

**WATERFORD UTILITY COMMISSION****REGULAR MEETING AGENDA******* ZOOM REMOTE ACCESS ONLY *******DATE:** Tuesday, April 21, 2020**PLACE:** 1000 Harford Tpke., Waterford, CT**TIME:** 6:00 pm**ZOOM Remote Access Only**

Join Zoom Meeting

<https://zoom.us/j/96638231306?pwd=UGg3SWWhPRytXd0JiaGVuQmovVXZMQT09>

Meeting ID: 966 3823 1306

Password: 001286

One tap mobile

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Meeting ID: 966 3823 1306

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Find your local number: <https://zoom.us/u/ajT0XkyS2>

1. **Citizens Session** –
2. **Secretary's Report** – Approval of March 11, 2020 Regular Meeting minutes, and March 26, 2020 Special Meeting minutes
3. **Accounts Adjustments** – As per list
4. **Expenditures** – Approval of Bill List
5. **Old Business** – Reports and Updates
 - Financials - WW Fund Revenues / Expenditures Report / Collections
 - Municipal Complex Rehab – Verbal Status Update
 - Waterford/East Lyme/New London Wastewater Agreement & Wtfd/EL Sewer Agreement - Verbal
 - Pumping stations – Flood Insurance discussion

DATE: TUESDAY, APRIL 21, 2020

PLACE: 1000 HARTFORD TPKE., WATERFORD, CT

TIME: 6:00 PM

ZOOM REMOTE ACCESS ONLY

6. Unfinished Business -

7. New Business

- Governor's Executive Order 7S
- COVID-19 – Office and Field Staff Safety measures (PPE and schedules)

WATER – Veolia Report - No report this month

8. Correspondence – As noted on correspondence list. - None

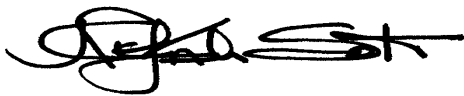
9. Plans Review – None

10. Personnel – Verbal Update

11. Other –

12. Adjournment

All requests for items to be considered by the Utility Commission must be received at least seven (7) days in advanced.

A handwritten signature in black ink, appearing to read 'Neftali Soto', with a stylized flourish at the end.

Neftali Soto, P.E. – Chief Engineer

WATERFORD UTILITY COMMISSION

SPECIAL MEETING MINUTES

2020 MAR 17 AM 11:08

DATE: March 11, 2020

PLACE: Waterford Municipal Complex; 1000 Hartford Turnpike

PRESIDING: Chairman Peter Green

MEMBERS PRESENT: Steve Negri, Rodney Pinkham, Raymond Valentini and Ken Kirkman

ALSO PRESENT: Staff: Neftali Soto-Chief Engineer and Attorney Nick Kepple

Chairman Green called the meeting to order at 6:01 PM and thanked Ken Kirkman for chairing the meeting last month.

CITIZEN SESSION

None

SECRETARY'S REPORT

MOTION Made by Mr. Pinkham to approve the Minutes of the February 18, 2020 meeting, Mr. Valentini seconded.

VOTE The motion passed

BILLING ADJUSTMENTS

The Commission reviewed the February Adjustments. The adjustment report will be kept in the office for review.

EXPENDITURES

Chairman Green asked for more information on some of the bigger purchases on the bill list.

MOTION made by Mr. Negri to approve March 2020 bill list, Mr. Valentini seconded.

VOTE The motion passed unanimously.

Attorney Kepple explained that the legal collection efforts bill was not ready again this month for meeting because we had an earlier meeting.

MOTION made by Mr. Pinkham for the Chairman to pay the bill when it comes but not to exceed \$10,000.00, seconded by Mr. Kirkman.

VOTE The motion passed.

OLD BUSINESS – REPORTS & UPDATES

- FINANCIALS – WW FUND REVENUES/EXPENDITURES REPORT
The financial were reviewed.
- MUNICIPAL COMPLEX REHAB – STATUS UPDATE
Mr. Kirkman reported that as of this morning, they were painting walls and putting up the ceiling grids. Third week of April is the moving date.
- COLLECTIONS-UPDATE
Attorney Kepple gave a report that collections are going well.
- TRI TOWN AGREEMENT
Mr. Soto gave a review of the meeting that happened last week with New London and East Lyme. He went over some of the areas that the agreement will need some revision and areas that can be deleted because they are not relevant anymore. The next meeting to take place will be on March 19th.
- FLOOD INSURANCE ON PUMP STATIONS
Mr. Soto explained that once the new Finance Director is settled, he will meet with her. He will ask if we can just insure the electronics and not the building. Also, can have it priced out again.

UNFINISHED BUSINESS

NEW BUSINESS

- Well Meters and Secondary meters-Missed Readings Reporting Policy

There was discussion on how to handle residents who do not turn in a reading card for secondary meters. The current policy was reviewed. Mr. Soto will prepare drafts for commission to review and discuss at next meeting.

WATER-VEOLIA REPORT

Report was e-mailed to the commission members and reviewed.

CORRESPONDENCE

- Letter received from 85 Boston Post Rd-discussed
- Letter received from 184 Oswegatchie Rd-discussed.

PLANS REVIEW

No plans to review.

PERSONNEL

- There are two interviews scheduled for the Electrician position.
- The department has a worker still out on Worker's Comp and another out on FMLA.

OTHER

ADJOURNMENT

With no further business before the Commission, the meeting adjourned at 7:21 p.m.

MOTION made by Mr. Pinkham to adjourn. Mr. Kirkman seconded.

VOTE The motion passed unanimously.

Respectfully submitted,

Amy L. Windle
Recording Secretary

WATERFORD UTILITY COMMISSION

SPECIAL MEETING MINUTES

RECEIVED FOR RECORD
MAY 12 10:01 AM

2020 MAR 27 AM 9:45

[Signature]
TOWN CLERK

DATE: March 26, 2020

PLACE: Waterford Municipal Complex; 1000 Hartford Turnpike

PRESIDING: Chairman Peter Green

MEMBERS PRESENT: Steve Negri, Raymond Valentini and Ken Kirkman

ALSO PRESENT: Staff: Neftali Soto-Chief Engineer, Jim Bartelli-Assistant Director and Attorney Nick Kepple

Chairman Green called the meeting to order at 12:00 PM

NEW BUSINESS

- April 2020 Sewer Billing

Chairman Green discussed wanting to help the residents in this difficult time of the COVID-19 virus.

MOTION was made by Mr. Kirkman, in response to the COVID-19 effects, the Waterford Utility Commission hereby extends the due date of the April 2020 sewer billing to May 1, 2020, seconded by Mr. Negri.

VOTE Passed Unanimously

ADJOURNMENT

With no further business before the Commission, the meeting adjourned at 12:07 p.m.

MOTION made by Mr. Kirkman to adjourn. Mr. Valentini seconded.

VOTE The motion passed unanimously.

Respectfully submitted,
Amy L. Windle
Recording Secretary

Waterford Utility Commission

Transaction List

Sorted by Location No
From 03/12/2020 through 04/17/2020

Account No	Location No	Customer Name	Trans. Date	Trans. Type	Reason Batch	Amount
06-0005831	0000005	---	04/08/2020	Adjustment MISSED CARD WELLS SEC MT		28.66
						28.66
06-0005831	0000005	-----	04/08/2020	Adjustment WELLS SEC MT Miscellaneous		-22.00
						-22.00
06-0000861	0011900	-----	04/08/2020	Adjustment NL ADJUST SEWER USE		-35.00
						-35.00
06-0005143	0077800		03/30/2020	Adjustment OOB SEWER USE SEWER USE Redist		-118.00
						118.00
						0.00
06-0006217	0137300		04/13/2020	Adjustment NL ADJUST SEWER USE		-14.00
						14.00
06-0001435	0141300		04/15/2020	Adjustment NL ADJUST SEWER USE		-70.00
						-70.00
06-0003189	0189600		03/30/2020	Adjustment OOB SEWER USE SEWER USE Redist		-62.50
						62.50
						0.00
06-0002299	0242400		04/17/2020	Adjustment NL ADJUST SEWER USE		-63.00
						-63.00
06-0004611	0265900		03/17/2020	Adjustment SEWER USE Interest		-31.51
						-31.51
06-0060108	0270000		04/08/2020	Adjustment LATE METER SEWER USE		-1755.55
						-1755.55
06-0006225	0282124		03/30/2020	Adjustment OOB SEWER USE SEWER USE Interest		-2.00
						2.00
						0.00
06-0001047	0307400	-----	03/17/2020	Adjustment SEWER USE Interest		-11.31
						-11.31
06-0003023	0333100		04/06/2020	Adjustment NL ADJUST SEWER USE		-101.50
						-101.50

Account No	Location No	Customer Name	Trans. Date	Trans. Type	Reason	Batch	Amount
06-0004743	0366600		04/08/2020	Adjustment	NL ADJUST SEWER USE		-59.50 -59.50
06-0002481	0397000		04/14/2020	Adjustment	SEWER USE SEWER USE Interest		-2.00 2.00 0.00
06-0002185	0421500		03/17/2020	Adjustment	SEWER USE Interest		-9.90 -9.90
06-0002304	0468200		04/17/2020	Adjustment	NL ADJUST SEWER USE		-84.00 -84.00
06-0004434	0496200		04/08/2020	Adjustment	2NDARY READ SEWER USE SEWER USE Miscellaneous		-11.65 -22.00 -33.65
06-0006248	0511700		03/19/2020	Adjustment	SEWER USE SEWER USE Interest SEWER USE Miscellaneous		-881.50 -170.44 -24.00 -1075.94
06-0006248-A	0511700		03/19/2020	Adjustment	PAYMENT PLAN		1075.94 1075.94
06-0006675	0583400		03/30/2020	Adjustment	SEWER USE Miscellaneous SEWER USE Redist		-22.00 22.00 0.00
06-0001188	0605100		03/19/2020	Adjustment	SEWER USE SEWER USE Interest SEWER USE Miscellaneous		-1404.81 -271.88 -72.00 -1748.69
06-0001188-A	0605100		03/19/2020	Adjustment	PAYMENT PLAN		1748.69 1748.69
06-0000383	0675100		03/19/2020	Adjustment	SEWER USE SEWER USE Interest SEWER USE Miscellaneous		-665.00 -128.68 -24.00 -817.68
06-0000383-A	0675100		03/19/2020	Adjustment	PAYMENT PLAN		817.68 817.68
06-0006170	0687900		04/14/2020	Adjustment	NL ADJUST SEWER USE		-77.00 -77.00
06-0006046	0699400		04/13/2020	Adjustment	NL ADJUST SEWER USE		28.00

Account No	Location No	Customer Name	Trans. Date	Trans. Type	Reason Batch	Amount
						28.00
06-0000255	0721800		04/15/2020	Adjustment	NL ADJUST SEWER USE	-143.16
						-143.16
06-0001380	0732600		04/09/2020	Adjustment	NL ADJUST SEWER USE	-28.00
						-28.00
06-0000857	0873700		04/08/2020	Adjustment	NL ADJUST SEWER USE	-45.50
						-45.50
Grand Totals				Adjustment		
				SEWER USE		-5595.67
				WELLS SEC MT		28.66
				PAYMENT PLAN		3642.31
				SEWER USE Interest		-619.72
				SEWER USE Miscellaneous		-164.00
				WELLS SEC MT Miscellaneous		-22.00
				SEWER USE Redist		202.50
						-2527.92

4/21/2020		BILL LIST			5/8/2020					
Date	PAID DATE	Department #	ACCT #	INVOICE #	JOB	VENDOR	DESCRIPTION	AMOUNT		
		20531	57817	110	200147	Deedy Construction	Replacing wet well hatches-RW & QH	\$ 16,872.72		
		60131	52040	9969451256		Airgas	Cylinder Rental	\$ 53.69		
		60131	53020	9099477534		Airgas	Respirator Mask	\$ 407.44		
		60131	52040	41020		Atlantic Broadband	Cable for Rear Building	\$ 221.72		
		60131	52040	08-160C1		Connected Systems	Load Test Generator	\$ 709.79		
		60131	53070	22781		Critical Signs	Lettering on New Truck	\$ 725.00		
		60131	52040	G4-9510		Cummins	Dock Road Generator	\$ 808.00		
		60131	53070	160535		Darling	T4-Wiper Blades	\$ 7.98		
		60131	52040	42020		Deedy Constructions	Repair on Force Main in Reynolds Lane	\$ 3,406.00		
		60131	52080	41520		Frontier	Fax Line	\$ 237.17		
		60131	54170	66825931		FW Webb	Material for generator access holes GP stat	\$ 66.30		
		60131	54194	1317C3	200396	Hayes Pump	2 Pumps for Oswegatchie Pump Stations	\$ 9,134.00		
		60131	54194	32720		Home Depot	Training Room/Shelving	\$ 1,508.14		
		60131	52040	3368226		Infoshred	Pick up off 2 containers	\$ 20.00		
		60131	52040	3368873		Infoshred	Purge of old records	\$ 41.52		
		60131	54170	N83356		JAN Electronics Supplies	Transfer Switch Bulbs	\$ 168.00		
		60131	54170	N83358		JAN Electronics Supplies	Transfer Switch Bulbs	\$ 35.90		
		60131	53070	46735		Macara	Spray Bedliner for new truck	\$ 1,200.00		
		60131	54170	S040212487		NorthEast Electrical	Wet Well Hatches	\$ 107.40		
		60131	54170	S040130071		NorthEast Electrical	LED lights for Shop	\$ 653.00		
		60131	54170	S040105676		NorthEast Electrical	Quaker Hill Wet Well Hatch Conduits	\$ 239.10		
		60131	54170	S0395679C4		NorthEast Electrical	Wet Well Hatches	\$ 60.62		
		60131	54170	S040167854		NorthEast Electrical	Shop Tools	\$ 61.50		
		60131	54170	S039722429		NorthEast Electrical	Stoneybrook	\$ 112.40		
		60131	54170	S039481915		NorthEast Electrical	Cameras	\$ 14.04		
		60131	54170	S039474066		NorthEast Electrical	GR Lightning	\$ 35.03		
		60131	54170	S039473715		NorthEast Electrical	GR Heat Pump Hose	\$ 175.56		
		60131	52040	20028C	200317	Service Station Equipment	Removal of Generator Tank @ Ric Gro PS	\$ 3,785.00		
		60131	52008	41620		Suisman Shapiro	March Collection Fees	\$ 5,341.59		
		60131	54170	S2860410		Superior Products Distributors	Manhole Frame and Cover	\$ 975.74		
		60131	54170	S2857517		Superior Products Distributors	Manhole Frame and Cover	\$ 975.74		
		60131	53070	7-310850		West Springfield Auto Parts	T4 Repair	\$ 33.78		
		60131	53070	7-3109C1		West Springfield Auto Parts	T4 Repair	\$ 4.74		
		60131	53070	7-311056		West Springfield Auto Parts	Filter	\$ 6.29		
		60131	53070	7-310945		West Springfield Auto Parts	T4 Truck Service	\$ 3.74		

TOTAL \$ 48,208.64

ALREADY PAID										
3/24/2020	4/10/2020	60131	52080	9850584431		Verizon	Cell Phones	\$ 813.71		

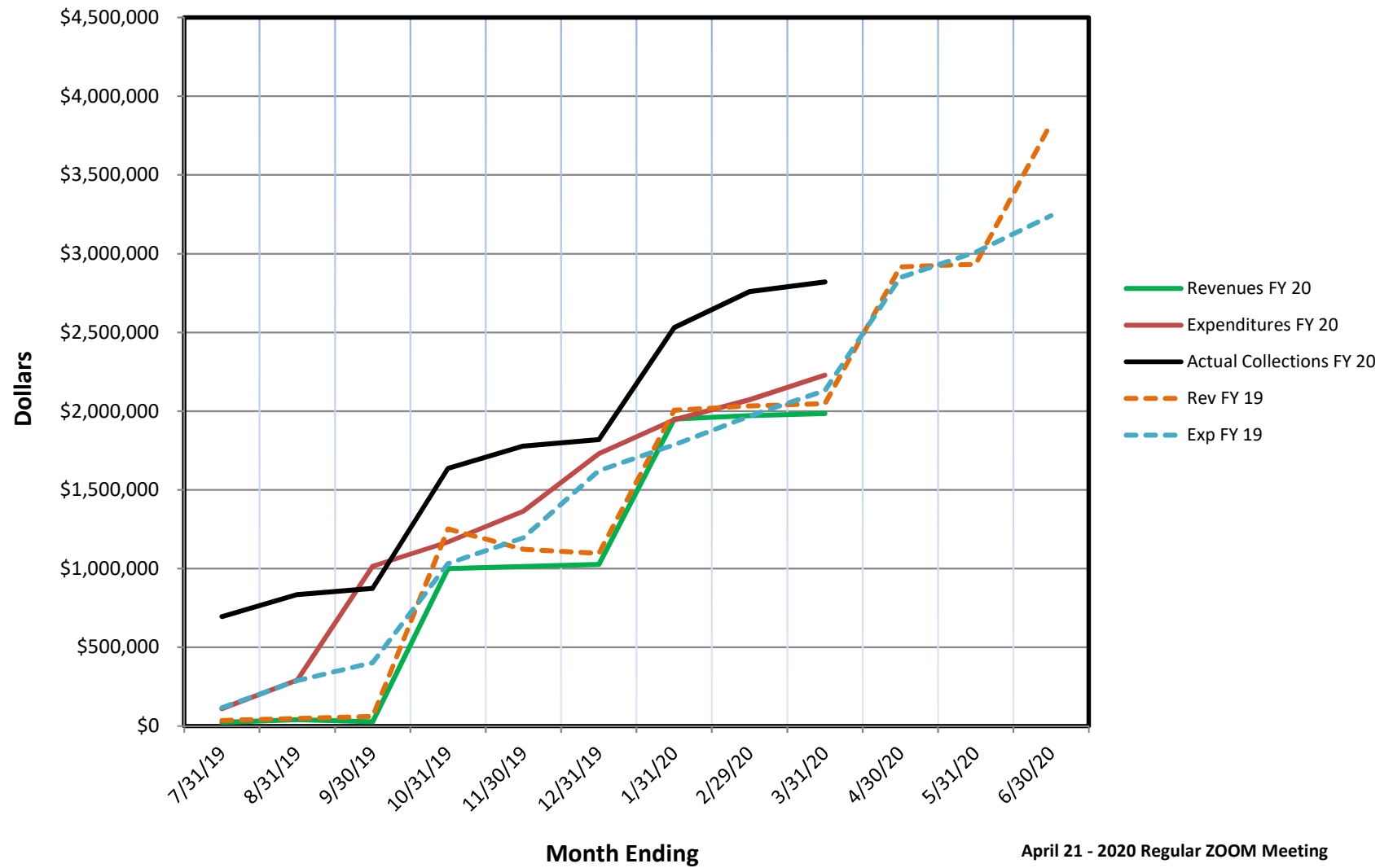
3/25/2020	4/10/2020	60131	52008	Feb-20	Suisman Shapiro	Feb Collections Fee	\$	5,922.00
		60131	52040	31020	Atlantic Broadband	Cable for Rear Building	\$	110.84
		60131	52080	31520	Frontier	Fax Line	\$	250.19
3/26/2020	4/10/2020	60131	52110		City of New London	Water	\$	419.80
4/6/2020	4/24/2020	60131	53310	904364984	Evoqua	Seaside PS	\$	100.00
				904364992	Evoqua	Ridgewood PS	\$	140.00
				904365011	Evoqua	Mago Point PS	\$	140.00
				904365018	Evoqua	Bolles CT PS-February	\$	140.00
				904364997	Evoqua	Oswegatchie PS-February	\$	140.00
				904365006	Evoqua	Oil Mill PS-February	\$	140.00
				904365023	Evoqua	Graniteville PS	\$	100.00
				904365030	Evoqua	Monthly Charge for Vapor Links	\$	300.00
				904402395	Evoqua	Seaside PS	\$	100.00
				904402400	Evoqua	Bolles CT PS-March	\$	140.00
				904402398	Evoqua	Oil Mill PS-March	\$	140.00
				904402397	Evoqua	Oswegatchie PS-March	\$	140.00
				904402399	Evoqua	Mago Point PS-March	\$	140.00
				904402396	Evoqua	Ridgewood PS	\$	140.00
				904402401	Evoqua	Graniteville PS-March	\$	100.00
				904402402	Evoqua	Vapor Link for March	\$	300.00
		60131	52040	17750787 033120	Crystal rock	Water for Rear Building	\$	8.98
		60131	52040	10501952	Vanco	March Electronic Checks Fee	\$	11.90
		60131	52040	7061350	TIAA Bank	Plotter Lease	\$	205.00
4/17/2020	5/8/2020	60131	52080	4920	Frontier	Pump Station Telephones	\$	144.55
		60131	52100		Eversource	Electric	\$	25,556.08
		60131	52090		Eversource	Gas	\$	598.99

TOTAL \$ 36,442.04

GRAND TOTAL \$ 84,650.68

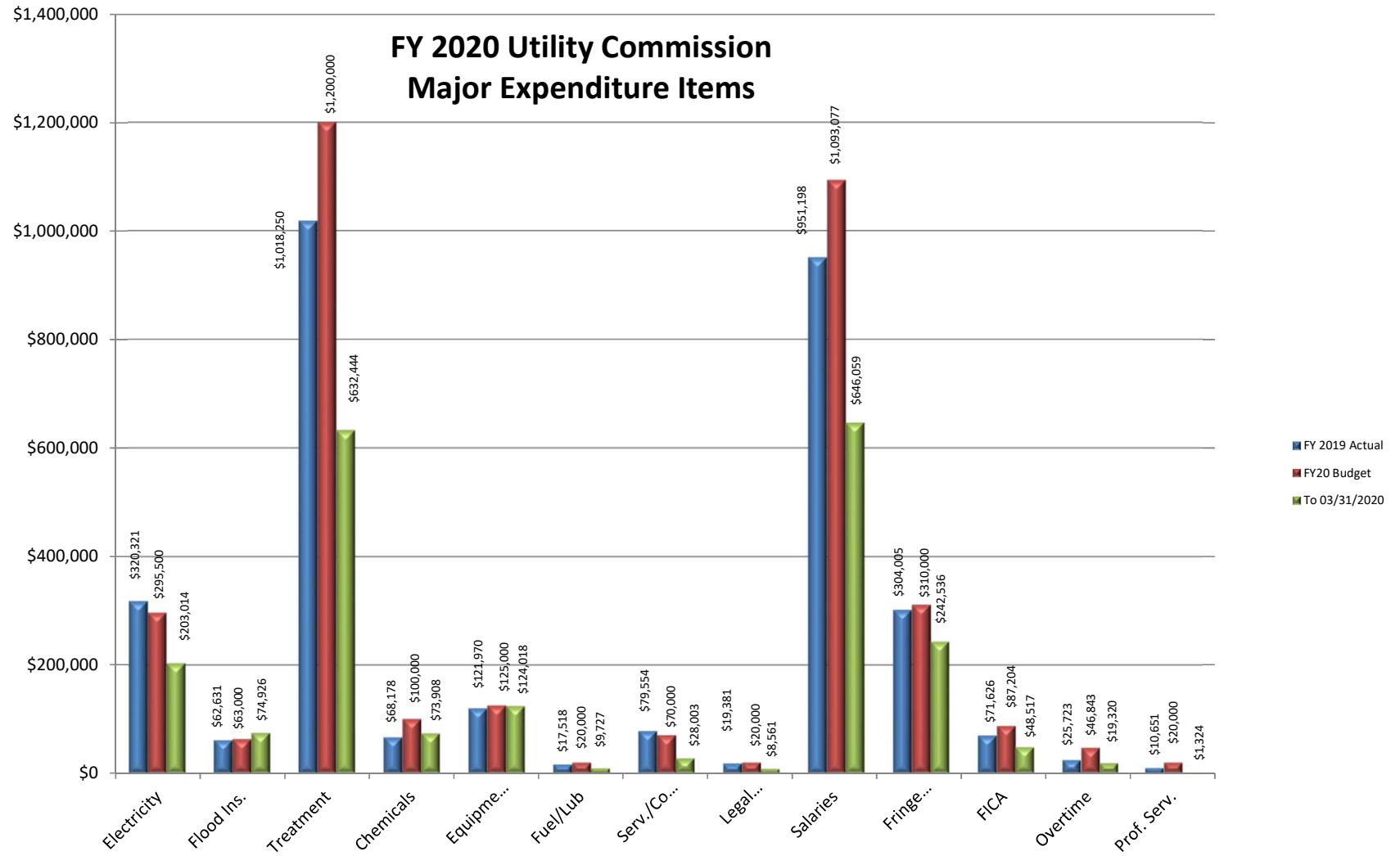
Wastewater Enterprise Fund FY 2020 - Performance - Cumulative					
Month Ending	Revenues FY 20	Expenditures FY 20	Actual Collections FY 20	Rev FY 19	Exp FY 19
7/31/19	\$23,981	\$110,914	\$695,689	\$35,191	\$116,618
8/31/19	\$40,299	\$291,616	\$834,268	\$48,322	\$288,871
9/30/19	\$27,971	\$1,015,091	\$874,785	\$60,904	\$402,928
10/31/19	\$999,673	\$1,168,315	\$1,636,562	\$1,251,548	\$1,032,499
11/30/19	\$1,013,082	\$1,365,066	\$1,777,971	\$1,122,326	\$1,196,006
12/31/19	\$1,027,038	\$1,730,566	\$1,819,750	\$1,095,751	\$1,623,009
1/31/20	\$1,950,795	\$1,945,572	\$2,530,327	\$2,006,367	\$1,785,621
2/29/20	\$1,972,295	\$2,072,289	\$2,760,028	\$2,032,486	\$1,968,801
3/31/20	\$1,984,582	\$2,228,364	\$2,820,744	\$2,047,489	\$2,131,401
4/30/20				\$2,917,195	\$2,849,448
5/31/20				\$2,933,359	\$3,008,809
6/30/20				\$3,828,644	\$3,241,761
April 21 - 2020 Regular ZOOM Meeting					

Performance to Wastewater Enterprise Budget FY 2020

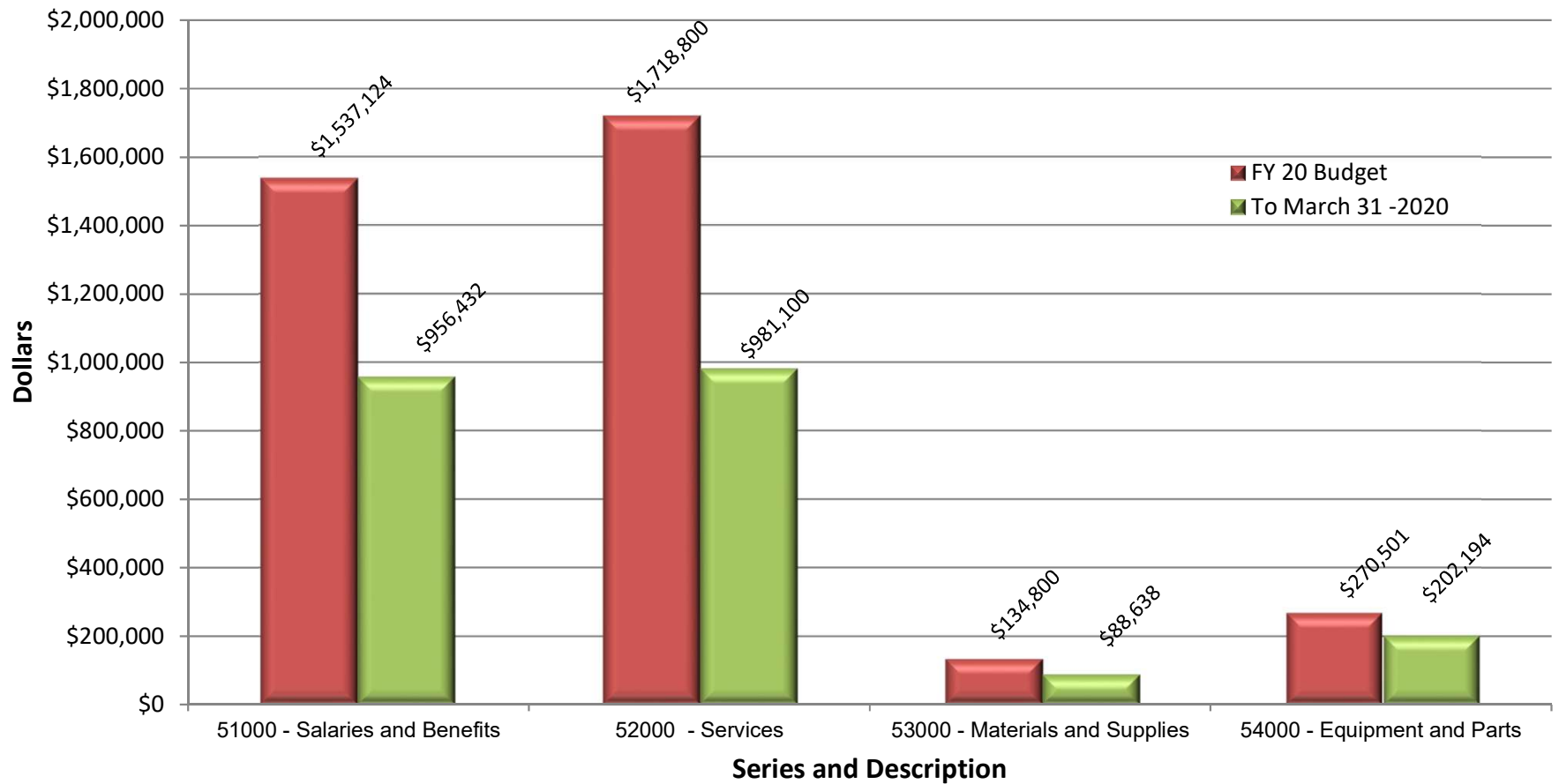


April 21 - 2020 Regular ZOOM Meeting

FY 2020 Utility Commission Major Expenditure Items



Expenditures by Series FY20



Sewer Use Collections Status as of April 16, 2020

902 Files referred for collections with a current total of \$610,515.22

To Date:

755 Paid/Closed
51 Payment Plans – \$172,920.21
17 Town Real Estate Tax Foreclosures - \$91,663.45
14 Other entity foreclosures/bankruptcy/military - \$64,145.11

Activities over next 60-90 Days:

25 Filed or Filing lawsuits for non-payment - \$83,107.13
20 Town Sewer Use Foreclosures - \$144,566.27
20 Miscellaneous follow-up, on hold, bank owned, new referrals - \$54,113.05

Delinquent Sewer Use Collections Summary through April 16, 2020:

Fiscal Total Use Collections from July 1, 2011 to April 16, 2020	\$ 1,997,866.64
Fiscal Year Use Collections YTD	\$ 152,404.74
Fiscal Year Attorney Fees and Costs Expended	\$ 54,234.39
Fiscal Year Attorney Fees and Costs Recovered	\$ 40,696.51

SUMMARY FOR PREVIOUS FISCAL YEAR COLLECTIONS

2000 THROUGH 2016

UTILITY COMMISSION FILES TOTAL:	\$1,689,608.54
TAX COLLECTOR FILES TOTAL:	\$4,435,384.49
UTILITY COMMISSION LEGAL REIMBURSEMENT	\$ 116,268.60
MISC. COLLECTION FILES TOTAL:	<u>\$ 697,962.57</u>
	\$6,939,224.20

FISCAL YEAR 2017

UTILITY COMMISSION FILES TOTAL:	\$ 231,995.36
TAX COLLECTOR FILES TOTAL:	\$ 770,364.04
UTILITY COMMISSION LEGAL REIMBURSEMENT	\$ 63,848.23
TAX & WUC LEGAL REIMBURSEMENT:	<u>\$ 45,710.30</u>
TOTAL	\$ 1,111,917.93

FISCAL YEAR 2018

UTILITY COMMISSION FILES TOTAL:	\$ 250,573.49
TAX COLLECTOR FILES TOTAL:	\$ 700,752.17
UTILITY COMMISSION LEGAL REIMBURSEMENT	\$ 47,979.70
TAX & WUC LEGAL REIMBURSEMENT:	<u>\$ 26,266.71</u>
TOTAL	\$ 1,025,572.07

FISCAL YEAR 2019

UTILITY COMMISSION FILES TOTAL:	\$ 215,330.67
TAX COLLECTOR FILES TOTAL:	\$ 794,921.89
UTILITY COMMISSION LEGAL REIMBURSEMENT	\$ 54,793.23
TAX & WUC LEGAL REIMBURSEMENT:	<u>\$ 45,981.33</u>
TOTAL	\$ 1,111,027.12

FISCAL YEAR TO DATE 2020 (JULY 1, 2019, TO APRIL 16, 2020)

UTILITY COMMISSION FILES TOTAL:	\$ 152,404.74
TAX COLLECTOR FILES TOTAL:	\$ 407,453.27
UTILITY COMMISSION LEGAL REIMBURSEMENT	\$ 40,696.51
TAX & WUC LEGAL REIMBURSEMENT:	<u>\$ 33,328.71</u>
TOTAL	\$ 633,883.23

GRAND TOTAL COLLECTED SINCE APPOINTMENT

AS TOWN ATTORNEY: \$10,821,624.55

Neftali Soto

From: Kimberly Allen
Sent: Monday, April 20, 2020 2:30 PM
To: Neftali Soto
Subject: RE: Various wastewater pumping stations - Flood insurance

Tali,

I reviewed the commission's requests and have also contacted insurance carrier to raise some of the questions. Please see the responses below in **RED**.

I have to research why the flood insurance was moved out of the Town budget and onto the commission. I'll get back to you with more data on why the change occurred.

Kimberly Allen

Finance Director
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385
kallen@waterfordct.org
860.444.5840 (direct)
860.440.0579 (fax)



From: Neftali Soto
Sent: Monday, April 13, 2020 3:53 PM
To: Kimberly Allen <kallen@waterfordct.org>
Subject: Various wastewater pumping stations - Flood insurance

Hi, Kim.

During the Utility Commission meeting of March 11, the commissioners asked me to discuss with you the following:

- the possibility of [flood] insuring only the electronics at our stations.
The pump stations are in flood zones and must carry full insurance per law. We cannot only insure the contents and/or electronics.
- Shop around for better premiums.
Our insurance broker, HD Segur, quotes the flood insurance annually to various vendors and awards the insurance to best quote on the premiums.

The attached graph, which I need to update, shows the stations that require flood insurance. Once the current situation settles down and once the budget process is taken care of – Can we get together and discuss flood insurance for our pumping stations? Also, it has been the discussion among the commissioners that flood insurance should be the responsibility of the town, same as any other insurance, including schools ... since the buildings and the infrastructure is

owned by the town, not the utility commission. It was always that way until about three years ago. This is something that we can talk about later on.

Thanks and be safe.

Tali

Neftali Soto, PE

Chief Engineer/Director – Utility Commission

Mail - 15 Rope Ferry Road

Waterford, CT 06385

Address – 1000 Hartford Tpke.

Waterford, CT 06385

nsoto@waterfordct.org

860-444-5886

Fax- 860-442-9037

STATE OF CONNECTICUT

BY HIS EXCELLENCY

NED LAMONT

EXECUTIVE ORDER NO. 7S

**PROTECTION OF PUBLIC HEALTH AND SAFETY DURING COVID-19 PANDEMIC AND
RESPONSE – SAFE STORES, RELIEF FOR POLICYHOLDERS, TAXPAYERS, AND
TENANTS**

WHEREAS, on March 10, 2020, I issued a declaration of public health and civil preparedness emergencies, proclaiming a state of emergency throughout the State of Connecticut as a result of the coronavirus disease 2019 (COVID-19) outbreak in the United States and confirmed spread in Connecticut; and

WHEREAS, pursuant to such declaration, I have issued seventeen (17) executive orders to suspend or modify statutes and to take other actions necessary to protect public health and safety and to mitigate the effects of the COVID-19 pandemic; and

WHEREAS, COVID-19 is a respiratory disease that spreads easily from person to person and may result in serious illness or death; and

WHEREAS, the World Health Organization has declared the COVID-19 outbreak a pandemic; and

WHEREAS, the risk of severe illness and death from COVID-19 appears to be higher for individuals who are 60 years of age or older and for those who have chronic health conditions; and

WHEREAS, to reduce the spread of COVID-19, the United States Centers for Disease Control and Prevention and the Connecticut Department of Public Health recommend implementation of community mitigation strategies to increase containment of the virus and to slow transmission of the virus, including cancellation of gatherings of ten people or more and social distancing in smaller gatherings; and

WHEREAS, my Executive Order No. 7N imposed certain safety restrictions and mandates on retail establishments in order to limit the spread of COVID-19 among customers, employees, and others entering such establishments; and

WHEREAS, there exists a compelling state interest in a consistent and easily understandable statewide approach to reducing the risk of transmission of COVID-19 among customers, staff, and other persons entering retail establishments, to limit community transmission of COVID-19 statewide, and to ensure the continuity of essential retail services and safe conduct of permitted non-essential retail services; and

WHEREAS, widespread financial hardship caused by the COVID-19 pandemic and necessary responses to it may prevent policyholders from timely payment of insurance premiums, and any resulting penalties, including cancellation or non-renewal of policies, create additional hardship, cause further damage to the economy, and endanger property and public health; and

WHEREAS, to encourage social distancing and protect public health and safety, my Executive Order 7D, dated March 16, 2020 and Executive Order 7G, dated March 19, 2020, closed bars and restaurants to all on-premise service of food and beverages; and

WHEREAS, many businesses may be experiencing lost revenue from the prohibition of on-premise food and beverage sales, which will hinder their ability to make timely payments to their creditors; and

WHEREAS, the State of Connecticut serves many elders and disabled individuals through multiple home and community based services waivers and Medicaid state plan benefits under the Medicaid program, including clients of the Department of Social Services, Department of Mental Health and Addiction Services and the Department of Developmental Services, who rely upon these home-based services to remain in their homes, avoid institutionalization and achieve maximum independence and functioning, and certain adjustments to the provision of services under these various waivers are necessary to ensure continuity of services and provide greater flexibility during COVID-19;

WHEREAS, the Centers for Medicare & Medicaid Services has advised the Department of Social Services that it may, on an expedited basis, and without providing a notice and comment period, take advantage of opportunities included in Appendix K to the Home and Community Based Waivers under Section 1915(c), as well as Sections 1115 (a) and 1135, of the Social Security Act, and also including, as applicable, amendments to Medicaid state plan provisions under other relevant provisions, such as sections 1915(i), 1915(k) and 1945 of the Social Security Act, in order to act quickly to address critical health needs of Medicaid beneficiaries and others in Connecticut in response to COVID-19; and

WHEREAS, Chapter 204 of the Connecticut General Statutes sets forth tax collection deadlines that will be difficult for residential and commercial property owners to meet in light of the significant job and economic losses experienced by Connecticut residents and businesses; and

WHEREAS, municipalities have sought relief on behalf of taxpayers who are struggling due to business operations being suspended or ceased, layoffs and other complications due to the COVID-19 pandemic; and

WHEREAS, certain municipal charters, ordinances or resolutions require critical town fiscal and budgetary decisions to be voted on by referendum or town meeting that create a risk to public health; and

WHEREAS, Sections 12-170aa(e) and (f) and Sections 12-129b and 12-129c of the Connecticut General Statutes require municipalities to conduct specific duties, including but not limited to processing tax relief claims that require in-person meetings and application filing requirements for taxpayers who have attained age sixty-five or over or are totally disabled; and

WHEREAS, Section 12-62 of the Connecticut General Statutes requires municipalities to conduct in-person inspections which will create increased risk of transmission of COVID-19; and

WHEREAS, Section 12-63c of the Connecticut General Statutes requires taxpayer filings based on information in Income and Expense Statements by Assessors, which were previously extended under Executive Order 7I, Section 15; and

WHEREAS, it will promote the public health and safety of all Connecticut residents to prohibit evictions during the public health and civil preparedness emergency; and

WHEREAS, the Judicial Branch has suspended all evictions and ejectment proceedings and Executive Order No. 7G suspended non-critical court operations;

NOW, THEREFORE, I, NED LAMONT, Governor of the State of Connecticut, by virtue of the authority vested in me by the Constitution and the laws of the State of Connecticut, do hereby **ORDER AND DIRECT**:

1. **Safe Stores Mandatory Statewide Rules, Amending Executive Order No. 7N, Sec. 3.** Effective upon the opening of each retail establishment for the first time on April 3, 2020, every retail establishment in the State of Connecticut shall take additional protective measures to reduce the risk of transmission of COVID-19 between and among customers, employees, and other persons such as delivery drivers or maintenance people. The Commissioner of Economic and Community Development, in consultation with the Commissioner of Public Health, shall issue mandatory statewide rules prescribing such additional protective measures no later than 11:59 p.m. on April 1, 2020. Such rules shall be mandatory throughout the state and shall supersede and preempt any current or future municipal order and shall supersede the requirements of Executive Order No. 7N, Sec. 3, providing that nothing in this order shall eliminate or reduce the requirements of Executive Order No. 7N, Sec. 3 regarding firearms transactions.
2. **60-Day Grace Period for Premium Payments, Policy Cancellations and Non-Renewals of Insurance Policies.** Beginning on April 1, 2020, for a period of sixty (60) calendar days ending on June 1, 2020, no insurer may, without a court order, lapse, terminate or cause to be forfeited a covered insurance policy because a covered policyholder does not pay a premium or interest or indebtedness on a premium under the policy that is due except as provided hereunder. This grace period shall apply to entities licensed or regulated by the Insurance Department including admitted and non-admitted insurance companies that provide any insurance coverage in Connecticut including, life, health, auto, property, casualty and other types of insurance as follows:
 - a. Insurers shall provide such 60-day grace period to individuals that have individual insurance policies who, as a result of the COVID-19 pandemic, were laid off, furloughed, or fired from employment or otherwise sustained a significant loss in revenue. Such individuals may be required to provide an affidavit or other statement acceptable to their insurance carrier, explaining that as a result of the COVID-19 pandemic they were laid

off, furloughed, or fired from employment or otherwise sustained a significant loss in revenue.

- b. Insurers shall provide such 60-day grace period to businesses that are group policyholders, have group insurance and/or have property/casualty insurance that were required to close or significantly reduce operations or suffered significant revenue loss as a result of the COVID-19 pandemic. Such businesses may be required to provide an affidavit or other statement acceptable to their insurance carriers, explaining that as a result of the COVID-19 pandemic, they were required to close or significantly reduce their business operations or suffered a significant revenue loss.
 - c. This 60-day grace period is not automatic. To be eligible, affected policyholders must provide the information outlined above in an affidavit or other statement acceptable to their insurance carriers. Carriers shall provide instructions on how policyholders are to provide such information.
 - d. Policyholders are advised that this grace period is not a waiver or forgiveness of the premium; it is only an extension of time in which to pay premiums. Policyholders are advised that they may be subject to restrictions if they are in receipt of state or federal stimulus funding relating to COVID-19.
 - e. Individuals or businesses that do not meet the criteria for the 60-day grace period set forth above, will need to contact their insurance carrier should they wish to discuss a premium deferral.
 - f. This order does not apply to self-funded health plans.
 - g. If a carrier has already provided a policyholder with a 60-day grace period for March and April 2020 premiums, or offers to provide a 60-day grace period for that time frame and it is accepted, the carrier will be deemed to have satisfied the requirements of this Executive Order with respect to that policyholder.
 - h. This 60-day grace period shall only apply to policyholders that were in good standing with their insurance carrier on March 12, 2020, and shall only apply to premiums due after the initial premium has been made to secure coverage.
 - i. This 60-day grace period applies only to cancellation or non-renewals attributed to a failure to pay premiums during the applicable 60-day grace period. If a policy is to be cancelled or non-renewed for any other allowable reason, the cancellation or non-renewal may be made pursuant to statutory notice requirements and for legally recognized reasons.
3. **Extension of 30-Day Period of Credit for Liquor Permittees.** Section 30-48(b) of the Connecticut General Statutes and Sections 30-6-A36 and 30-6-A37a of the Regulations of Connecticut State Agencies, which permit no more than a thirty-day period of credit, from

manufacturers, wholesalers, or others specified in such statute and regulations, is modified so that the maximum period of credit shall be ninety days after the date of delivery for all permittees prohibited from engaging in on-premise sales per Executive Order No. 7D, as amended by Executive Order No. 7H. The extension of credit shall not apply to permits that were delinquent at the time Executive Order No. 7D became effective on March 16, 2020. The period of delinquency shall begin on the ninety-first day after the date of delivery. All other requirements under the above-referenced statute and regulations shall apply, except as modified to reflect the increased period of credit, and the standard thirty-day period of credit shall continue to apply to all permittees whose businesses who were not engaging in on-premise sales at the time Executive Order No. 7D became effective. The credit extension shall remain in effect for any delivery made prior to the time Executive Order No. 7D expires or is terminated, or if extended or renewed, through any period of extension or renewal.

4. **Daily Payment of Certain Taxes Changed to Weekly.** Section 12-575 (h) of the Connecticut General Statutes is modified so that the licensee authorized to operate off-track betting in Connecticut shall file with the Department of Consumer Protection: a daily electronic report of the amount of wagers collected; and, no later than 12:00 PM every Tuesday, the tax filing and payment for the week preceding.
5. **Flexibility to Amend Medicaid Waivers and State Plan.** Section 17b-8 of the Connecticut General Statutes, to the extent that it requires: the submission of proposed applications to submit waivers or make certain amendments to Medicaid waivers or the Medicaid state plan (for such amendments that would have required a waiver but for the Affordable Care Act) to the joint standing committees having cognizance of matters relating to human services and appropriations; a 30-day public notice and comment period prior to submission of the proposed amendments to said committees; the holding of a public hearing by said committees; and the approval of the applications for amendment by said committees, is modified retroactive to the declaration of public health and civil preparedness emergency on March 10, 2020, to authorize the Commissioner of Social Services, on an expedited basis, to exercise the waiver flexibilities provided in response to COVID-19 and afforded by Appendix K to the Home and Community Based Waivers under Section 1915(c), as well as Sections 1115 (a) and 1135, of the Social Security Act and also including, as applicable and in response to COVID-19, amendments to Medicaid state plan provisions under other relevant provisions, such as sections 1915(i), 1915(k) and 1945 of the Social Security Act. The suspension of the aforesaid requirements is limited solely to emergency waivers related to the COVID-19 declared public health and civil preparedness emergencies.
6. **Suspension and Modification of Tax Deadlines and Collection Efforts.**
Notwithstanding any contrary provisions of Chapter 204 of the Connecticut General Statutes or of any special act, charter, home-rule ordinance, local ordinance or other local law, there shall be established two programs to offer support to eligible taxpayers, businesses, nonprofits, and residents who have been economically affected by the COVID-19 pandemic. Such programs shall be known as the "Deferment Program" and the "Low Interest Rate Program." Each

municipality, as defined in section 7-148 of the general statutes, by determination of its local legislative body, or, in any town in which the legislative body is a town meeting, by a vote of the board of selectmen, shall participate in one or both programs and shall notify the Secretary of the Office of Policy and Management no later than April 25, 2020, about which program or programs it is electing to participate in.

- a. **Deferment Program.** During the period of March 10, 2020, the date that I declared the public health and civil preparedness emergency, through and including July 1, 2020, municipalities participating in the Deferment Program shall offer to eligible taxpayers, businesses, nonprofits, and residents a deferment by ninety (90) days of any taxes on real property, personal property or motor vehicles, or municipal water, sewer and electric rates, charges or assessments for such tax, rate, charge, or assessment from the time that it became due and payable. Eligible taxpayers, businesses, nonprofits, and residents are those that attest to or document significant economic impact by COVID-19, and/or those that document they are providing relief to those significantly affected by the COVID-19 pandemic. The Secretary of the Office of Policy and Management shall issue guidance as to which taxpayers, businesses, nonprofits, and residents shall be considered eligible for the Deferment Program, but participating municipalities may, upon approval of its local legislative body, or, in any town in which the legislative body is a town meeting, by a vote of the board of selectmen, extend eligibility for the deferment program to other categories of taxpayers, businesses, nonprofits, and residents.
- b. **Low Interest Rate Program.** For municipalities participating in the Low Interest Rate Program, notwithstanding Section 12-146 of the General Statutes, (i) the delinquent portion of the principal of any taxes on real property, personal property or motor vehicles, or municipal water, sewer and electric charges or assessments or part thereof shall be subject to interest at the rate of three (3) per cent per annum for ninety days from the time when it became due and payable until the same is paid, for any such tax, rate, charge, or assessment due and payable from March 10 through and including July 1, 2020, unless such delinquent portion is subject to interest and penalties at less than three (3) per cent per annum. Following the ninety days, the portion that remains delinquent shall be subject to interest and penalties as previously established; and (ii) any portion of the principal of any taxes on real property, personal property or motor vehicles, or municipal water, sewer and electric rates, charges or assessments or part thereof that had been delinquent on or prior to March 10, shall be subject to interest at the rate of three (3) per cent per annum for ninety days from this Order, unless such delinquent portion is subject to interest and penalties at less than three (3) per cent per annum. Following the ninety (90) days, the portion that remains delinquent shall be subject to interest and penalties as previously established.
- c. **Eligibility of Landlords.** In order for a landlord, or any taxpayer that rents or leases to any commercial, residential, or institutional tenant or lessee, to be eligible for the Deferment Program, said landlord must provide documentation to the municipality that the parcel has or will suffer a significant income decline or that commensurate

forbearance was offered to their tenants or lessees. Any taxpayer that rents or leases to any commercial, residential, or institutional tenant or lessee shall only be eligible for the Low Interest Rate Program if said landlord offers commensurate forbearance to tenants or lessees, upon their request.

- d. **Escrow Payments.** Financial institutions and mortgage servicers that hold property tax payments in escrow on behalf of a borrower shall continue to remit property taxes to the municipality, so long as the borrower remains current on their mortgage or is in a forbearance or deferment program, irrespective of the borrower's eligibility for or participation in the Deferment Program or the Low Interest Rate Program.
- e. **Liens Remain Valid.** Nothing in this order affects any provision of the Connecticut General Statutes relating to continuing, recording and releasing property tax liens and the precedence and enforcement of taxes, rates, charges and assessments shall remain applicable to any deferred tax, rate, charge or assessment or installment or portion thereof.

7. **Allowance of Suspension of In-Person Voting Requirements for Critical and Time Sensitive Municipal Fiscal Deadlines.** Notwithstanding any contrary provision of the Connecticut General Statutes, including Title 7, or any special act, municipal charter, ordinance or resolution that conflicts with this order, the legislative body of a municipality, or in a municipality where the legislative body is a town meeting other than a representative town meeting, the board of selectmen, and the budget-making authority of said municipality if different from the legislative body or board of selectmen, by majority vote of each such body, as applicable, may authorize (i) any supplemental, additional or special appropriations under Section 7-348 of the Connecticut General Statutes or comparable provisions of any special act, municipal charter or ordinance, (ii) any tax anticipation notes to be issued under Section 7-405a of the Connecticut General Statutes or comparable provisions of any special act, municipal charter or ordinance, or (iii) municipal general obligation bonds or notes to be issued in anticipation of such bonds to be issued pursuant to Chapter 109 of the Connecticut General Statutes for capital improvement purposes, without complying with any requirements for in-person approval by electors or taxpayers, including but not limited to, annual or special town meetings requiring votes or referenda. Notwithstanding the foregoing, if the legislative body and budget-making authority, if they are separate entities, are taking any action specified in (ii) or (iii) above, or any action under (i) above, which involves an appropriation in an amount in excess of 1% of the current year's total municipal budget without complying with any in-person approval requirements normally required by statute, special act, municipal charter, ordinance or resolution, such body(ies) shall make specific findings that such actions are necessary to permit the orderly operation of the municipality and that there is a need to act immediately and during the duration of the public health and civil preparedness emergency in order to avoid endangering public health and welfare, prevent significant financial loss, or that action is otherwise necessary for the protection of persons and property within the municipality. In so acting, the legislative body and, if different from the legislative body, the budget-making

authority of the municipality, shall comply with open meeting requirements set forth in Executive Order No. 7B. All conditions precedent to any such approval, including without limitation, public notices, hearings or presentations, shall proceed in a manner as closely consistent with the applicable statutes, special acts, town charters, municipal ordinances, resolutions or procedures as possible, and in compliance with the open meeting provisions set forth in Executive Order 7B. Nothing in this order shall be construed to prohibit a municipality from conducting any in-person meeting, approval process, or referendum, provided such municipality first consults with local or state public health officials and conducts such meeting, approval process, or referendum in a way that significantly reduces the risk of transmission of COVID-19

8. **Suspension of Reapplication Filing Requirement for the Homeowners' Elderly/Disabled Circuit Breaker Tax Relief Program and for the Homeowners' Elderly/Disabled Freeze Tax Relief Program.** The biennial filing requirements under Sections 12-170aa(e) and (f) and Sections 12-129b and 12-129c of the Connecticut General Statutes for any taxpayers who were granted the benefit for the Grand List year 2017 and who is required to recertify for the Grand List year 2019, are suspended and such taxpayers shall automatically maintain their benefits for the next biennial cycle ending in Grand List year 2021.
9. **Substitution of Full Inspection Requirements Pertaining to October 1, 2020 Grand List Revaluations.** The requirement set forth under Section 12-62 of the Connecticut General Statutes pertaining to October 1, 2020 Grand List revaluations that require a full interior inspection of property, for which such interior inspection that has not yet been completed, is suspended and replaced with the alternative requirement to send a questionnaire to the owner as outlined in Section 12-62(b)(4).
10. **Extension of Deadline to File Income and Expense Statement.** The taxpayer filing deadline set forth under Section 12-63c of the Connecticut General Statutes is extended to August 15, 2020.
11. **Suspension of Non-Judicial Tax Sales.** Notwithstanding any contrary provision of the Connecticut General Statutes, including but not limited to Section 12-157 or Section 7-258, or any special act, municipal charter or ordinance that conflicts with this order, (1) no municipality nor water pollution control authority may conduct any sale pursuant to General Statutes Section 12-157 or Section 7-258, until thirty days after the end of the public health and civil preparedness emergency, including any period of renewal or extension of such emergency. Any sale for which notice had been filed prior to March 10, 2020 shall be adjourned by operation of law to a date to be determined by the tax collector. Such adjourned date shall be no earlier than thirty days after the end of the public health and civil preparedness emergency; and (2) For any sales held under Section 12-157 or Section 7-258 that were conducted prior to March 10, 2020, any six-month redemption period in General Statutes Section 12-157 shall be extended for the number of calendar days the public health and civil preparedness emergency remains in effect. The time period from March 10, 2020 to the end of the emergency shall be considered a

“holding period.” Redemption interest during said holding period shall be charged at a monthly rate equivalent to three per cent per annum.

Unless otherwise specified herein, this order shall take effect immediately and shall remain in effect for the duration of the public health and civil preparedness emergency, unless earlier modified or terminated by me.

Dated at Hartford, Connecticut, this 1st day of April, 2020.



Ned Lamont
Governor

By His Excellency's Command



Denise W. Merrill
Secretary of the State





April 15, 2020

Mr. Thomas J. Dembek, Moderator
Representative Town Meeting
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

RE: Waterford Utility Commission Recommendation Regarding Governor Lamont's Executive Order No. 7S, Financial Relief to Tax and Rate Payers

Dear Moderator Dembek,

On April 1, 2020, Governor Lamont issued Executive Order No. 7S (EO7S) intended to provide some financial relief to taxpayers and ratepayers consequential to the effects of the COVID-19 pandemic. EO7S provides for two programs to be considered by our legislative body – Sec. 6(a) - Deferment Program and Sec. 6(b) – Low Interest Rate Program. The RTM has the option to adopt one or both of these programs.

After evaluating the conditions of each of the programs, it is my recommendation for the RTM to adopt EO7S Sec. 6(a) as the manner by which the Town of Waterford will offer some financial relief to our tax and rate payers. This program provides the most significant benefit to our tax and rate payers. It would be our intent to implement this relief program with the July 1, 2020 Sewer Bill, extending the payment period to 90 days through October 1, 2020.

It should be noted that this extension has a potential short-term cash flow impact of up to \$1.12 million which represents the estimated operating costs of the Waterford Sewer System during July-September 2020. This is a worst case scenario as it is anticipated that some revenue would be received during this 90 day payment period.

On behalf of the Waterford Utility Commission,

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Peter M. Green".

Peter M. Green – Chairman
Waterford Utility Commission

Cc: Rob Brule, First Selectman
Nick Kepple, Town Counsel
Utility Commission

Neftali Soto

From: Jim Bartelli
Sent: Tuesday, March 17, 2020 9:20 AM
To: Neftali Soto
Cc: Peter Clark; Amy Windle
Subject: FW: WEF Publication on COVID-19
Attachments: WEF_COVID_19.docx

Tali,
For your information, Below is the directive I executed.

James A. Bartelli

Assistant Director

Waterford Utility Commission

860-444-5886

860-460-9108 (Cell)

From: Jim Bartelli
Sent: Friday, March 13, 2020 12:25 PM
To: Peter Clark (PClark@waterfordct.org) <PClark@waterfordct.org>
Cc: Robert Brule (rbrule@waterfordct.org) <rbrule@waterfordct.org>; Peter Green <pmgreen1940@gmail.com>
Subject: FW: WEF Publication on COVID-19

Peter,

In light of the recent circumstances, until further notice please inform your maintenance staff to cease all routine functions that requires direct contact with the waste water conveyance system, including CCTV of our infrastructure ,Jet Rodding, Impeller adjustments and any other intrusive work. Follow routine practices to prevent exposure to wastewater, including using the engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater in the event the need arises to conduct an emergency repair.

Please contact me with any questions.

James A. Bartelli

Assistant Director

Waterford Utility Commission

860-444-5886

860-460-9108 (Cell)

Please see the publication below for further information:

Is COVID-19 present in wastewater?

Recent information suggests that COVID-19 may be transmitted through the fecal-oral route. The virus RNA was detected in patient stool after scientists noticed that some patients infected with the COVID-19 virus experienced diarrhea in the early stages of infection instead of a fever, the latter being more common. A recent paper, “First Case of 2019 Novel Coronavirus in the United States,” in the *New England Journal of Medicine* also confirmed the virus RNA detection in feces. OSHA recommends that workers handle solid waste contaminated with COVID-19 as they would other regulated Category B medical waste, corresponding with the recommendations of other organizations. If the recovery of infectious particles from feces or wastewater at potentially infective doses is confirmed at a future date, this recommendation may have to be revised.

Detection of viruses by molecular techniques provides no indication that the virus is infectious. It remains to be seen if infectious virus particles are excreted in patients' feces and urine, and if so, how well the viruses are able to survive in wastewater.

Previous studies investigating persistence of coronavirus surrogates and SARS in wastewater highlight that in the absence of disinfection, the virus can survive in wastewater from hours to days. In 2003, research on SARS had suggested that sewage was implicated in the infection of a cluster of cases in the Amoy Gardens apartment block in Hong Kong. A recent report indicated possible COVID-19 transmission through sewage pipes in a building in Hong Kong, but this remains to be confirmed.

However, previous work also highlights that SARS can readily be disinfected when chlorine dosing produces a free chlorine residual between 0.2 and 0.5 mg/L for municipal wastewater. While Ebola virus is different, it is reassuring that the article, “Persistence of Ebola Virus in Sterilized Wastewater,” similarly showed that no virus was recovered at doses of 5 and 10 mg/L of chlorine and a 3.5 log reduction was achieved in the presence of free chlorine residual of 0.16 mg/L for 20 seconds. These results imply that standard municipal wastewater system disinfection and hyper (or shock) chlorination practices may be sufficient to control the virus provided utilities monitor free available chlorine during treatment to ensure it has not been depleted.

Wastewater Treatment and COVID-19

Disinfection systems at water resource recovery facilities (WRRFs) and the associated regulatory requirements were developed to be protective of a broad spectrum of potential pathogens. The recent coronavirus serves as another example of the importance of this infrastructure for protecting public health.

On Feb. 5, 2020, the U.S. Occupational Safety and Health Administration (OSHA) released its new wastewater worker guidance stating that current disinfection conditions in WRRFs, such as oxidation with hypochlorite or peracetic acid, and inactivation by ultraviolet irradiation, are expected to be sufficient to protect wastewater workers and public health. The recommendation is based on coronavirus disinfection data from healthcare settings and corresponds with OSHA's position on the susceptibility of coronaviruses to disinfection.

These recommendations are likely to be broadly applicable, although more research may be warranted for disinfectants such as peracetic acid and combined chlorine (chloramines), where coronavirus specific data is lacking or evidence suggests higher bacterial susceptibility to disinfection compared to viruses. Although coronaviruses have not been tested, peracetic acid has been found to have some efficacy against some non-enveloped viruses (e.g., Norovirus) that are known to be more resistant than enveloped viruses.

Chlorine is extensively used for wastewater disinfection due to its effectiveness, low cost, and ease of application. It typically reacts with ammonia present in wastewater to form combined chlorine (chloramines), which behaves differently than free chlorine during disinfection. Thus, it is important for each facility to understand the chlorine species that are present and their relative abundance within the disinfection process. Additional research could provide reassurance on the effectiveness of wastewater disinfection processes, specifically against coronaviruses and at lower doses and contact times.

The Water Professional's Guide to COVID-19 (WEF, 2020)

The 2019 Novel Coronavirus was identified as the cause of an outbreak of respiratory illness, referred to as COVID-19. It was first detected in Wuhan, China on Dec. 12, 2019. Because this disease already has begun to spread worldwide, it is important that water sector professionals keep informed on the attributions of this virus and any measures needed to protect both workers and public health, in general.

This virus is a member of the Coronavirus family. On Feb. 5, 2020, the World Health Organization reported 24,554 cases and 492 deaths in 25 countries worldwide, with the vast majority (24,363 cases and 491 deaths) in China. As of February 17, 2020, this number has globally increased to 71,429 confirmed cases, 70,635 of which are located in China. This large increase in case numbers is mainly due to a change in reporting by the WHO.

The U.S. reported its first confirmed case of person-to-person spread with this virus on Jan. 30, 2020. As of Feb. 16, 2020, there were 15 confirmed cases in the US. The most up-to-date CDC data are available online.

In Canada, eight cases of COVID-19 have been confirmed as of Feb. 16, 2020. Canadian case numbers are being updated daily by the Public Health Agency of Canada.

Based on the sharp increase in number of COVID-19 infections, on Jan. 30, 2020, the World Health Organization (WHO) declared the current outbreak to be a public health emergency of international concern.

Have we seen this virus before? What do we know about its origin?

The virus, technically named SARS-CoV-2, is a newly identified virus, but it is the seventh Coronavirus known to infect humans. The resulting illness is referred to as COVID-19. This virus is in the same Coronavirus family as severe acute respiratory syndrome Coronavirus (SARS-CoV or SARS) and Middle East respiratory syndrome Coronavirus (MERS-CoV or MERS), which caused the two previous Coronavirus outbreaks in 2003 (SARS) and 2012 (MERS).

Since SARS and MERS are from the same family of coronaviruses, they have similar physical and biochemical properties and comparable transmission routes as COVID-19. In the absence of COVID-19 specific data, we rely on SARS, MERS, and coronavirus surrogate data to extrapolate, assess, and manage risk. See a comparison with these viruses.

In addition to the seven coronaviruses known to infect humans, many other coronaviruses are known to infect animals. Viruses that infect animals do not normally infect humans and vice versa, but mutations in the viral genetic material can occur naturally and lead to animal-to-person spread, formally known as zoonotic transmission.

Initially, many of the patients in the outbreak in Wuhan reportedly had some link to a large seafood and animal market suggesting animal-to-person spread. Later on, an increasing number of patients with COVID-19 had no exposure to animals, indicating person-to-person transmission is occurring.

This has occurred with other Coronaviruses such as SARS and MERS, which originated from animal reservoirs, spread into the human population, and then continued to spread by person-to-person contact. A recent publication links COVID-19 to bats. The CDC posts updated information on this topic.

How is COVID-19 transmitted, and how contagious is it?

While many questions remain regarding transmission of COVID-19, most often Coronaviruses spread from person-to-person during close contact — about 2 m (6 ft). Person-to-person spread is thought to mainly occur via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. Close contact generally does not include brief interactions, such as walking past a person.

With most respiratory viruses, people are thought to be most contagious when they show symptoms of infection. However, some viruses can be contagious prior to symptoms development, and the COVID-19 has been reported to have spread from an asymptomatic infected patient to a close contact.

The rate at which a person can get COVID-19 by touching a contaminated surface or object (i.e., fomites) and then touching their own mouth, nose, or possibly their eyes is unclear. We also do not know if viral particles can be aerosolized from water or suspended into air after settling and remain infective. While such routes can occur for other coronaviruses, the European Centre for Disease Prevention and Control states that there is currently no evidence to support airborne transmission of the novel Coronavirus. A precautionary approach should be taken until studies eliminate other routes of transmission. Epidemiological studies also suggest that transmission rates of COVID-19 currently might be higher than those of SARS and MERS. Scientists have estimated that each person with the new Coronavirus could infect somewhere between 1.5 and 3.5 people without effective containment measures, according to "Early Transmissibility Assessment of a Novel Coronavirus in Wuhan, China," in the Elsevier SSRN (Social Science Research Network).

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However, previous work also highlights that SARS can readily be disinfected when chlorine dosing produces a free chlorine residual between 0.2 and 0.5 mg/L for municipal wastewater. While Ebola virus is different, it is reassuring that the article, "Persistence of Ebola Virus in Sterilized Wastewater," similarly showed that no virus was recovered at doses of 5 and 10 mg/L of chlorine and a 3.5 log reduction was achieved in the presence of free chlorine residual of 0.16 mg/L for 20 seconds. These results imply that standard municipal wastewater system disinfection and hyper (or shock) chlorination practices may be sufficient to control the virus provided utilities monitor free available chlorine during treatment to ensure it has not been depleted.

Wastewater Treatment and COVID-19

Disinfection systems at water resource recovery facilities (WRRFs) and the associated regulatory requirements were developed to be protective of a broad spectrum of potential pathogens. The recent coronavirus serves as another example of the importance of this infrastructure for protecting public health.

On Feb. 5, 2020, the U.S. Occupational Safety and Health Administration (OSHA) released its new wastewater worker guidance stating that current disinfection conditions in WRRFs, such as oxidation with hypochlorite or peracetic acid, and inactivation by ultraviolet irradiation, are expected to be sufficient to protect wastewater workers and public health. The recommendation is based on coronavirus disinfection data from healthcare settings and corresponds with OSHA's position on the susceptibility of coronaviruses to disinfection.

These recommendations are likely to be broadly applicable, although more research may be warranted for disinfectants such as peracetic acid and combined chlorine (chloramines), where coronavirus specific data is lacking or evidence suggests higher bacterial susceptibility to disinfection compared to viruses. Although coronaviruses have not been tested, peracetic acid has been found to have some efficacy against some non-enveloped viruses (e.g., Norovirus) that are known to be more resistant than enveloped viruses.

Chlorine is extensively used for wastewater disinfection due to its effectiveness, low cost, and ease of application. It typically reacts with ammonia present in wastewater to form combined chlorine (chloramines), which behaves differently than free chlorine during disinfection. Thus, it is important for each facility to understand the chlorine species that are present and their relative abundance within the disinfection process. Additional research could provide reassurance on the effectiveness of wastewater disinfection processes, specifically against coronaviruses and at lower doses and contact times.

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How Can I Stay Informed?

The organizations below are reputable and reliable sources that are frequently updated.

WHO, CDC and OSHA.

Is this virus an occupational health concern to wastewater system workers?

Wastewater treatment and collection system workers are commonly exposed to untreated wastewater that contains disease-causing organisms that could result in an infection. While the risk of infection may increase during some outbreaks, thus requiring additional protective measures for workers, this is not the case for COVID-19 based on the new OSHA guidance.

These findings are bolstered by what we know about disinfection and persistence of coronaviruses and their surrogates in the environment.

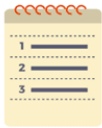
WRRF operations should ensure workers follow routine practices to prevent exposure to wastewater, including using the engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater. The figure above outlines the hierarchy of controls for wastewater worker protection based on the Occupational Safety and Health Administration (OSHA) recommendations. It is important to communicate that proper PPE use and sound hygiene practices are protective against coronaviruses and other waterborne infectious viruses. Research on the survival and infectivity of the Novel Coronavirus in wastewater, and on the efficacy of different wastewater disinfection options, including chlorination, PAA and UV, are needed to better assess the risk to both public and occupational health.

For information specific to protection of workers during infectious disease outbreaks, OSHA has a page dedicated to [COVID-19 occupational health protection](#) that highlights resources for workers and employers on the evolving Coronavirus situation first identified in Wuhan, China. It also has resources for [housekeeping practices](#) that can be helpful and resources for [protecting workers during pandemics](#) which apply to office workers.

Should we disinfect surfaces that may have come in contact with untreated wastewater?

For contaminated surfaces to play a role in transmission, respiratory pathogens must be shed into the environment, survive on the surface, be transferred to hands or other objects at concentrations high enough to cause infection (*i.e.*, at an infectious dose) and be transferred to the mouth, nose, or eyes at an infectious dose. Transmission can be interrupted at any of these steps. Therefore, disinfection of PPE, surfaces, and equipment that comes in contact with untreated wastewater can lower risk of infection.

Studies have shown that SARS virus can be inactivated fairly effectively (greater than or equal to 4 log reductions) using common household sanitizers or hand rubs provided recommended contact time and concentrations are used. Similar results were found when investigating [common household disinfectants](#) to reduce coronavirus surrogate concentrations. This is consistent with OSHA's statement on [coronaviruses being highly susceptible to inactivation](#) by many commonly used disinfectants. Additional research on Novel Coronavirus quantitative occurrence, survival, inactivation rates, and dose-response could support quantitative microbial risk assessments.



IMPLEMENTING THE HIERARCHY OF CONTROLS FOR WASTEWATER WORKER PROTECTION



Engineering Controls

- Use physical barriers to prevent worker exposure to splashes or sprays of potentially contaminated waste water.
- Enclose processes that may generate potentially infectious aerosols (e.g., mixing zones, tank discharge points, pressurized lines).
- Use ventilation equipment to remove contaminated air from the work environment.



Administrative Controls and safe work practices

TRAINING

- Wash hands with soap and water: immediately after handling waste or sewage, *before* eating or drinking, *and before and after* using the toilet.
- Avoid touching face, mouth, eyes, nose, or open sores and cuts while handling sewage.
- Before eating, remove work clothes and eat in designated areas.
- Do **not** smoke or chew tobacco/gum.
- Keep open sores, cuts, and wounds covered with clean, dry bandages.
- Remove work clothes before leaving worksite.
- Make appropriate vaccines available, such as those for tetanus, polio, typhoid fever, Hepatitis A and B, and influenza.



Personal Protective Equipment

TRAINING



Goggles



Rubber boots



Liquid repellent coveralls and gloves



Face mask or face shield

- PPE required changes with task, work site, and potential exposures.
- Train workers on how to properly put on, use/wear, and take off PPE, as well as how to clean/disinfect, maintain, store, and dispose of PPE.
- Other types of PPE may be needed to ensure a fully protective ensemble.

IF WORKERS ARE EXPOSED TO WASTE OR SEWAGE

- Gently flush eyes with clean water if sewage contacts eyes.
- Wash cuts and abrasions with soap and water.
- Consider providing workers with post-exposure evaluation and follow-up care, especially for sharps or puncture injuries.
- Clean contaminated work clothing daily with 0.05% chlorine solution.