRATION		SAMPLING FREQUENCY	SAMPLING TYPE
	VALUE	UNITS	VALUE	UNITS		
BOD, carbonaceous, 20 day, 20 C (80087)	95.38	...	1 day	24-Hr Composite
Sample Measurement	95.25	...	1 week	24-Hr Composite
Permit Requirement	Min Max Avg	...		

Facility Sampling Point Comments



COMMONWEALTH OF PENNSYLVANIA
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NAME: DELCORA
ADDRESS: 100 EAST FIFTH STREET P.O. BOX 999, CHESTER PA, 19016-0999
FACILITY: DELCORA STP
LOCATION: 3201 W FRONT ST, CHESTER PA, 19013-1829
STAGE: Raw Sewage Influent

PA0027103
PERMIT NUMBER

001
OUTFALL NUMBER

Reporting Frequency: Monthly
DMR Effective From: 01/01/2020
DMR Effective To: 01/31/2020
Permit Expires: 04/30/2018
Permit Application Due: 11/01/2017
No Discharge: ☐

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2020	01	01	2020	01	31

FROM

PARAMETERS REPORTED VALUES

PARAMETER	QUANTITY OR LOADING			QUANTITY OR CONCENTRATION			SAMPLING FREQUENCY	SAMPLING TYPE
	VALUE	UNITS	VALUE	VALUE	UNITS	VALUE		
Biochemical Oxygen Demand (BOD5) (00310)	Sample Measurement	78465	***	***	242.94	mg/L	2/week	24-Hr Composite
	Permit Requirement	Monitor & Report	***	***	Monitor & Report	***	1/week	24-Hr Composite
Total Suspended Solids (00330)	Sample Measurement	85504	***	***	235.87	mg/L	1/day	24-Hr Composite
	Permit Requirement	Monitor & Report	***	***	Monitor & Report	***	1/day	24-Hr Composite
Carbonaceous Biochemical Oxygen Demand (CBOD5) (60062)	Sample Measurement	89548	***	***	279.06	mg/L	1/day	24-Hr Composite
	Permit Requirement	Monitor & Report	***	***	Monitor & Report	***	1/day	24-Hr Composite
Facility Sampling Point Comments								



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
DISCHARGE MONITORING REPORT (DMR)

ATTACHMENT DETAILS

File Name	Attachment Type	Uploaded Time	Attachment Comments
DMR Cover Letter January 2020.doc	Cover Letter	2020-02-27T11:23:50-05:00	
Daily Effluent Monitoring Form_01_2020.xlsx	Daily Effluent Monitoring Form	2020-02-24T11:40:01-05:00	
Daily Influent Monitoring Form_01_2020.xlsx	Daily Influent Monitoring Form	2020-02-24T11:40:31-05:00	
DMR Laboratory Accreditation-WRTF-01-2020.doc	Laboratory Accreditation Form	2020-02-24T11:54:38-05:00	
DMR Laboratory Accreditation-MJR-01-2020.doc	Laboratory Accreditation Form	2020-02-24T11:54:03-05:00	
DMR Laboratory Accreditation-ALS-01-2020.doc	Laboratory Accreditation Form	2020-02-24T11:53:30-05:00	
Hauled in Municipal Waste_01_2020.xls	Hauled-in Municipal Waste Form	2020-02-24T11:48:34-05:00	
Hauled in Residual Waste_01_2020.xls	Hauled-in Residual Waste Form	2020-02-24T11:48:36-05:00	
Influent and Process Control_01_2020.xls	Influent and Process Control Form	2020-02-24T11:52:07-05:00	
Sewage Sludge Biosolids Production and Disposal Form_01_2020.xls	Sewage Sludge / Biosolids Production and Disposal Form	2020-02-27T12:28:31-05:00	
January 2020 SWMM Report.xlsx	CSO Detailed Outfall Report Form	2020-02-24T11:56:18-05:00	
Influent January 2020 Calculations.xlsx	Other	2020-02-24T11:42:47-05:00	Influent-PRF January 2020 Calculations
DMR In-PRF (CBOD, TSS, BOD)_01_2020.pdf	Other	2020-02-24T11:44:06-05:00	Influent-PRF (CBOD, TSS, BOD)_01_2020
Process Control_01_2020.pdf	Other	2020-02-24T11:57:40-05:00	Process Control 01_2020
Excess Sludge Production_01_2020.pdf	Other	2020-02-27T12:27:51-05:00	Sludge Production 01_2020
Hauler Generator Totals_01_2020.xlsx	Other	2020-02-24T12:06:12-05:00	Hauler Generator Totals_01_2020
WRTF Effluent_01_2020.pdf	Laboratory Analytical Report	2020-02-24T11:38:21-05:00	
WRTF Influent_01_2020.pdf	Laboratory Analytical Report	2020-02-24T11:38:52-05:00	
EFF_1-14-20.pdf	Laboratory Analytical Report	2020-02-24T11:37:27-05:00	

PERMIT VIOLATIONS

Non-Compliance ID	Event Start Date	Event End Date	Parameter	Limit Type	Reported Value	Permit Limit	Unit	Sampling Point	Cause Of Non-Compliance	Corrective Action	Comments
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UNAUTHORIZED DISCHARGES

Non-Compliance ID	Event Start Date	Event End Date	Date and Time Discovered	Substance Discharged	Event Location	Volume (gal)	Duration (hrs)	Receiving Water	Impact On Waters	Cause Of Discharge	Date and Time DEP Notified Orally	Comments
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OTHER PERMIT VIOLATIONS

Non-Compliance ID	Non-Compliance Type	Sampling Point	Parameter	Reported Value	Permit Limit	Comments
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COMMENT DETAILS

Non-Compliance ID	Comments	Operator Name	Operator Certification Number	Operator Contact Number
		Michael J. Disantis	TD403	(610)-975-5523

SUBMISSION INFORMATION

SUBMITTED BY GREENPORT USER	*Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your 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 your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities).			TELEPHONE		DATE	
	Michael Disantis			(610)	876-5523	2020	02
	SUBMITTED BY FULL NAME			AREA CODE	NUMBER	YEAR	MO
disantism							DAY

OPERATIONS STRATEGIC PLAN REPORT

FEBRUARY 2020

Missed Samples Per Month		#	YTD
Goal is zero		0	0
Deviations from Required Sampling Or Analytical Protocol		#	
Goal is 100% compliance		0	0
Samples with Analytical Results Outside of QA/QC Standards		#	
Goal is 100% compliance		6	21
Hours in Training for Month		#	
Total		18.5	37.0
DEP Approved		0.0	0.0
DEP Certified Operators		#	
Regulations Require One		10	

CENTRAL MAINTENANCE MATRIX FEBRUARY 2020

		CURRENT MONTH	YTD
Work Order Aging		#	
31-60 days		25	
61-90 days		18	
Over 90 days		43	
Work order hours/Available hours		%	%
**Mechanical Maintenance		95%	98%
Electrical Maintenance		86%	93%
Instrument Maintenance		100%	100%
**Includes all Preventive Maintenance			
Work Ratio Hours		# / %	# / %
Corrective		1101 / 30%	2245 / 27%
Preventive		2539 / 68%	5691 / 70%
Predictive		88 / 2%	208 / 3%
System Failures		#	#
Hours in Training		#	#
Mechanics/Helpers		NA	NA
Electricians		NA	NA
Instrument Techs		NA	NA
Call-Ins		#	#
WRTP		12	38
Pump Stations		7	20



Work Order Summary Report for Date
Range: 2/1/2020 to 2/29/2020

Asset Type	Work Order Type	Labor Hours	Labor Cost
SCHAMBER		254	8,020.27
	CLEAN GRATES	104	\$3,344.32
	MISCELLANEOUS	9	\$279.51
	SIPHON MAINTENANCE AND REPAIR	107	\$3,324.98
	TIDE GATE/CHAMBER CLEANING	34	\$1,071.46
SCONTROLVALVE		100	3,100.30
	SERVICE AIR RELIEF VALVE	100	\$3,100.30
SCSOREGULATOR		165	5,105.88
	CSO INSPECTION	153	\$4,728.60
	RUN CORSSOVER/VAC DEBRIS FROM TRUNK LINES	12	\$377.28
SFORCEMAIN		103	3,838.19
	MISCELLANEOUS	103	\$3,838.19
SGRAVITYMAIN		649	21,454.95
	AREA LINE CLEANING	204	\$6,341.11
	EMERGENCY CALL IN	72	\$3,326.52
	GNET TV INSPECTION	195	\$6,320.55
	MISCELLANEOUS	6	\$188.64
	PA ONE CALL LINE LOCATING	172	\$5,278.13
SLATERALPOINT		239	9,160.33
	CLEAR LATERALS	13	\$398.37
	EMERGENCY CALL IN	112	\$5,226.72
	LATERAL REPAIR	23	\$727.50

Asset Type	Work Order Type	Labor Hours	Labor Cost
	SEWER COMPLAINT INVESTIGATION	81	\$2,504.85
	TV INSPECTION	10	\$302.90
SMANHOLE		41	1,270.15
	COLD PATCH REPAIR	9	\$282.96
	INSPECT / REPAIR FRAME AND COVER	6	\$181.74
	MISCELLANEOUS	2	\$60.09
	SURVEY / VERIFICATION	24	\$745.36
SMETER		45	1,432.05
	CSL SUPPORT	45	\$1,432.05
SPUMPSTATION		52	1,630.09
	BEECH STREET	4	\$125.76
	SEAPORT DRIVE	17	\$512.44
	THORNBURY TOWNSHIP T.P.	16	\$503.04
	WOODLAND AVE. CHADDS FORD PS	15	\$488.85
STREATMENTPLANT		190	7,439.02
	B-3	9	\$277.21
	CLEAN GRIT PIT/LOAD CONTAINER	49	\$1,526.76
	MISCELLANEOUS VAC WORK	2	\$62.88
	SLUDGE RECEIVING	20	\$733.28
	SLUDGE TRAILER SWITCH OUT	76	\$3,390.36
	T-2	2	\$62.88
	THE BEAST	32	\$1,385.66
SVARIOUS		321	9,897.10
	ENGINEERING SUPPORT	120	\$3,634.80
	EQUIPMENT MALFUNCTIONS AND REPAIRS	60	\$1,868.83
	MISCELANEOUS	25	\$761.17
	PARTS /TOOLS/ EQUIPMENT PROCUREMENT	10	\$307.01
	VEHICLE INSPECTON	107	\$3,325.30
Grand Total:		2,158	\$72,348.33



Inter - Office Memorandum

To: Robert J. Willert, Executive Director
From: Charles N. Hurst, Director of Engineering
Subject: Board Report for the March 10, 2020 O&E Committee Meeting
Date: March 10, 2020

CONSTRUCTION PROJECTS

1. INCINERATOR MAINTENANCE AND EMERGENCY REPAIRS (#TC-1801-C)

Funding:	Capital
Design:	In-House
Inspection:	In-House
Contractor:	Industrial Furnace Company, Inc.
Contract Amount:	\$686,750.00
Percentage Paid:	56.75% - through previous month
Notice of Award:	03/20/2018
Notice to Proceed:	04/04/2018
Substantial Completion:	03/31/2020
Final Completion:	05/30/2020

2. PS-6 CONSTRUCTION, PHASE I (#TC-1707-C)

Funding:	Capital
Design:	Gannett Fleming
Inspection:	In-house
Electrical (Part D):	Philips Brothers Electrical
Contract Amount:	\$4,140,900.00
Notice of Award:	01/23/2017
Notice to Proceed:	05/30/2017
Substantial Completion:	09/21/2018
Final Completion:	11/21/2018 (Part D Final Completion 1/29/2021)

Construction is complete. General, Plumbing and HVAC contracts are closed out. Fiber Communication work remains prior to initiating the close-out process for Contract Part D Electrical. Change Order #1 was approved by the BOD for an extension in contract time to accommodate the remaining Fiber Communication work.

3. SOLIDS HANDLING UPGRADE 2016 (#TC-1608-C)

Funding:	Capital
Design:	GHD & Weston
Inspection:	In-house
General (Part A):	Allan Myers.
Contract Amount:	\$6,495,555.00
Percentage Paid:	98.31% - through previous month
Electrical (Part B):	Philips Brothers Electric
Contract Amount:	\$1,833,200.00
Percentage Paid:	90.41% - through previous month
Notice of Award:	10/17/2017
Notice to Proceed:	12/04/2017
Substantial Completion:	01/03/2019
Final Completion:	02/01/2019

The contractors are preparing their as-built drawings for submission and completing punch list items. The close out process has been initiated for Contract A. Programming work dependent on the schedule of other ongoing W RTP projects remains prior to close out for Contract B.

4. W RTP Plant Upgrades (#TC-1717-C)

Funding:	Capital
Design:	D'Huy Engineering, Inc. & Gannett Fleming
Inspection:	D'Huy Engineering, Inc.
General (Part A):	Allan Myers.
Contract Amount:	\$14,905,555.00
Percentage Paid:	82.73% - through previous month
Electrical (Part B):	Philips Brothers Electric
Contract Amount:	\$6,220,777.00
Percentage Paid:	73.78% - through previous month
Notice of Award:	05/17/2018
Notice to Proceed:	06/04/2018

Substantial Completion: 12/25/2020
Final Completion: 02/23/2021

Allan Myers has completed the installation of the return activated sludge piping and supports, baffle, spray water piping, and stairs at T-16. They have leveled the rake arms and are completing start-up. They have completed the installation of the ceiling and painting in the B-3 mini-laboratory. They continue to work on the improvements to the B-3 incinerator control room. They have installed the new utility water pump P-27 along with its pad and associated piping in PS-4. They have installed the cross-collector hatches at the primary clarifiers and continued the installation and painting of the sludge piping and valves in the pipe gallery. They have replaced two gates and installed the new flow meter. Philips Brothers has finished installation of Substation 1 and are prepared for start-up. They have wired the new pump P-27, wired T-16, and completed approximately three fourths of the aeration tank conduit installation. They have completed the electrical demolition at the chlorine contact tanks and are continuing installation of fiber optic cables.

5. MARCUS HOOK PUMP STATION & CHESTER RIDLEY CREEK PUMP STATION ELECTRICAL UPGRADES (#PR-1804-C)

Funding:	Capital
Design:	In-House
Inspection:	In-House
Contractor:	Philips Brothers Electrical Contractors, Inc.
Contract Amount:	\$789,127.00
Percentage Paid:	67.10% - through previous month
Notice of Award:	09/19/2018
Notice to Proceed:	10/15/2018
Substantial Completion:	03/14/2019
Final Completion:	05/03/2019 - Maintenance Alternate: 10/31/2020

Philips Brothers completed work to install the 150KW generator at Marcus Hook Pump Station and the 600KW generator at Chester Ridley Creek Pump Station. PECO service updates at Marcus Hook Pump Station were completed and inspected by PECO. Programming work was completed at Chester Ridley Creek Pump Station. Philips Brothers completed maintenance projects including 480V feeder work and outdoor gear work at Muckinipates Pump Station, and they are preparing As-Built engineering drawings for B-3. A PECO line, transfer switch and meter discovered on parcel previously owned by Covanta was removed and made safe. Philips Brothers also provided assistance during an emergency call-in at T-16 and an emergency call-in regarding the 15KV system at Chester Ridley Creek Pump Station. Philips Brothers replaced two electrical poles and replaced the 15kV feeder from the pole to the high voltage switch at Muck Pump Station.

6. HVAC ENERGY SAVINGS UPGRADE (#TC-1716-C)

Funding:	Capital
Design:	In-House
Inspection:	In-House
Contractor:	CM3 Building Solutions
Contract Amount:	\$6,134,716.00
Percentage Paid:	82.17% - through previous month
Notice of Award:	9/13/2017
Notice to Proceed:	9/13/2017

Phase 2 work continues.

7. SEWER MAINTENANCE (#SEW-1905-CO)

Funding:	Capital
Design:	In-House
Inspection:	In-House
Contractor:	A. J. Jurich, Inc.
Contract Amount:	\$1,141,981.00
Percentage Paid:	22.14% - through previous month
Notice of Award:	06/19/2019
Notice to Proceed:	07/16/2019
Final Completion:	08/31/2020

February maintenance work included:

- Chadds Ford Ridings plant Sand Filter Repair
- Chester Pump Station scaffolding set up for valve replacement
- Prep work for Tapping new Valve on Central FM Air Relief 55
- Soft Dig Excavation for Utility Locating on 3rd and Townsended Project
- Utility Locating Excavation on Church St. in Upland for Upcoming line install
- Manhole I and I Sealing, F & C replacement in Rose Valley (15 Total)
- WRTP B-3 Drain repair excavation and Install
- Feltonville PS Emergency Force Main repair

8. PAVING RESTORATION SERVICES – ANNUAL (#SEW-1902-CO)

Funding:	Capital
Design:	In-House
Inspection:	In-House
Contractor:	A. F. Damon, Inc.

Contract Amount: \$959,742.50 – 2 Year Contract
Percentage Paid: 34.82% - through previous month

Notice of Award: 11/20/2018
Notice to Proceed: 02/01/2019
Substantial Completion: 01/31/2021
Final Completion: 02/28/2021

9. W RTP SUBSTATION NO. 2 REPLACEMENT (#TC-1904-C)

Funding: Capital
Design: In-House
Inspection: In-House

Contractor: Philips Brothers Electrical
Contract Amount: \$1,442,777.00
Percentage Paid: 70.30% - through previous month

Notice of Award: 04/16/2019
Notice to Proceed: 05/10/2019
Substantial Completion: 11/29/2019
Final Completion: 01/17/2020

Substation in service and on line. SCADA connections remain.

10. SPRINGHILL FARM WWTF PUMP STATION AND SANITARY FORCE MAIN
PROJECT (#PFR-1903-C – RE-BID) - CONTRACT 1: GENERAL CONSTRUCTION

Funding: Capital
Design: Entech Engineering, Inc.
Inspection: In-House

Contractor: A. J. Jurich, Inc.
Contract Amount: \$480,304.00
Percentage Paid: 0% - through previous month

Notice of Award: 12/17/2019
Notice to Proceed: 02/12/2020
Substantial Completion: 10/09/2020
Final Completion: 11/09/2020

PADEP WQM Permit was received. Contractor in submittal / approval /
procurement phase.

11. SPRINGHILL FARM WWTF PUMP STATION AND SANITARY FORCE MAIN
PROJECT (#PFR-1903-C– RE-BID) - CONTRACT 2: ELECTRICAL/SCADA
CONSTRUCTION

Funding: Capital

Design:	Entech Engineering, Inc.
Inspection:	In-House
Contractor:	AJM Electric, Inc.
Contract Amount:	\$198,543.00
Percentage Paid:	0% - through previous month
Notice of Award:	12/17/2019
Notice to Proceed:	02/12/2020
Substantial Completion:	10/09/2020
Final Completion:	11/09/2020

PADEP WQM Permit was received. Contractor in submittal / approval / procurement phase.

DESIGN

1. CSO LONG TERM CONTROL PLAN UPDATE

The LTCP Semi-Annual Report No. 9 was submitted on December 30, 2019. On January 30, 2020, the USEPA issued a letter to respond to the LTCP Update that was submitted to USEPA on February 12, 2019. The letter identified 11 deficiencies and requested additional information in 11 other areas. The letter included an offer to meet to discuss items. DELCORA has requested this meeting and anticipates it will occur within a couple weeks.

2. ESA ALTERNATIVES

In response to escalated costs for the treatment of the Eastern Service Area (ESA) flow at Philadelphia's Southwest Water Pollution Control Plant, DELCORA formed a cross functional team to evaluate the various alternatives for the treatment and conveyance of the ESA. DELCORA's procurement of ESA Engineers is completed. The kickoff for final design of the ESA design is underway. Last month, the first of two 3-day Value Engineering sessions brought in outside Engineers to analyze the basis of design for the ESA Program to inform the final design. Detailed Condition Assessments are being conducted at WRTP and remote pump stations this month to inform design.

3. CSO #5 PARTIAL SEPARATION – TOWNSEND STREET 48" COMBINED SEWER SEPARATION PROJECT

Engineer:	Remington & Vernick Engineers
Design Project Kick-off Meeting:	March 28, 2019

This project is a component of the LTCP Update. The engineer has submitted a Design Schedule projecting that the design will be prepared for construction bidding in April 2020. Project will not be finalized by April 2020.

Final acceptance of the H&H Study is contingent upon the Stormwater Authority of The City of Chester. Design of pipe plan and profile is proceeding. Utility companies are now being contacted regarding conflict resolutions and relocations. Final plans are being prepared reflecting inlet connections and final lower end alignment. Plans will be prepared for submission to SAC by the end of April 2020

4. CRUM CREEK PUMP STATION BYPASS FORCE MAIN – FINAL DESIGN

Engineer: Gannett Fleming, Inc.

Gannett Fleming and ERM are engaged in acquiring permission to access properties to continue design work. At this time, three of the five property owners have granted permission to enter their properties to survey. ERM has applied to PECO to the install force main through their easement. Offsite design work has begun. Engineer has surveyed conducted SUE Level A and Geotechnical Investigation along north end of project (Crum Creek Pump Station to Amtrak). A second meeting was held on January 29, 2020 with representatives of Liberty Electric to discuss site specific work requirements. Request for additional insurance and bonding requirements made at this meeting will result in re-evaluation of the route across the Liberty Electric property. Liberty Electric alignment has been abandoned to Boeing side of fence. ERM has begun negotiations with Boeing for access. DELCORA has continued conversations with Boeing to acquire easement.

5. BOROUGH OF UPLAND SEWER UPGRADE – CHURCH AND TENTH STREETS

Engineer: Catania Engineering Associates, Inc. (CEA)

This project is a component of the LTCP Update. A proposal has been accepted for preparation of final design and preparation of construction documents in accordance with the March 13, 2019 Technical Memorandum issued by Greeley and Hansen. The kick-off meeting was held on January 13, 2020. Sewers have been televised and conditions reported to CEA. Exploration of the existing box culvert has shown that it crosses the sanitary sewer on a long skew. Plans will have to include a 50' storm sewer re-route and partial demolition, abandonment of the box culvert.

6. WRTP – LOWER DELAWARE RIVER IMPROVEMENTS

Engineer: Gannett Fleming, Inc. (GF)

Gannett Fleming has completed a review of the Seaport Drive DRI Relief Pump Station and submitted a final report on its operation. GF has completed design of a section of 48" interceptor pipe from PS-6 to the ending manholes of the Delaware River Interceptor (DRI) and West End Interceptor (WEI). The plan is to remove a 1.4' step in the last manhole of the DRI and to remove a hydraulically inefficient crossing and connection of the two interceptors. This improvement will result in more efficient flows in the DRI, WEI and PRF pipes reducing dry weather and wet weather hydraulic issues. These improvements are required to facilitate the flow increases projected in the Long-Term Control Plan Update (LTCPU). GF applied for the required WQM Part II Permit on February 21, 2020.

PRETREATMENT/LABORATORY

1. RULES & REGULATIONS, LOCAL LIMITS DEVELOPMENT, ENFORCEMENT RESPONSE PLAN, & STREAMLINING

No updates at this time.

2. PERMIT ISSUES

The following draft permit was issued in the month of February:

- Quotient Sciences

The following final permit was issued in the month of February:

- Delaware County Solid Waste Authority

No Industrial Users were issued a Notice of Violation in the month of February.

3. INDUSTRIAL USER SAMPLING AND INSPECTIONS

No Industrial Users were sampled in the month of February.

No Industrial Users were inspected in the month of February.

4. MISCELLANEOUS

The following were sampled during the month of February:

- Monthly Plant Sampling
- DRBC Weekly Sampling
- Weekly Sludge Metals
- Weekly Remote

All were sent to the contract laboratories for analysis.

REGULATORY FILINGS/ISSUES

- DRBC – Letter sent on February 12, 2018 addressing DRBC’s concerns about the acceptance of “out of basin” wastewater and the request for increased BOD and TDS waste load allocations.
- Met with DRBC on June 25, 2018 to discuss DRBC’s ongoing impact on DELCORA’s operations.
- Title V Permit was received December 21, 2018 – Effective December 17, 2018 – Expires December 17, 2023.
- DRBC Docket Modification for an increased cBOD20/cBOD5 Waste Load Allocation was posted for Public Comment on February 13, 2019.
- Title V – Semi-Annual Subpart LLL Deviation Report for 2nd Half 2019 submitted to EPA & DEP on January 31, 2020.
- Plan Approval Extension 23-0038F was submitted to PADEP on January 21, 2020.
- Semi-Annual Subpart O report was submitted to EPA Administrator on January 24, 2020.
- Semi-Annual Preventative and Corrective Maintenance report covering October through December 2019 was submitted to PADEP on January 8, 2020.
- Plant Wide Applicability Report was submitted to PADEP on January 24, 2020.
- 2019 Annual Report – SARA Title III – Tier II Report was submitted to the PA Dept. of Labor & Industry on February 5, 2020.
- AIMS report for the reporting year 2019 was submitted on March 2nd, 2020.
-

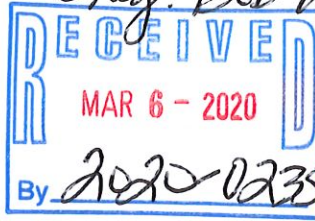
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cc: (via email)
M. DiSantis
J. Pileggi
C. Lenton
I. Fitzgerald
S. Labrum
J. Centrone
D. Dutton
M. Sweeney
J. Yochim
T. Diewald
File



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Mr. Robert Willert
Executive Director
DELCORA
100 East Fifth Street
P.O. Box 999
Chester, PA 19016



4 March 2020

W.O. No. 05623.035.001.0001

RE: Summary of Activities for February 2020

Dear Mr. Willert:

The progress on current Weston Solutions, Inc. (WESTON®) authorized project assignments for DELCORA is summarized below.

CHAPTER 94 ANNUAL REPORT

Proposal No.:	133360
WESTON WO No.	05623.035.002
Start Date:	January 1, 2020
End Date:	March 31, 2020
Percent Complete	38%

This project is to prepare the Chapter 94 Municipal Wasteload Management Reports for 2019. This report is mandated for all owners for municipal treatment plant and sewage collection systems. DELCORA is required to submit a report for the Western Service Area (WSA) which will include reports submitted by each municipality or municipal authority that owns a collections that discharges to DELCORA's Western Regional Treatment Plant. DELCORA is also required to prepare a report for the Eastern Service Area (ESA) which will be provided to the Philadelphia Water Department (PWD) for inclusion in their Chapter 94 Report for the Southwest Water Pollution Control Plant. The reports are due to PADEP at the end of March. The reports include recorded flow and organic loads to the treatment facilities, five-year projections for flow and loads, and annual flows with two-year projected flows at pump stations.

During the month of February, WESTON worked with DELCORA on obtaining specific information from select DELCORA staff including influent flows and organic loads to the WRTP, flows to pump stations, a listing of planning module submissions to DELCORA for both the Eastern and Western Service Areas. WESTON updated PADEP forms required for each report, narrative text, figures, and spreadsheets (planning modules, pump stations, treatment flows) for the ESA and the WSA needed to produce the report narrative, tables, and graphics. Additionally, WESTON processed the daily pump station data into monthly summaries and



Mr. Robert Willert
DELCORA

4 March 2020
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assigning the EDU counts provided in the list of planning module submissions to its receiving pump station to use in the two-year flow projection. WESTON prepared a draft of the report for the ESA for DELCORA review. The ESA report will be submitted to PWD the first week of March.

ANNUAL SWMM MODELING

Proposal No.: 133462
WESTON WO No.: 05623.034.006
Start Date: August 2019
End Date: December 2020
Percent Complete: 34%

This project is for completion of monthly SWMM model runs and for submission of month-end reports and a year-end letter report for DELCORA's use and reference in the annual Chapter 94 Report. DELCORA's NPDES permit for the W RTP requires that information of the volume and duration of discharges from the Combined Sewer Overflows be reported monthly. PADEP accepts discharge information from a calibrated numerical model in lieu of measured flows. WESTON utilized the calibrated SWMM model created for the LTCP Revision.

During the month of February, WESTON simulated precipitation events for January and reported simulation results to DELCORA. Supplemental precipitation data from the West Sellers Avenue CDCA rain gauge was used while the DELCORA rain gauge was inoperable between the dates of 1/10/2020 through 1/16/2020. The simulation is based on precipitation recorded on the rain gauge located at the W RTP. During the month of January, DELCORA experienced a total of 2.12 inches of precipitation over 8 separate days. This resulted in roughly 0 to 8 CSO overflow events per outfall depending on the sensitivity to rainfall. During small precipitation events, some outfalls with small drainage areas do not overflow, while other outfalls with large drainage areas overflow frequently. The results of the simulation are loaded into a PADEP form that is included in DELCORA's monthly DMR submission for the W RTP.

METERING PROGRAM

Proposal No.: 137102
WESTON WO No.: 05623.034.003
Start Date: March 19, 2019
End Date: Open
Percent Complete: 39%

This project is to assist DELCORA in implementation of the Delaware County Metering Program. This program was initiated in 2005 to provide more accurate distribution of sewage flows to contributing communities in Delaware County. The program maintains and collects data



Mr. Robert Willert
DELCORA

4 March 2020
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from 122 flow meters deployed in sewers and incorporates data from 12 meters at pump stations. The sewer meters capture approximately 75% of the flow discharged. The remaining unmetered areas did not have a capture point that would provide reliable and repeatable data so they are estimated based on EDU counts for the unmetered areas. The unmetered areas are estimated using the EDU count for that area and the flow per EDU for the metered areas in the same municipality.

During the month of February, WESTON received the sewer flow meter data from DELCORA's flow metering contractor and pump station data from DELCORA staff. The data was loaded summary flow data for January to the apportionment spreadsheets and reviewed for any potential discrepancies. WESTON also initiated a new county-wide summary spreadsheets, the eastern authorities' summary spreadsheets, and summary spreadsheets for select municipalities for 2020. The monthly report and spreadsheets were submitted to DELCORA.

FORCE MAIN TEST COUPONS and ARV REPAIR

Proposal No.: 137483
WESTON WO No.: 05623.034.004
Start Date: June 2019
End Date: December 2019
Percent Complete: 54%

The scope of services for this project include preparation of contract documents to obtain pipe coupons from the Eastern Force Main. The pipe coupons will be analyzed to determine the condition of the force main. The project also includes preparation of contract documents to clean and repair the ARV's located on the Central Bypass and Eastern Force Mains.

WESTON has completed the Project Kick-Off data Collection and the Field Investigation phases of the work. Follow-up field investigation will be required at a few ARV locations to further verify the existing design information with the existing conditions. WESTON is currently working on the Phase III Detailed Design scope of work.

In October, WESTON completed the design for one of the ARV locations, ARV-55, located on the Central By-Pass Force Main. Since this location does not have an existing ARV and it is located at a critical spot (creek crossing) along the force main the team decided to design and construct this ARV first. The results of this installation will be used to determine the improvements to the force main and the information will be implemented in the final design for the remaining locations. In December WESTON submitted an application to PennDOT for a Road Opening Permit. The permit approval was received on January 7, 2020; construction of the ARV will start when all material has been received.



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GENERAL ENGINEERING SUPPORT

Proposal No.: 37717
WESTON WO No.: 05623.021.107
Start Date: March 21, 2006
End Date: Open
Percent Complete: 96%

This project, a continuation of the previous "General Engineering" project, provides on-demand support to DELCORA for various services at the direction and approval of the Executive Director.

WESTON had no activity on this project during the month of February.

REGULATOR 04, 15, 17, 18, and 19 REPLACEMENT

Proposal No.: 130616
WESTON WO No.: 05623.032.003
Start Date: March 2017
End Date: Open
Percent Complete: 97%

The scope of services for this project includes preparation of the detailed design drawings and specifications for the replacement and rehabilitation of five sewage regulators, Numbers 04, 15, 17, 18 and 19, as well as supporting DELCORA during bidding and construction phases.

Installation of the new mechanisms is complete for both locations. The contractor completed punch list items and submitted As-Built Drawings for review. WESTON reviewed this submittal and finalized the project record drawings, and submitted them to DELCORA for review/comment. This project will be closed out next month.

CENTRAL FORCE MAIN AND CHESTER FORCE MAIN EVALUATION

Proposal No.: 133118
WESTON WO No.: 05623.033.004
Start Date: July 2016
End Date: Open
Percent Complete: 75%

This project is to perform an engineering evaluation of the Central and Chester force mains to determine design parameters for sizing the future Crum Creek Pump Station equipment. The



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ultimate goal of the project is to determine how DELCORA can pump more flow from the CDPS to the Western Regional Treatment Plant (WRTP).

WESTON prepared and conducted modeling to evaluate the flow characteristics of both the Central By-Pass and the Chester force mains. The model took into account flow, pump discharge pressure, static conditions, pipe material, and pipe length and diameter. Flow conditions for the two force mains as well as the Kimberly Clark Pump Station and the total influent flow to the WRTP was also incorporated into the evaluation.

WESTON ran several model scenarios for both dry weather and storm conditions. The modeling was conducted during 2018 and 2019 and approximately 20 scenarios were evaluated. Each scenario was run over a period of several hours and real time operating data from DELCORA's E-Ops was input into each model run. The results of each model scenario were consistent and showed that the performance of the Chester force main was very good and in line

After the first several model runs, WESTON and DELCORA staff performed a site assessment of the ARV locations. Where possible, the ARV's were cleaned, tested, and put back into service. Several of the locations could not be inspected due to faulty isolation valves. After this inspection additional model runs were conducted and the results were similar previous model results.

WESTON met with DELCORA and discussed conducting additional field investigations and modifications to existing air release valve location. After further investigation it was decided to prepare contract documents to repair isolation valves, clean ARV's, and install new ARV's at locations where valves are missing. This work will be conducted under a separate project. WESTON had no activity on this project during the month of February.

FORCE MAIN TRANSIENT ANALYSIS

Proposal No.: 132758
WESTON WO No.: 05623.032.007
Start Date: October 15, 2017
End Date: December 2018
Percent Complete: 90%

The scope of services for this project includes preparation of a transient analysis of the Eastern Force Main and Chester Force Main. The goal is to determine a maximum flow value from the CDPS to the WRTP without increasing the risk of a pressure surge.

DELCORA and WESTON met and reviewed the preliminary results of the analysis. The main pump stations were modeled for two scenarios and results indicate that additional vacuum relief



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valves are required on the force mains. WESTON completed the model for additional scenarios and submitted the draft report. During the month of August, WESTON and DELCORA discussed additional analysis associated with the project. The additional work will be a part of the Crum Creek Force Main project. No additional work was completed during February. The transient analysis that was part of another contract (Crum Creek Force Main) has been completed. The results indicated that there was no additional impact to the Chester and Eastern By-Pass Force Mains. Weston will submit a proposal to incorporate the recommendations included in the initial evaluation.

WRTP AS-BUILT PLAN

Proposal No.: 133118
WESTON WO No.: 05623.032.006
Start Date: October 18, 2017
End Date: Open
Percent Complete: 97%

The scope of services for this project is to prepare a composite as-built plan of the WRTP in AutoCAD format that include both original plant information as well as new features added in recent years to document the existing site conditions specifically the underground utilities. The drawings are being prepared to facilitate a conversion to GIS for some of the features. WESTON had no activity on this project during the month of February.

UTILITY WATER SYSTEM REPLACEMENT BID & CONSTRUCTION PHASE SERVICES

Proposal No.: 127597
WESTON WO No.: 05623.031.003
Start Date: January 2016
End Date: Open
Percent Complete: 98%

This project is to provide bid support services and construction phase services relating to the Utility Water System Upgrade project at the WRTP. The existing system is at the end of its life and the system is critical to treatment operations. Bids were received on March 7, 2016.

WESTON had no activity for this project during the month of February. The construction has been completed and the remaining effort includes preparation of the record drawings after receipt of contractor marked drawings.



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Should you have any questions, please do not hesitate to contact me at (610) 701-3706.

Very truly yours,

WESTON SOLUTIONS, INC.

A handwritten signature in black ink, appearing to read "John J. Kochubka". The signature is fluid and cursive, with the first and last names being more prominent.

John J. Kochubka, P.E.
Client Service Manager

cc: DELCORA Board of Directors
C. Hurst, DELCORA