

ITHACA AREA WASTEWATER TREATMENT FACILITY

TOWN OF ITHACA

CITY OF ITHACA

TOWN OF DRYDEN, OWNERS

525 THIRD STREET
ITHACA, NEW YORK 14850
(607) 273-8381

Special Joint Committee
Wednesday, September 8, 2021 1:00pm

Join Zoom Meeting

<https://us02web.zoom.us/j/84315740670?pwd=dnJIWdDpCWdSUks0ZXZsaHFkS1hmUT09>

Meeting ID: 843 1574 0670 Passcode: SJCMtg

One tap mobile: +19292056099,,84315740670#,,,,*592036# US (New York)

- 1) Welcome
- 2) Agenda Review and Approval of Minutes
- 3) Financial Report – Steve Thayer City Controller
 - a) IAWWTF Financial Report Audit for year ended December 31, 2019 -- *Insero & Co., CPA*
- 4) Operations and Engineering Report – *CJ Kilgore Chief Operator*
- 5) Voting Items
 - a) Resolution for Ithaca Area Wastewater Treatment Facility Emergency Repairs – Secondary Digester
- 6) Discussion Items
 - a) Energy Service Group Presentation on Performance Contracts
- 7) Adjournment

Upcoming Meeting Dates: October 13, November 10

Approval Status Dashboard

	Municipality Review/Approval	Municipality Approval Completed	Completed/Signed Documents Returned to IAWWTF
Emergency Funding Agreements			
City of Ithaca	X	X	X
Town of Dryden	X	X	()
Town of Ithaca	x	x	X
Behind the Meter Agreements			
City of Ithaca	X	X	X
Town of Dryden	X	X	()
Town of Ithaca	X	X	X

Out of consideration for the health of other individuals, please refrain from using perfume/cologne and other scented personal care products at City of Ithaca meetings.
Thank you for your cooperation and understanding.

IAWWTF
 Approved Budget and Actual Activity
 As of August 31, 2021
 9/6/2021

Revenues:							
J8150							
Account #	Description		Budget	Actual	Excess or (Deficiency)	% Rec'd	
2373	Septage Service Other		\$ 495,000	\$ 342,695	\$ (152,305)	69.23%	
2374	Sewer Service Other Govt's		\$ 3,225,999	\$ 2,419,500	\$ (806,499)	75.00%	
2392	Debt Service Other Govt's		\$ 1,153,595	\$ -	\$ (1,153,595)	0.00%	
2401	Interest & Earnings		\$ 1,800	\$ -	\$ (1,800)	0.00%	
2665	Sale of Equipment		\$ 1,500	\$ 299	\$ (1,201)	19.93%	
2680	Insurance Recoveries		\$ -	\$ -	\$ -		
2701	Refund of Prior Year Expense		\$ -	\$ 31,191	\$ 31,191		
2705	Gifts and Donations		\$ -	\$ 2,500	\$ 2,500		
2770	Unclassified Revenue		\$ 1,000	\$ 2,160	\$ 1,160	216.00%	
Total Revenues as of 8/31/21			\$ 4,878,894	\$ 2,798,345	\$ (2,080,549)	57.36%	

IAWWTF
Approved Budget and Actual Activity
As of August 31, 2021
9/6/2021

Expenditures:								
J8150							Available	%
Account #	Description		Budget	Actual		Balance	Used	
<i>Operations:</i>								
1920	Municipal Association Dues		\$ 1,119	\$ 1,086		\$ 33	97.05%	
1990	Contingency Account		\$ 20,000	\$ -		\$ 20,000	0.00%	
5105	Administration Salaries		\$ -	\$ -		\$ -	0.00%	
5110	Staff Salaries		\$ 833,775	\$ 477,479		\$ 356,296	57.27%	
5115	Hourly F/T		\$ 21,110	\$ 13,531		\$ 7,579	64.10%	
5120	Hourly P/T		\$ 7,500	\$ 13,918		\$ (6,418)	185.57%	
5125	Overtime		\$ 22,000	\$ 13,048		\$ 8,952	59.31%	
5210	Office Equipment		\$ -	\$ -		\$ -	0.00%	
5215	Motor Vehicles		\$ -	\$ -		\$ -	0.00%	
5225	Other Equipment		\$ -	\$ -		\$ -	0.00%	
5405	Telephone		\$ 6,200	\$ 2,415		\$ 3,785	38.95%	
5410	Utilities		\$ 280,000	\$ 207,919		\$ 72,081	74.26%	
5415	Clothing		\$ 7,500	\$ 5,986		\$ 1,514	79.81%	
5420	Gas & Oil		\$ 10,000	\$ 5,534		\$ 4,466	55.34%	
5425	Office Expense		\$ 2,000	\$ 292		\$ 1,708	14.60%	
5430	Fees		\$ 115,000	\$ 32,411		\$ 82,589	28.18%	
5435	Contracts		\$ 160,000	\$ 141,889		\$ 18,111	88.68%	
5436	Overhead Charge City General Fund		\$ 194,210	\$ 97,105		\$ 97,105	50.00%	
5440	Staff Development		\$ 20,000	\$ 2,114		\$ 17,886	10.57%	
5450	Advertising		\$ 200	\$ -		\$ 200	0.00%	
5455	Insurance		\$ 163,000	\$ 160,360		\$ 2,640	98.38%	
5475	Property Maintenance		\$ -	\$ -		\$ -	0.00%	
5476	Equipment Maintenance		\$ -	\$ -		\$ -	0.00%	
5477	Equipment Parts		\$ 135,000	\$ 162,163		\$ (27,163)	120.12%	
5479	Vehicle Maintenance		\$ 2,000	\$ -		\$ 2,000	0.00%	
5480	Building Maintenance Supplies		\$ 18,000	\$ 2,308		\$ 15,692	12.82%	
5494	Safety Materials & Supplies		\$ 6,000	\$ 3,867		\$ 2,133	64.45%	
5495	Treatment Supplies		\$ 550,000	\$ 195,955		\$ 354,045	35.63%	
5496	Lab Supplies		\$ 84,000	\$ 43,427		\$ 40,573	51.70%	
5499	Sludge Disposal Fees		\$ 450,000	\$ 224,002		\$ 225,998	49.78%	
5700	Prior Year Encumbrances		\$ -	\$ -		\$ -	0.00%	
5720	Prior Year Equipment		\$ -	\$ -		\$ -	0.00%	
	Sub-Totals		\$ 3,108,614	\$ 1,806,809		\$ 1,301,805	58.12%	
<i>Benefits:</i>								
9010	State Retirement		\$ 133,110	\$ -		\$ 133,110	0.00%	
9030	Social Security		\$ 67,655	\$ 39,625		\$ 28,030	58.57%	
9040	Workers Compensation		\$ 25,800	\$ 10,110		\$ 15,690	39.19%	
9050	Unemployment Insurance		\$ -	\$ -		\$ -	0.00%	
9060	Health Insurance		\$ 384,420	\$ 319,507		\$ 64,913	83.11%	
9070	Dental Insurance		\$ 3,500	\$ 2,861		\$ 639	81.74%	
9080	Day Care Assistance		\$ 200	\$ -		\$ 200	0.00%	
9089	Employee Tuition		\$ 2,000	\$ -		\$ 2,000	0.00%	
	Sub-Totals		\$ 616,685	\$ 372,103		\$ 244,582	60.34%	
<i>Debt Service</i>								
9710	Serial Bonds		\$ 573,138	\$ 573,138		\$ -	100.00%	
9711	Interest on Serial Bonds		\$ 438,395	\$ 387,838		\$ 50,557	88.47%	
9730	BANS		\$ 63,016	\$ 63,016		\$ -	0.00%	
9731	Interest on BANS		\$ 79,046	\$ 79,046		\$ -	100.00%	
	Sub-Totals		\$ 1,153,595	\$ 1,103,038		\$ 50,557	95.62%	
<i>Interfund Transfers</i>								
9951	Transfer to Capital Reserves		\$ -	\$ -		\$ -	0.00%	
	Sub-Totals		\$ -	\$ -		\$ -	0.00%	
Total All Expenditures as of 8/31/21			\$ 4,878,894	\$ 3,281,950		\$ 1,596,944	67.27%	

IAWWTF
 Approved Budget and Actual Activity
 As of August 31, 2021
 9/6/2021

	Surplus(deficit) as of 8/31/21		\$ -	\$ (483,605)		\$ (483,605)	
	*\$0 was appropriated from Fund Balance surplus for 2021						

Capital Activity:		Status	Current Cash Balance	Current Auth Balance	Original Authorization	Expended To date	Expended This Period	Funded Amount	Comment
Account #	Capital Reserves:								
J1	Capital Reserve Balance		\$ 251,457.00						
	Capital Projects:								
409J	Phosphorus Removal Improvements	Closed	\$ 191,657.79	\$ (3,271.80)	\$ 4,975,000	\$ 4,978,271.80	\$ -	\$ 4,975,000.00	Authorized, funded by each entity
410J	Primary Settling Tanks Rehab I & II	Closed	\$ -	\$ 13,423.83	\$ 360,000	\$ 346,576.17	\$ -	\$ 150,000.00	Project complete, funding needed phase II
411J	Admin Building & Thickner Roof Addition Design	Closed	\$ -	\$ 10,000.00	\$ 10,000	\$ -	\$ -	\$ -	Authorized, funding from each entity
412J	Energy Reduction Upgrades	Closed	\$ -	\$ 31,369.44	\$ 60,000	\$ 28,630.56	\$ -	\$ -	Authorized, funding from each entity
413J	Boiler Replacement	Closed	\$ -	\$ 100,000.00	\$ 100,000	\$ -	\$ -	\$ -	Authorized, funding from each entity
414J	Flow Meter Stations Rehabilitation	Active	\$ (26,048.08)	\$ (11,048.08)	\$ 132,927	\$ 143,975.08	\$ -	\$ 132,927.00	Authorized, funding from each entity
415J	Facility Concrete Restoration	Closed	\$ -	\$ 118,279.28	\$ 135,000	\$ 16,720.72	\$ -	\$ -	Authorized, funding from each entity
416J	Misc Plant Improvements	To close	\$ (4,859.19)	\$ (4,859.19)	\$ 1,504,950	\$ 1,509,809.19	\$ -	\$ 1,430,950.00	Authorized, funding from each entity
417J	IAWWTF Energy Improvements	Active	\$ 202,567.15	\$ 202,567.39	\$ 8,026,398	\$ 8,247,921.61	\$ -	\$ 8,026,398.00	Authorized, funding from each entity, NYSERDA Grant \$406,179
418J	Septage Receiving Facility Improvements	To close	\$ 143,282.38	\$ 143,282.38	\$ 3,077,475	\$ 2,934,192.62	\$ -	\$ 3,077,475.00	Authorized, funding from each entity
419J	Influent Building & Dewatering System Imp	Active	\$ 13,487.51	\$ 62,487.51	\$ 3,953,563	\$ 3,891,075.49	\$ -	\$ 3,879,563.00	Authorized, funding from each entity
420J	Enhanced Primary Treatment Feasibility Study	Active	\$ 39,227.84	\$ 39,227.84	\$ 287,650	\$ 248,422.16	\$ -	\$ 287,650.00	Authorized, capital reserve funding
421J	IAWWTF Microgrid Electric Power Feasibility	Closed	\$ -	\$ -	\$ 148,960	\$ 148,960.00	\$ -	\$ 148,960.00	Authorized, funded from NYSERDA Grant
422J	IAWWTF Various Improvements to Facility	Active	\$ 1,222,756.24	\$ 2,872,756.24	\$ 13,191,850	\$ 10,319,093.76	\$ 160,799.28	\$ 13,191,850.00	Authorized, capital reserve funding/Bonds
423J	IAWWTF Boiler Room Evaluation	Active	\$ (18,500.00)	\$ -	\$ 18,500	\$ 18,500.00	\$ -	\$ 18,500.00	Authorized, capital reserve funding
424J	IAWWTF Actiflow System Upgrade	Active	\$ 959.97	\$ 959.97	\$ 102,685	\$ 101,725.03	\$ -	\$ 102,385.00	Authorized, funding from each entity
425J	IAWWTF Chemical Bulk Storage Tanks Replace	Active	\$ 148,833.00	\$ 248,833.00	\$ 457,000	\$ 208,167.00	\$ -	\$ 457,000.00	Authorized, funding from each entity
	Total Capital Projects		\$ 1,913,364.61	\$ 3,824,007.81	\$ 36,541,958.00	\$ 33,142,041.19	\$ 160,799.28	\$ 35,878,658.00	
	Fund Balance:		Amount						
	12/31/2015 Capital Reserves		\$ 714,520						
	Assigned		\$ 160,665						
	Unassigned		\$ 1,234,482						
	Total Fund Balance		\$ 2,109,667						
	12/31/2016 Restricted for Capital		\$ 427,684	Capital reserves					
	Nonspendable		\$ 27,231	Prepaid expenses					
	Assigned		\$ 276,960	Encumbrances, next year budget					
	Unassigned		\$ 1,276,218						
	Total Fund Balance		\$ 2,008,093						
	12/31/2017 Restricted for Capital		\$ 253,257	Capital reserves					
	Nonspendable		\$ 27,317	Prepaid expenses					
	Assigned		\$ 406,847	Encumbrances, next year budget					
	Unassigned		\$ 1,227,808						
	Total Fund Balance		\$ 1,915,229						
	12/31/2018 Restricted for Capital		\$ 253,549	Capital reserves					
	Nonspendable		\$ 27,395	Prepaid expenses					
	Assigned		\$ 461,887	Encumbrances, next year budget					
	Unassigned		\$ 1,116,391						
	Total Fund Balance		\$ 1,859,222						
	12/31/2019 Restricted for Capital		\$ 251,457	Capital reserves					
	Nonspendable		\$ 27,475	Prepaid expenses					
	Assigned		\$ 368,604	Encumbrances, next year budget					
	Unassigned		\$ 893,244						
	Total Fund Balance		\$ 1,540,780						

IAWWTF
 Summary of CP 422J
 9/6/2021

<u>IAWWTF Design for Various Improvements to Plant 422J</u>										
Authorizations:										
					Amount	Source		Allocation per	SJS Budget:	
12/6/2017	Regular CC meeting		City of Ithaca	\$ 248,088	\$ 434,175.00	Reserve/Bonds	\$ 434,175	2/15/2018	BANS	\$ -
			Town of Ithaca	\$ 177,491	\$ -					\$ -
			Town of Dryden	\$ 8,596			\$ -			\$ -
				\$ 434,175			\$ -			\$ -
12/5/2018	Regular CC meeting		City of Ithaca	\$ 4,108,366	\$ 7,190,000.00	Bonds	\$ 7,190,000	2/19/2019		
			Town of Ithaca	\$ 2,939,272						
			Town of Dryden	\$ 142,362						
				\$ 7,190,000						
1/8/2020	Regular CC meeting		City of Ithaca	\$ 2,238,559	\$ 3,917,675.00	Bonds	\$ 3,917,675.00	2/19/2021	BAN	
			Town of Ithaca	\$ 1,601,546						
			Town of Dryden	\$ 77,570						
				\$ 3,917,675						
5/5/2021	Regular CC meeting		City of Ithaca		\$ 1,650,000.00	Various sources				
			Town of Ithaca							
			Town of Dryden							
Total Authorization					\$ 13,191,850.00		\$ 11,541,850			
Expenditures:										
Date	Payee		PO	Voucher	Amount	Comment				
5/8/2018	GHD Consulting Services Inc			1290	\$ 41,962.00	inv 66144, 66722 engineering services				
	Fiscal Advisors			1284	\$ 220.19	Bonding cost				
	Premier Printing			1285	\$ 69.44	Bonding cost				
	Orrick			1286	\$ 160.02	Bonding cost				
6/13/2018	GHD Consulting Services Inc			1292	\$ 24,198.00	inv 67191 engineering services to 5/19/18				
7/9/2018	GHD Consulting Services Inc			1294	\$ 49,620.00	inv 67712 engineering services to 6/23/18				
8/21/2018	GHD Consulting Services Inc			1296	\$ 70,295.00	inv 68181 engineering services to 7/21/18				
10/15/2018	GHD Consulting Services Inc			1302	\$ 82,700.00	inv 945516 engineering services to 8/18/18				
10/23/2018	GHD Consulting Services Inc			1304	\$ 82,700.00	inv 69129 engineering services to 9/29/18				
11/14/2018	GHD Consulting Services Inc			1305	\$ 20,675.00	inv 69625 engineering services to 10/20/18				
12/13/2018	GHD Consulting Services Inc			1307	\$ 22,000.00	inv 70180 engineering services to 11/17/18				
12/31/2018	GHD Consulting Services Inc		\$ 405,599.65	1308	\$ 11,000.00	inv 70617 engineering services to 12/15/18				
3/15/2019	GHD Consulting Services Inc			1319	\$ 5,000.00	inv 71222 engineering services to 1/19/19				
	SourceMedia	Bonds		1309	\$ 29.03	Bonding cost				
	Moody's			1311	\$ 611.24	Bonding cost				
	Premier Printing			1316	\$ 86.13	Bonding cost				
	Fiscal Advisors			1313	\$ 527.89	Bonding cost				
	Orrick			1314	\$ 407.03	Bonding cost				
	Orrick	BANs		1315	\$ 2,789.75	Bonding cost				
	Fiscal Advisors			1317	\$ 3,838.69	Bonding cost				
	Premier Printing		\$ 7,802.36	1318	\$ 1,173.92	Bonding cost				
4/4/2019	GHD Consulting Services Inc			1321	\$ 3,350.00	inv 71812 engineering services to 2/19/19				
4/30/2019	GHD Consulting Services Inc			1323	\$ 17,000.00	inv 72375 engineering services to 3/26/19				
12/16/2019	GHD Consulting Services Inc	\$ 37,783.68		1332	\$ 2,970.00	inv 75450 engineering services to 9/21/19				
1/21/2020	GHD Consulting Services Inc	\$ 39,810.00	ap19	1333	\$ 11,490.00	inv 76426 engineering services to 11/23/19				
3/10/2020	Premier Printing	BANs		1335	\$ 709.19	Bonding cost				
	Orrick			1334	\$ 1,653.88	Bonding cost				

IAWWTF
Summary of CP 422J
9/6/2021

IAWWTF Design for Various Improvements to Plant 422J									
Authorizations:				Amount		Source		Allocation per SJS Budget:	
12/6/2017	Regular CC meeting	City of Ithaca	\$ 248,088		\$ 434,175.00	Reserve/Bonds	\$ 434,175	2/15/2018	BANS
		Town of Ithaca	\$ 177,491		\$ -				\$ -
		Town of Dryden	\$ 8,596				\$ -		\$ -
			\$ 434,175				\$ -		\$ -
12/5/2018	Regular CC meeting	City of Ithaca	\$ 4,108,366		\$ 7,190,000.00	Bonds	\$ 7,190,000	2/19/2019	
		Town of Ithaca	\$ 2,939,272						
		Town of Dryden	\$ 142,362						
			\$ 7,190,000						
1/8/2020	Regular CC meeting	City of Ithaca	\$ 2,238,559		\$ 3,917,675.00	Bonds	\$ 3,917,675.00	2/19/2021	BAN
		Town of Ithaca	\$ 1,601,546						
		Town of Dryden	\$ 77,570						
			\$ 3,917,675						
5/5/2021	Regular CC meeting	City of Ithaca			\$ 1,650,000.00	Various sources			
		Town of Ithaca							
		Town of Dryden							
Total Authorization					\$ 13,191,850.00		\$ 11,541,850		
Expenditures:									
Date	Payee	PO	Voucher	Amount	Comment				
	Fiscal Advisors		1336	\$ 2,778.52	Bonding cost				
6/15/2020	GHD Consulting Services Inc		1340	\$ 19,373.75	inv 78767 engineering services to 4/18/20				
	M.A. Bongiovanni, Inc.		1341	\$ 353,637.50	App 1 General Construction 3/9/20-4/25/20				
6/24/2020	GHD Consulting Services Inc		1343	\$ 22,574.75	inv 79199 engineering services to 5/23/20				
	M.A. Bongiovanni, Inc.	\$ 762,761.00	1342	\$ 367,175.00	App 2 General Construction 4/25/20-5/31/20				
8/19/2020	M.A. Bongiovanni, Inc.		1348	\$ 311,281.56	App 3 General Construction 6/1/20-6/30/20				
8/19/2020	GHD Consulting Services Inc	\$ 409,434.50	1349	\$ 98,152.94	inv 79682,79683, 80125, 80126 engineering services to 7/25/20				
9/9/2020	GHD Consulting Services Inc		1357	\$ 143,190.24	inv 78481, 78766, 79198, 80472,80473 engineering services thru 8/22/20, and onsite re				
9/1/2020	M.A. Bongiovanni, Inc.		1354	\$ 501,639.63	App 4 & 5 General Construction 7/1/20 thru 9/1/20				
9/1/2020	Matco Electric	\$ 677,528.87	1356	\$ 32,699.00	App 1 for electrical services 7/1/20-7/31/20				
10/14/2020	GHD Consulting Services Inc		1361	\$ 39,287.54	inv 80773, 80774 engineering services through 9/19/2020				
	Matco Electric		1360	\$ 19,983.25	App 2 for electrical services 8/1/20-8/31/20				
10/21/2020	M.A. Bongiovanni, Inc		1363	\$ 1,115,922.25	App 6 general construction 9/1/20 thru 9/30/20				
	Matco Electric Corp	\$ 1,215,863.60	1364	\$ 40,670.56	App 3 services 9/1/20-9/30/20				
11/4/2020	GHD Consulting Services Inc		1365	\$ 64,496.48	Inv 77860 eng services thru 2/22/20, 81581 eng services thru 10/17/2020 and 81582 or				
	M.A. Bongiovanni, Inc		1366	\$ 1,229,319.38	App 7 general construction 10/1/2020-10/31/2020				
	Matco Electric Corp	\$ 1,383,510.11	1367	\$ 89,694.25	App 4 for electrical services 10/1/20-10/31/20				
12/23/2020	M.A Bongiovanni, Inc		1371	\$ 386,306.67	App 8 general construction 11/1/20-11/30/20				
	GHD Consulting Services Inc		1372/1373	\$ 37,475.60	inv 81792, 81793 engineering services and onsite rep thru 11/21/20				
	Matco Electric Corp	\$ 564,678.27	1374	\$ 140,896.00	App 5 electrical services 11/1/20-11/30/20				
1/27/2021	GHD Consulting Services Inc	ap20	1380	\$ 30,081.26	Inv 82330, 82333 engineering services and on-site rep thru 12/19/20				
	John W. Danforth Co	ap20	1376	\$ 339,247.35	Inv PB107690 pay app 1 services thru 11/30/20				
	M.A. Bongiovanni, Inc.	ap20	1377	\$ 575,130.91	App 9 general construction 11/30-12/31/20				
	Matco Electric Corporation	\$ 2,361,303.28	1378	\$ 852,165.49	App 6 electrical services 12/1-12/31/2020				
3/10/2021	M.A. Bongiovanni, Inc		1392/1393	\$ 1,012,005.49	App10 and 11 construction 1/1/21 thru 2/28/21				
	GHD Consulting Services Inc		1394/1395/1396/1397	\$ 66,610.52	inv 82821, 82822, 83265, and 83266 engineering services and on-site rep thru 2/20/21				
	Matco Electric Corp	\$ 1,439,199.91	1398/1399	\$ 360,583.90	App 7 & 8 electrical services thru 2/28/2021				

IAWWTF
 Summary of CP 422J
 9/6/2021

<u>IAWWTF Design for Various Improvements to Plant 422J</u>											
<u>Authorizations:</u>											
12/6/2017	Regular CC meeting	City of Ithaca	\$ 248,088			\$ 434,175.00	Reserve/Bonds	\$ 434,175	2/15/2018	BANS	\$ -
		Town of Ithaca	\$ 177,491			\$ -					\$ -
		Town of Dryden	\$ 8,596					\$ -			\$ -
			\$ 434,175					\$ -			\$ -
12/5/2018	Regular CC meeting	City of Ithaca	\$ 4,108,366			\$ 7,190,000.00	Bonds	\$ 7,190,000	2/19/2019		
		Town of Ithaca	\$ 2,939,272								
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1/8/2020	Regular CC meeting	City of Ithaca	\$ 2,238,559			\$ 3,917,675.00	Bonds	\$ 3,917,675.00	2/19/2021	BAN	
		Town of Ithaca	\$ 1,601,546								
		Town of Dryden	\$ 77,570								
			\$ 3,917,675								
5/5/2021	Regular CC meeting	City of Ithaca				\$ 1,650,000.00	Various sources				
		Town of Ithaca									
		Town of Dryden									
Total Authorization						\$ 13,191,850.00		\$ 11,541,850			
<u>Expenditures:</u>											
<u>Date</u>	<u>Payee</u>	<u>PO</u>	<u>Voucher</u>	<u>Amount</u>	<u>Comment</u>						
	Balance of Authorization			\$ 2,872,756.24							
<u>Transfers from Capital Reserve/other funding sources:</u>											
				\$ -							
				\$ -							
Total Transfers/other funding sources						\$ -					
Cash Balance						\$ 1,222,756.24					
<u>Project Allocation:</u>											
<u>Allocation per SJS Budget:</u>	<u>Amount</u>	<u>Expended</u>	<u>Available</u>	<u>Status</u>							
<u>Contracts</u>											
GHD Consulting Service Inc	\$ 1,142,660	\$ 1,090,507.76	\$ 52,152.24	Prof Eng design services							
Matco Electric Corporation	\$ 2,043,600	\$ 1,903,047.41	\$ 140,552.59	Electrical contract							
John W. Danforth Co.	\$ 521,900	\$ 454,530.69	\$ 67,369.31	Grit Removal and Plant Modifications	5/5/2020						
M.A. Bongiovanni, Inc.	\$ 8,867,175	\$ 6,827,725.33	\$ 2,039,449.67	General Construction CO for digester repairs							
Totals											
	\$ 12,575,335	\$ 10,275,811	\$ 2,299,524								

**Operator and Engineer's Report
SJC Meeting
8 SEPT 2021**

1. Plant Maintenance & Operations

- a. Primary Digester Pumpdown/dewatering almost complete, cover repair complete, piping and valving rehab/replacement mostly done on primary side, remaining work requires Secondary dewatering/cleaning. Mixer Shaft bent, requires repair. Will need additional funding to complete Secondary Digester dewatering and cleaning as Primary Digester contained far more solids than anticipated. Completing Secondary Digester is considered essential in order to restore entire system back to full operational functionality.
- b. Blowers estimated return date January 2022.

2. Facilities Maintenance & Operations

- a. Flow monitoring/ I and I project continuing.

3. Staff Management

4. Reporting

5. Business, Long Term Development

Equipment	Usage(ft²) August	Usage(ft²) July	Usage(ft²) June	Usage(ft²) May	Usage(ft²) April	Usage(ft²) March
Micro-turbines	1,699,000	900,000	0	827,000	2,493,000	2,291,000
Boilers	0	3,000	6,000	40,000	57,000	0
Waste Flare	0	583,000	1,203,000	1,028,000	39,000	0
Total Biogas Produced	1,699,000	1,486,000	1,209,000	1,895,000	2,589,000	2,291,000

DIVISION OF WATER

WASTEWATER FACILITY OPERATION REPORT FOR THE MONTH OF July, 2021

SPDES PERMIT NO. NY 0026638			FACILITY NAME Ithaca Area Wastewater Treatment Facility				FACILITY OWNER Ithaca (C) Ithaca (T) Dryden (T)				FACILITY IAWWTF						
Day	Date	Daily Precip in/day	VOLUME OF SEWAGE TREATED			TEMPERATURE (F)		pH (s.u.)				SETTLABLE SOLIDS (m/l)		B.O.D.5 (mg/l)		SUSPENDED SOLIDS (mg/l)	
			Inst.Max. MGD	Daily Average MGD	Inst.Min. MGD	Influent (2)	Effluent (2)	Influent Minimum	Influent Maximum	Effluent Minimum	Effluent Maximum	Influent Maximum	Effluent Maximum	Influent Type	Effluent Type	Influent Type	Effluent Type
Thu	01	0.55	11.50	7.01	2.40	70	69	7.1	7.6	7.4	7.7	6.0	<0.10				
Fri	02	0.30	10.10	6.802	2.60	68	69	7.6	7.6	7.5	7.7	7.5	<0.10				
Sat	03	0.03	9.30	6.39	4.00	67	69	7.5	7.7	7.5	7.6	7.0	<0.10				
Sun	04	0.22	8.60	5.63	3.30	68	68	7.7	7.8	7.5	7.8	10.0	<0.10				
Mon	05	0.00	8.50	6.03	3.50	70	68	7.6	7.7	7.4	7.8	10.0	<0.10				
Tue	06	0.01	9.60	6.35	4.00	72	69	7.6	8.0	7.4	7.6	10.0	<0.10	167	16	176	4
Wed	07	0.40	12.30	7.915	5.20	72	70	7.5	7.9	7.5	7.6	9.0	<0.10	143	20	208	5
Thu	08	0.72	21.50	10.805	5.80	73	69	7.5	7.7	7.5	7.8	6.0	<0.10				
Fri	09	0.79	13.50	9.206	6.50	71	69	7.5	7.8	7.5	7.8	6.0	<0.10				
Sat	10	0.11	10.30	7.612	4.80	69	68	7.6	7.7	7.6	7.7	6.5	<0.10				
Sun	11	0.00	18.50	12.173	6.50	69	69	7.6	7.7	7.6	7.8	6.0	<0.10				
Mon	12	1.08	15.10	10.832	7.40	69	69	7.5	7.6	7.6	7.8	6.0	<0.10	88	18	80	5
Tue	13	0.01	12.80	9.295	7.50	72	69	7.3	7.8	7.6	7.9	30.0	<0.10	110	13	141	4
Wed	14	0.50	14.50	9.532	6.30	71	69	7.5	7.8	7.5	7.6	7.5	<0.10				
Thu	15	0.52	12.40	8.281	5.20	72	69	7.5	7.7	7.4	7.5	7.5	<0.10				
Fri	16	0.00	11.30	7.035	4.00	71	70	7.5	7.7	7.4	7.6	8.0	<0.10				
Sat	17		13.50	8.832	5.50	70	70	7.6	7.7	7.4	7.5	8.5	<0.10				
Sun	18	0.57	11.10	8.379	5.40	69	69	7.6	7.9	7.7	7.9	5.0	<0.10				
Mon	19	0.01	11.00	7.324	4.40	71	69	7.5	7.6	7.5	7.6	9.0	<0.10	208	16	207	6
Tue	20	0.00	11.80	7.218	4.20	72	69	7.5	7.5	7.5	7.8	6.0	<0.10	211	22	137	5
Wed	21	0.23	11.10	7.366	4.00	70	70	7.5	7.6	7.5	7.7	7.5	<0.10				
Thu	22		10.50	7.080	3.70	70	69	7.6	7.6	7.5	7.6	7.5	<0.10				
Fri	23	0.00	9.80	6.013	3.00	71	69	7.5	8.1	7.4	7.5	12.0	<0.10				
Sat	24	0.00	8.10	5.73	3.30	70	69	7.6	7.6	7.5	7.6	10.0	<0.10				
Sun	25	0.03	8.40	5.482	2.80	71	70	7.4	7.7	7.4	7.7	8.0	<0.10				
Mon	26	0.00	8.80	5.734	2.90	74	70	7.5	7.6	7.5	7.5	10.0	<0.10	341	17	266	4
Tue	27	0.00	8.90	5.592	2.90	73	71	7.5	7.6	7.3	7.4	15.0	<0.10	220	18	302	4
Wed	28	0.14	9.80	5.306	2.50	72	71	7.4	7.6	7.3	7.5	10.0	<0.10				
Thu	29	0.00	8.00	5.523	2.50	72	71	7.3	8.1	7.3	7.4	14.0	<0.10				
Fri	30	0.07	8.40	4.754	2.30	71	71	7.6	8.1	7.3	7.4	12.0	<0.10				
Sat	31	0.00	7.60	4.781	2.00	70	70	7.6	7.7	7.2	7.4	10.0	<0.10				
		Total Precip 6.29	Monthly 7.291			Monthly Average		Monthly				Monthly Maximum	Monthly Maximum	30 day arithmetic mean (1)		30 day arithmetic mean (1)	
						Influent	Effluent	Minimum	Maximum	Minimum	Maximum	30.0	<0.10	Inf.(mg/l)	Eff.(mg/l)	Inf.(mg/l)	Eff.(mg/l)
						71	69	7.1	8.1	7.2	7.9			186	18	190	5
			Monthly Total 226.013											91	%Rem	98	%Rem
								30 Day Avg						10,842	1,094	11,113	294
								Quantity Loading (1)						lbs/day	lbs/day	lbs/day	lbs/day

(1) Refer to January 1994 edition of *Dmr Manual for Completing the Discharge Monitoring Report for the National Pollutant Discharge Elimination System (NPDES)* for procedures to calculate loadings, arithmetic mean, geometric mean, maximum, minimum, percent removal, etc.

(2) If temperature is measured more than once a day, report the average for the day.

NOTE: Refer to current SPDES permit for specific monitoring requirements. Sample type for temperature, pH and settleable solids is grab

FACILITY MAILING ADDRESS (Street, City, State, Zip Code)				TELEPHONE NUMBER		CHIEF OPERATOR'S NAME		CERTIFICATION GRADE	
525 Third Street, Ithaca N.Y. 14850				(607) 273-8381		CJ Kilgore		4 - A	
Day	Date	TOTAL PHOSPHORUS(mg/l)		PHOS	CHLORINE RESIDUAL		FECAL COLIFORM	REMARKS Enter any other comments, observations, operating problems, equipment failure, etc.	
		Influent Type	Effluent Type	TMRA Eff	Pre-SO2	Post SO2	Effluent MF or MPN/100ml		
Thu	01					0.017			
Fri	02				0.43	0.017			
Sat	03				0.43	0.040			
Sun	04				0.39	0.040			
Mon	05				0.44	0.020	2		
Tue	06	3.36	0.10		0.36	0.037	2		
Wed	07	2.69	0.12		0.31	0.037			
Thu	08				0.27	0.030			
Fri	09				0.30	0.023			
Sat	10				0.43	0.023			
Sun	11				0.27	0.027			
Mon	12	1.61	0.34		0.43	0.047	687		
Tue	13	1.80	0.14		0.25	0.030	2,420		
Wed	14				0.34	0.027	12		
Thu	15				0.50	0.057	7		
Fri	16				0.67	0.000			
Sat	17				0.77	0.083			
Sun	18				0.65	0.100			
Mon	19	2.60	0.12		0.58	0.080	517		
Tue	20	2.62	0.27		0.84	0.070	5		
Wed	21				0.74	0.077			
Thu	22				0.61	0.060			
Fri	23				0.69	0.067			
Sat	24				0.69	0.083			
Sun	25				0.63	0.073			
Mon	26	3.41	0.11		0.49	0.077	4		
Tue	27	3.63	0.08		0.62	0.077	1		
Wed	28				0.63	0.073			
Thu	29				0.66	0.083			
Fri	30				0.70	0.047			
Sat	31				0.76	0.080			
		30 day arithmetic mean (1) Influent(mg/l) Effluent(mg/l)		TMRA Eff	Monthly Minimum(1) Maximum(1)		30 Day Geo. Mean (1)		
		2.72	0.16		0.25	0.100	19		
		161.17	10.92	19.25					
		lbs/day	lbs/day	lbs/day					

(1) Refer to January 1994 edition of Dmr Manual for Completing the Discharge Monitoring Report for the National Pollutant Discharge Elimination System (NPDES) for procedures to calculate loadings, arithmetic mean, geometric mean, maximum, minimum, percent removal, etc.

NOTE: Refer to current SPDES permit for specific monitoring requirements. Sample type for chlorine residual and fecal coliform is grab.

		NON-CONVENTIONAL POLLUTANTS NY0026638																		
		SEMI-VOLATILE ORGANICS										METALS								
		TKN mg/l Sample	TKN mg/l Type	AMM mg/l Sample	AMM mg/l Type	TRI ug/l Sample	TETRA ug/l Sample	CHLORO ug/l Sample	1,2 TRANS ug/l Sample	METH ug/l Sample	PHTHAL ug/l Sample	Ca mg/l Sample	Ca mg/l Sample	Cu mg/l Sample	Cu mg/l Sample	Pb mg/l Sample	Ni mg/l Sample	Ag mg/l Sample	Zn mg/l Sample	
Day	Date	Influent	Effluent	Influent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Influent	Effluent	Influent	Effluent	Effluent	Effluent	Effluent	Effluent	
Thu	01																			
Fri	02																			
Sat	03																			
Sun	04																			
Mon	05																			
Tue	06																			
Wed	07																			
Thu	08																			
Fri	09																			
Sat	10																			
Sun	11																			
Mon	12																			
Tue	13																			
Wed	14	20.4	5.7	13.8	5.8	<1.0	<1.0	3.8	<1.0	<2.0	<1.0	<0.020	<0.020	0.080	<0.020	<0.020	<0.020	<0.020	<0.020	
Thu	15																			
Fri	16																			
Sat	17																			
Sun	18																			
Mon	19																			
Tue	20																			
Wed	21																			
Thu	22																			
Fri	23																			
Sat	24																			
Sun	25																			
Mon	26																			
Tue	27																			
Wed	28																			
Thu	29																			
Fri	30																			
Sat	31																			
30 day arithmetic mean (1)		20.40 mg/l	5.70 mg/l	13.80 mg/l	5.80 mg/l	<1.0 ug/l	<1.0 ug/l	3.8 ug/l	<1.0 ug/l	<2.0 ug/l	<1.0 ug/l	<0.020 mg/l	<0.020 mg/l	0.080 mg/l	<0.020 mg/l	<0.020 mg/l	<0.020 mg/l	<0.020 mg/l	<0.020 mg/l	
30 Day Aver. Quantity Loading (1)		1,621.7 lbs/day	453.1 lbs/day	1,097.1 lbs/day	461.1 lbs/day	<0.079 lbs/day	<0.079 lbs/day	0.302 lbs/day	<0.079 lbs/day	<0.159 lbs/day	<0.08 lbs/day	<1.59 lbs/day	<1.59 lbs/day	6.36 lbs/day	<1.59 lbs/day	<1.59 lbs/day	<1.59 lbs/day	<1.59 lbs/day	<1.59 lbs/day	

(1) Refer to January 1994 edition of DMR Manual for Completing the Discharge Monitoring Report for the National Pollutant Discharge Elimination System (NPDES) for procedures to calculate loading, arithmetic mean, geometric mean, maximum, minimum, percent removal, etc.

Effect on Receiving Stream

NAME OF RECEIVING STREAM			
DATE	STATION	PARAMETER	RESULT

Name and amount of chemicals used in treatment

- Process during month:
- a. Sodium Hypochlorite 4,039 gal.
 - b. Sulfur Dioxide 988 lbs.
 - c. Ferrous Chloride _____ gal.
 - d. Polymer (Pressing) _____ lbs.
 - e. Ferric Chloride 11,223 gal.
 - f. Polymer (Actiflo) _____ gal.

- Amount of electrical power consumed:
- a. Commercial 10,800 kw.hrs.
 - b. Stand-by _____ kw.hrs.

- Amount of fuel consumed:
- a. Natural gas 720,100 cubic ft.
 - b. Oil _____ gallons
 - c. Gasoline _____ gallons
 - d. Coal _____ tons
 - e. Digester Gas 0 cubic ft.
 - f. Propane _____ gallons

Sludge removal from plant:

- a. Amount 97.7 Dry Tons
- b. Solid Content 20.0 %
- c. Volatile Solids Content 56.3 %
- d. Disposal site :
Seneca Meadows Landfill, Waterloo, NY, 13165
Ontario Cty. Landfill, Stanley, NY, 14561

Other Solid Wastes:

- a. Screenings 12 YARDS
- b. Grit Combined amt. with screenings
- c. Ashes _____ tons
- d. _____
- e. _____
- f. _____
- g. Disposal Site:
Seneca Meadows Landfill, Waterloo, NY 13165
Ontario Cty. Landfill, Stanley, NY, 14561
Chemung Cty. Landfill, Lowman, NY, 14861
Digester Gas Wasted 583,000 cubic feet

TRUCKED WASTE RECEIVED THIS MONTH

1. Septage, holding tank waste and portable toilet waste		
	Total	Max day
Volume (gallons)	439,994	
2. All other wastes		
	Total	Max day
Volume (gallons)	1,219,692	
3. Number of Part 364 haulers currently approved to transport wastes to this POTW		
a. Septage, etc.	13	
b. All others	3	

Labor expended:

POSITION NAME	NUMBER FULL TIME	NUMBER PART TIME	TOTAL HOURS
Chief Operator	1	0	176.0
Assistant Chief Operator	0	0	
Operator	5	0	888.0
Operator-Trainee	3	0	872.0
Laboratory Director	1	0	176.0
Laboratory Technician	1	0	176.0
Administrative Assistant	1	0	176.0
Interns	0	0	
Maintenance Worker	1		88

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

[Signature] CJ Kilgore Chief Operator 27 AUG 2021
 Signature of Chief Operator or Designated Facility Representative

Resolution for a Cost Amendment for Emergency Digester Repairs - Ithaca Area Wastewater Treatment Facility

WHEREAS, on the night of March 11-12, 2021, a blockage caused by excessive debris in the primary digester overflow line caused the liquid level in the tank to surge upwards and lift the digester cover approximately 18 inches, breaking anchor bolts, mounts, and concrete, and

WHEREAS, GHD Consultants hired to evaluate emergency repairs for the Primary Digester, along with potential work on the supporting appurtenances for the Secondary Digester, verbally estimated costs for cleaning, inspections, and repairs to be at least \$1.5 million, and

WHEREAS, at its April 28, 2021 meeting, the Special Joint committee of the Ithaca Area Wastewater Treatment Facility (IAWWTF) amended Capital Project 422J to include funding for Emergency Primary and Secondary Digester cleaning, inspections, and repairs in an amount not to exceed \$1,650,000, and

WHEREAS, following the initial authorization for emergency work and the execution of repairs, it was discovered that the amount of solids and debris within the Primary Digester far exceeded the initial estimates of 450 tons which was based on the quantity yielded from previous digester cleaning operations, and

WHEREAS, it is now anticipated that there may be an increased quantity of solids present in the Secondary Digester as well, and

WHEREAS, upon further inspection and evaluation of the digester systems, additional damage has been discovered including a bent linear motion driveshaft located inside the Primary Digester tank, and potentially compromised anchor supports for the Secondary Digester cover, and

WHEREAS, a summary of these concerns is provided in a September 3, 2021 draft status update as provided by GHD Consultants, and

WHEREAS, GHD verbally estimates the costs for these repairs to be an additional \$1,150,000, now, therefore be it

RESOLVED, that the SJC recommends to its municipal boards that they increase the previously approved emergency funding for Emergency Digester Repairs in an amount not to exceed the sum total of One Million One Hundred Fifty Thousand Dollars (\$1,150,000) for the removal of excessive solids and debris and repair of the existing linear motion mixer driveshaft in the Primary Digester and anticipated increased solids and debris and repair of the cover anchor supports for the Secondary Digester, and be it further

RESOLVED, that capital project CP #422J, IAWWTF Various Improvements, be hereby amended by an amount not to exceed \$2,800,000 for a total project authorization of \$14,341,850, for the purpose of funding said Primary and Secondary Digester repairs, and be it further

RESOLVED, that funds necessary for said project shall be derived from the following sources as determined by the City Controller; insurance recovery, serial bonds, grants and Federal stimulus funds.



5788 Widewaters Parkway, Suite 2A
Syracuse, New York 13214
United States
www.ghd.com

Our ref: 11153020

3 September 2021

Scott Gibson
Assistant Superintendent
City of Ithaca – DPW Division of Water & Sewer
510 First Street
Ithaca, NY 14850

Ithaca Area Wastewater Treatment Facility (WWTF)
Emergency Repairs – Primary Digester Failure
Status Update and Additional Funding Request

Dear Mr. Gibson

This letter has been prepared to provide an update on the general status of the emergency digester repairs and to recommend that additional funds be allocated to support completion of the critical system repairs as costs have exceeded the preliminary estimates.

Primary Digester Cleaning

Following the initial authorization of emergency work to repair the anaerobic digester system (Primary and Secondary Digesters and associated systems) the project team proceeded immediately with execution of the repairs. The first and largest task has been the cleaning of the Primary Digester, which experienced the initial failure event. It was anticipated that this process would take several months and potentially cost something on the order of \$600,000 to complete. However, the conditions inside the disabled digester tank were unknown at the time of the initial authorization, and since that time it has been discovered that the amount of solids and debris contained within the tank far exceed the initial estimate. An initial estimate of 450 tons was developed based on previous digester cleaning operations and the time elapsed since the last cleaning, but as of the date of this letter we have removed over 800 tons of material and still have a portion remaining to be removed. It is difficult to project what the exact final tonnage will be that is removed from the Primary Digester, but current estimates project it to be potentially in excess of 1,000 tons. This represents more than a twofold increase in the quantity of solids removed from the Primary Digester tank (450 tons → $\geq 1,000$ tons) with an associated cost increase of approximately \$750,000 for removal, dewatering, hauling, and offsite disposal.

Secondary Digester Cleaning

Based on the higher quantity of solids and debris found in the Primary Digester, it is now anticipated that there may be an increased quantity of solids present in the Secondary Digester as well, thus increasing the cost for cleaning of the Secondary Digester. However, the Secondary Digester is expected to have fewer accumulated solids and debris than the Primary Digester due to the process configuration of the digester system and plant operations. The larger quantity of heavy solids and debris are anticipated to be captured in the Primary Digester, as that unit receives the initial solids loading from the upstream treatment processes, thus reducing the amount of material that makes it downstream to the Secondary Digester.

The Secondary Digester is scheduled to be taken offline for dewatering, cleaning, and repairs next, after completion of the Primary Digester work. The Secondary Digester work is anticipated to begin this Fall.

Additional Digester System Repairs

Upon further inspection and evaluation of the digester systems, and as more of the associated equipment and systems have become available for observation, additional damage has been discovered or identified. A summary of these additional findings and the recommended repairs are provided below:

- Primary Digester Mixer – It has been discovered that the driveshaft on the existing linear motion mixer, located inside the Primary Digester tank, is bent and in need of repair in order to return the unit to service. The Primary Digester cannot be operated properly without this mixing unit in service. It is recommended that the bent driveshaft be replaced or repaired.
- Secondary Digester Cover Anchor Supports – It has been identified that the existing anchor supports for the Secondary Digester cover are in very poor condition, thus compromising the digester cover support system. It is recommended that these anchor supports be replaced with new grout supports.

Additional Funding Request

Due to the increased solids content found in the Primary Digester and anticipated in the Secondary Digester, along with the other repairs identified since the initial emergency repair authorization, additional funding in the amount of \$1,150,000 is requested to complete these critical repairs and return the treatment plant to full service.

The table below provides an updated opinion of costs for with the digester repairs. As before, these costs represent those needed to perform the emergency repairs to the digester system and address the underlying conditions which contributed to the failure. They have been developed based on the information gathered and available at the time of this letter.

No.	Item Description	Initial Opinion of Probable Costs	Updated Opinion of Probable Costs
1	Cleaning and Inspection of Digesters	\$850,000	\$1,900,000
2	Primary Digester Tank and Cover Repairs	\$150,000	\$200,000
3	Sludge Piping System Repairs	\$450,000	\$450,000
4	Additional Digester System Repairs	NA	\$75,000
5	Engineering	\$50,000	\$125,000
6	Contingency	\$150,000	\$50,000
	Total Opinion of Costs	\$1,650,000	\$2,800,000

Please contact us to discuss any questions or comments you may have regarding this update and the associated digester repair work.

Regards

Jason D. Greene, PE
Project Director

315.802.0284
Jason.greene@ghd.com

cc: Michael Thorne, City of Ithaca
CJ Kilgore, City of Ithaca

Critical items necessary in the near future:

- Biosolids Drying – landfill dumping fees increasing significantly, landfill capacity concerns (eventual diversion requirements). Drying to Class A opens potential for beneficial reuse; even if not approved for reuse, this significantly reduces tonnage reduces capacity and cost concerns.
 - Need to consider cost of drying, heat source of drying, carbon footprint.
- Boiler replacement - Two newer nat. gas high efficiency boilers are unreliable and deteriorating rapidly. One 33 year old biogas boiler and one 33 year old dual fuel boiler are near or at end of useful life. No parts support. Need reliable boilers with redundancy to building heating and digester heating. Need combination of Natural Gas and Biogas. Need to consider future heating requirements with regards to biosolids drying. Need to consider biogas use prioritization re: heat vs electricity production/CHP. Also should consider likely future biogas production if additional trucked waste is taken in (food waste, more grease, dairy waste, etc).
- Belt/Screw Press – Rodiger Belt Press is approx. 20 years old, manufacturer no longer in business, no parts support, is approaching end of useful life. Need new unit to ensure adequate pressing redundancy, potential need for additional pressing capacity with likelihood of increased amount trucked waste. Should consider additional polymer day tank/system to allow different polymer use on belt/screw press vs current PW Tech Volute presses.
- Trucked Waste Facility - Need thorough evaluation/reconfiguration of trucked waste facility to accommodate processing food waste with the mandate coming to require food waste landfill diversion Jan. 2022. Expect to start taking septage waste at head of plant (will need additional screening there), higher strength waste in trucked waste. Need to evaluate screening/processing needs, available options (such as Beast, Lakeside products, etc). Need to evaluate best way to handle grease loads (heating, blending, etc).
- Mechanical Thickening – Evaluate if this is considered critical and/or if it should be integrated as part of some of the above critical items.
- Repair/replacement PST tank bottom rails and shoes, shafts and sprockets.
- Install Air Conditioning in Influent Building MCC, heat causing operational failures due to overheating influent pump drives

Critical items necessary that are less immediate:

- Flare Replacement – major degradation, does not meet 10 state standards
- Better mixing in primary scum box – mixer does not thoroughly mix, results in scum layer
- Digester top painting/preservation – rusting, surface deteriorating
- Sluice Gate replacement (with electrical operators) – many gates are in poor operating condition, most require electrical hand held drive to open/close which is dangerous and inconvenient in a critical situation
- Continued concrete repair to tanks
- Admin Building AC Replacement
- Tank Top and Building lighting repair/upgrades – much lighting is out of service and/or inadequate. Should consider a complete LED make over.
- Driveway repaving - drive is deteriorated, get lots of heavy traffic, need some phased repaving
- Facility door repair/replacement – exterior doors are difficult to lock/unlock, many do not provide proper security. Some interior doors in galleries do not close/fit properly
- Repair/replace FST tank rails and shoes, shafts and sprockets.
- Evaluate/Re-evaluate phosphorous removal method(s)