

**EASTON AREA JOINT SEWER AUTHORITY  
COMMONWEALTH OF PENNSYLVANIA**

**RESOLUTION #2024-05-20A**

**RESOLUTION APPROVING AN UPDATED  
HIGH STRENGTH WASTE SURCHARGE FEE**

WHEREAS, the Easton Area Joint Sewer Authority (the "Authority") is a body corporate and politic organized and operated under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 et seq., as amended (the "Act");

WHEREAS, the Authority imposes a high strength waste surcharge fee, using a method consisting of a combination of capital basis treatment cost allocations and functional treatment costs allocation;

WHEREAS, the Authority Board reviews and updates the high strength waste surcharge fee from time to time based on the Authority's annual audit, Chapter 94 Report, and sewage treatment costs data, the evaluation by the Authority's Consulting Engineer and recommendation of the Authority's Engineering Committee; and

WHEREAS, based on the forgoing, the Authority Board has determined that an update to the current high strength waste surcharge fee is necessary and appropriate.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Easton Area Join Sewer Authority as follows:

1. The Authority's high strength waste surcharge fee shall be determined, where appropriate, by using the attached Table I - 2022 Allocation of Operation and Maintenance and Capital Costs and the attached Table II - Surcharge Program Cost Update Based on 2022 Data which includes the updated surcharge formula.

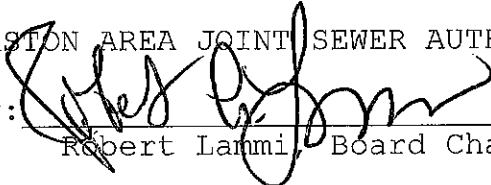
2. The updated high strength waste surcharge fee shall be effective July 1, 2024.

3. All Resolutions or parts of Resolutions inconsistent with this Resolution are hereby repealed insofar, but only insofar, as the same are inconsistent herewith.

4. If any section, subsection, sentence, clause or phrase of this Resolution is, for any reason, held to be illegal or unconstitutional, such decision shall not affect the validity of the remaining portions of this Resolution.

ADOPTED this 20th day of May, 2024.

EASTON AREA JOINT SEWER AUTHORITY

By:   
Robert Lammi, Board Chairman

  
Stephen Riegel, Secretary

(SEAL)

TABLE I  
TO RESOLUTION

2022 Allocation of Operation and Maintenance and Capital Costs

(attached hereto)

TABLE I  
 EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2022  
 ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS

ITEM	Actual 2022	Hydraulic Loading		BOD		Suspended Solids		NH3-N	
		%	Amount	%	Amount	%	Amount	%	Amount
<u>ANNUAL O &amp; M COST ALLOCATION</u>									
<u>Directly Allocable Costs</u>									
Salaries/Wages	\$1,636,097.45	30.0	\$490,829	25.0	\$409,024	25.0	\$409,024	20.0	\$327,219
Health, Disability, Workers Comp, Other Benefits	\$471,929.04	30.0	\$141,579	25.0	\$117,982	25.0	\$117,982	20.0	\$94,386
Social Security/FICA	\$100,648.78	30.0	\$30,195	25.0	\$25,162	25.0	\$25,162	20.0	\$20,130
Pension Contributions	\$304,525.80	30.0	\$91,358	25.0	\$76,131	25.0	\$76,131	20.0	\$60,905
Training and Dues	\$9,070.07	30.0	\$2,721	25.0	\$2,268	25.0	\$2,268	20.0	\$1,814
Office/Lab/Cleaning Supplies & Management Svcs	\$17,787.77	30.0	\$5,336	25.0	\$4,447	25.0	\$4,447	20.0	\$3,558
Heating Fuel	\$33,848.21	30.0	\$10,154	25.0	\$8,462	25.0	\$8,462	20.0	\$6,770
Vehicle Fuel and Maintenance	\$10,796.23	30.0	\$3,239	25.0	\$2,699	25.0	\$2,699	20.0	\$2,159
Clothing and Safety Supplies	\$25,986.10	30.0	\$7,796	25.0	\$6,497	25.0	\$6,497	20.0	\$5,197
Auditing Services	\$0.00	30.0	\$0	25.0	\$0	25.0	\$0	20.0	\$0
Computer and Data Contracted Services	\$13,553.37	30.0	\$4,066	25.0	\$3,388	25.0	\$3,388	20.0	\$2,711
Telephone	\$77,090.10	30.0	\$23,127	25.0	\$19,273	25.0	\$19,273	20.0	\$15,418
Engineering Services - Contract Lab	\$74,005.54	30.0	\$22,202	25.0	\$18,501	25.0	\$18,501	20.0	\$14,801
40% of IPP Costs	\$28,253.82	30.0	\$8,476	25.0	\$7,063	25.0	\$7,063	20.0	\$5,651
Indirect Costs	\$508,317.06	30.0	\$152,495	25.0	\$127,079	25.0	\$127,079	20.0	\$101,663
Repairs, Maintenance and Machinery	\$498,002.29	30.0	\$149,401	25.0	\$124,501	25.0	\$124,501	20.0	\$99,600
Insurances - Property, Casualty	\$204,000.00	30.0	\$61,200	25.0	\$51,000	25.0	\$51,000	20.0	\$40,800
Electricity	\$407,366.98	40.0	\$162,947	25.0	\$101,842	15.0	\$61,105	20.0	\$81,473
Water	\$54,792.10	30.0	\$16,438	25.0	\$13,698	25.0	\$13,698	20.0	\$10,958
Solid Waste	\$408,550.64	15.0	\$61,283	30.0	\$122,565	50.0	\$204,275	5.0	\$20,428
Chemicals	\$823,920.19	40.0	\$329,568	0.0	\$0	40.0	\$329,568	20.0	\$164,784
Subtotal - Directly Allocable Costs	\$5,708,541.54	31.1	\$1,774,408.58	21.7	\$1,241,582.87	28.2	\$1,612,124.38	18.9	\$1,080,425.71

**TABLE I**  
**EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2022**  
**ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2022	Hydraulic Loading		BOD		Suspended Solids		NH3-N	
		%	Amount	%	Amount	%	Amount	%	Amount
<u>Indirectly Allocable Costs</u>									
Solicitor Services/Outside Legal	\$60,467.00	31.1	\$18,795	21.7	\$13,151	28.2	\$17,076	18.9	\$11,444
Board/Officer Compensation	\$11,038.00	31.1	\$3,431	21.7	\$2,401	28.2	\$3,117	18.9	\$2,089
Administrative/Recording Secretary	\$1,950.00	31.1	\$606	21.7	\$424	28.2	\$551	18.9	\$369
Auditor / CPA	\$16,900.00	31.1	\$5,253	21.7	\$3,676	28.2	\$4,773	18.9	\$3,199
Accountant	\$23,895.00	31.1	\$7,427	21.7	\$5,197	28.2	\$6,748	18.9	\$4,522
Administrative, Meeting, Office	\$32,045.00	31.1	\$9,961	21.7	\$6,970	28.2	\$9,050	18.9	\$6,065
Fringe Benefits	\$784.00	31.1	\$244	21.7	\$171	28.2	\$221	18.9	\$148
Consulting Engineer- General Services	\$46,151.00	31.1	\$14,345	21.7	\$10,038	28.2	\$13,033	18.9	\$8,735
Consulting Engineer- Pretreatment Services	\$21,940.00	31.1	\$6,820	21.7	\$4,772	28.2	\$6,196	18.9	\$4,152
Contract Lab Services	\$74,168.00	31.1	\$23,054	21.7	\$16,131	28.2	\$20,945	18.9	\$14,037
Liability and Vehicle Insurance	\$14,499.00	31.1	\$4,507	21.7	\$3,153	28.2	\$4,095	18.9	\$2,744
Debt Service - Bonds 2015	\$1,853,273.00	31.1	\$576,060	21.7	\$403,079	28.2	\$523,375	18.9	\$350,759
Debt Service - Bonds 2021	\$329,175.00	31.1	\$102,319	21.7	\$71,594	28.2	\$92,961	18.9	\$62,301
Bond Fees	\$4,500.00	31.1	\$1,399	21.7	\$979	28.2	\$1,271	18.9	\$852
Contingencies	\$0.00	31.1	\$0	21.7	\$0	28.2	\$0	18.9	\$0
Capital Costs	\$214,699.00	31.1	\$66,736	21.7	\$46,696	28.2	\$60,632	18.9	\$40,635
Permits and Licensing	\$14,842.00	31.1	\$4,613	21.7	\$3,228	28.2	\$4,191	18.9	\$2,809
Subtotal - Indirectly Allocable Costs	\$2,720,326.00	31.1	\$845,569.71	21.7	\$591,659.03	28.2	\$768,235.43	18.9	\$514,861.83

**TABLE I**  
**EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2022**  
**ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2022	Hydraulic Loading		BOD		Suspended Solids		NH3-N	
		%	Amount	%	Amount	%	Amount	%	Amount
<b><u>CAPITAL COST ALLOCATION</u></b>									
<b><u>1988 Directly Allocable Costs</u></b>									
Aerobic Digester I	\$483,471.50	0.0	\$0	30.0	\$145,041	40.0	\$193,389	30.0	\$145,041
Blower Building	\$279,473.00	0.0	\$0	30.0	\$83,842	40.0	\$111,789	30.0	\$83,842
Secondary Clarifiers 5, 6 & 7	\$974,725.70	25.0	\$243,681	25.0	\$243,681	25.0	\$243,681	25.0	\$243,681
Flow Division Box 2 & 3	\$225,039.25	20.0	\$45,008	30.0	\$67,512	20.0	\$45,008	30.0	\$67,512
Secondary Sludge Wet Well	\$74,239.05	10.0	\$7,424	30.0	\$22,272	20.0	\$14,848	40.0	\$29,696
Chlorine Building	\$107,190.25	90.0	\$96,471	5.0	\$5,360	0.0	\$0	5.0	\$5,360
Sludge Dewatering	\$1,141,852.00	0.0	\$0	0.0	\$0	100.0	\$1,141,852	0.0	\$0
Oxidation Ditch I	\$3,216,284.95	10.0	\$321,628	30.0	\$964,885	10.0	\$321,628	50.0	\$1,608,142
Sludge Pump House	\$201,838.00	10.0	\$20,184	30.0	\$60,551	20.0	\$40,368	40.0	\$80,735
Sludge Sump and Valve Pits	\$63,595.35	0.0	\$0	0.0	\$0	100.0	\$63,595	0.0	\$0
<b><u>1998 &amp; 2002 thru 2022 Directly Allocable Costs</u></b>									
Influent Screen Building	\$410,800.00	30.0	\$123,240	30.0	\$123,240	40.0	\$164,320	0.0	\$0
Upgrade Digester No. 1	\$37,539.41	0.0	\$0	30.0	\$11,262	40.0	\$15,016	30.0	\$11,262
Primary Sludge Pump Station	\$242,714.56	25.0	\$60,679	25.0	\$60,679	25.0	\$60,679	25.0	\$60,679
Upgrade Digester No. 2	\$345,357.00	20.0	\$69,071	30.0	\$103,607	20.0	\$69,071	30.0	\$103,607
Digester Boiler Building	\$422,321.16	0.0	\$0	0.0	\$0	80.0	\$337,857	20.0	\$84,464
Secondary Sludge Dewatering	\$110,484.00	10.0	\$11,048	30.0	\$33,145	20.0	\$22,097	40.0	\$44,194
SCADA System	\$904,996.00	25.0	\$226,249	25.0	\$226,249	25.0	\$226,249	25.0	\$226,249
Grit System	\$749,418.00	0.0	\$0	10.0	\$74,942	90.0	\$674,476	0.0	\$0
Sludge Conveyor System	\$148,850.00	0.0	\$0	0.0	\$0	75.0	\$111,638	25.0	\$37,213
Anerobic Digester No. 1 Rehab	\$906,473.70	0.0	\$0	0.0	\$0	75.0	\$679,855	25.0	\$226,618
Primary Clarifier Project	\$1,098,727.09	0.0	\$0	15.0	\$164,809	85.0	\$933,918	0.0	\$0
Chlorine Contact Tank Project	\$218,000.00	100.0	\$0	0.0	\$0	0.0	\$0	0.0	\$0
Digester Gas System Upgrades	\$671,768.50	0.0	\$0	10.0	\$67,177	80.0	\$537,415	10.0	\$67,177
Centrifuge System	\$1,851,912.95	0.0	\$0	0.0	\$0	100.0	\$1,851,913	0.0	\$0
Oxidation Ditch Improvements	\$653,386.00	50.0	\$326,693	25.0	\$163,347	0.0	\$0	25.0	\$163,347
Digester No. 2 and Return Lift Station	\$1,121,678.59	40.0	\$448,671	10.0	\$112,168	40.0	\$448,671	10.0	\$112,168
WWTP Equipment Upgrade Project	\$1,853,381.13	60.0	\$1,112,029	10.0	\$185,338	20.0	\$370,676	10.0	\$185,338
Wastewater Pumping Station Upgrades	\$6,079,207.89	100.0	\$6,079,208	0.0	\$0	0.0	\$0	0.0	\$0
Second Street PS - Force Main Repairs	\$270,650.00	100.0	\$270,650	0.0	\$0	0.0	\$0	0.0	\$0
Disk Filter System	\$3,695,481.27	20.0	\$739,096	20.0	\$739,096	60.0	\$2,217,289	0.0	\$0
Replacement of Mechanical Bar Screens	\$49,212.00	20.0	\$9,842	20.0	\$9,842	60.0	\$29,527	0.0	\$0
New Administration and Lab Building	\$1,478,053.92	30.0	\$443,416	25.0	\$369,513	25.0	\$369,513	20.0	\$295,611
Subtotal - Directly Allocable Costs	\$30,088,122.22	35.4	\$10,654,290	13.4	\$4,037,559	37.5	\$11,296,339	12.9	\$3,881,935

**TABLE I**  
**EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2022**  
**ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2022	Hydraulic Loading		BOD		Suspended Solids		NH3-N	
		%	Amount	%	Amount	%	Amount	%	Amount
<u>1988 Indirectly Allocable Costs</u>									
Mobilization	\$63,013.40	35.4	\$22,313	13.4	\$8,456	37.5	\$23,658	12.9	\$8,130
Sitework	\$919,584.85	35.4	\$325,628	13.4	\$123,400	37.5	\$345,251	12.9	\$118,644
Control Building & Lab Addition	\$231,488.25	35.4	\$81,971	13.4	\$31,064	37.5	\$86,910	12.9	\$29,866
Retaining Wall	\$64,630.25	35.4	\$22,886	13.4	\$8,673	37.5	\$24,265	12.9	\$8,339
New Garage	\$249,331.50	35.4	\$88,289	13.4	\$33,458	37.5	\$93,609	12.9	\$32,168
Underground Piping	\$1,039,060.00	35.4	\$367,934	13.4	\$139,433	37.5	\$390,107	12.9	\$134,058
Electrical Contract 5	\$562,491.70	35.4	\$199,180	13.4	\$75,481	37.5	\$211,183	12.9	\$72,572
Plumbing Contract 6	\$91,030.00	35.4	\$32,234	13.4	\$12,215	37.5	\$34,176	12.9	\$11,745
HVAC Contract 7	\$130,830.00	35.4	\$46,327	13.4	\$17,556	37.5	\$49,119	12.9	\$16,880
Administrative Costs	\$1,898,505.00	35.4	\$672,266	13.4	\$254,763	37.5	\$712,778	12.9	\$244,943
<u>1998 &amp; 2002 thru 2022 Indirectly Allocable Costs</u>									
Mobilization	\$68,207.00	35.4	\$24,152	13.4	\$9,153	37.5	\$25,608	12.9	\$8,800
Sitework	\$97,000.00	35.4	\$34,348	13.4	\$13,017	37.5	\$36,418	12.9	\$12,515
Underground Piping	\$95,700.00	35.4	\$33,888	13.4	\$12,842	37.5	\$35,930	12.9	\$12,347
Electrical Contract	\$1,460,935.52	35.4	\$517,321	13.4	\$196,045	37.5	\$548,496	12.9	\$188,488
HVAC Contract	\$61,294.00	35.4	\$21,704	13.4	\$8,225	37.5	\$23,012	12.9	\$7,908
Sludge Cover	\$74,400.00	0.0	\$0	0.0	\$0	80.0	\$59,520	20.0	\$14,880
Digester Stairs	\$9,675.00	0.0	\$0	0.0	\$0	80.0	\$7,740	20.0	\$1,935
Maintenance Shop	\$61,200.00	25.0	\$15,300	25.0	\$15,300	25.0	\$15,300	25.0	\$15,300
Aeration Basin Coating	\$106,908.00	0.0	\$0	0.0	\$0	80.0	\$85,526	20.0	\$21,382
Grit System	\$121,965.00	0.0	\$0	10.0	\$12,197	90.0	\$109,769	0.0	\$0
Sludge Conveyor System	\$7,230.00	0.0	\$0	0.0	\$0	75.0	\$5,423	25.0	\$1,808
Anerobic Digester No. 1 Rehab	\$115,708.00	0.0	\$0	0.0	\$0	75.0	\$86,781	25.0	\$28,927
Administrative Cost	\$1,286,722.00	35.4	\$455,632	13.4	\$172,667	37.5	\$483,089	12.9	\$166,011
Subtotal - Indirectly Allocable Costs	\$8,816,909.47	35.4	\$2,961,373.24	13.4	\$1,143,942.91	37.5	\$3,493,667.89	12.9	\$1,157,645.12
<u>Annual O &amp; M Costs</u>									
Directly Allocable Costs	\$5,708,541.54		\$1,774,408.58		\$1,241,582.87		\$1,612,124.38		\$1,080,425.71
Indirectly Allocable Costs	<u>\$2,720,326.00</u>		<u>\$845,570</u>		<u>\$591,659</u>		<u>\$768,235</u>		<u>\$514,862</u>
Total Annual O & M Costs	\$8,428,868		\$2,619,978		\$1,833,242		\$2,380,360		\$1,595,288
<u>Capital Costs</u>									
Directly Allocable Costs	\$30,088,122.22		\$10,654,290		\$4,037,559		\$11,296,339		\$3,881,935
Indirectly Allocable Costs	<u>\$8,816,909.47</u>		<u>\$2,961,373</u>		<u>\$1,143,943</u>		<u>\$3,493,668</u>		<u>\$1,157,645</u>
Total Capital Costs	\$38,905,031.69		\$13,615,663		\$5,181,502		\$14,790,007		\$5,039,580

TABLE II  
TO RESOLUTION

Surcharge Program Cost Update Based on 2022 Data

(attached hereto)



**TABLE II  
EASTON AREA JOINT SEWER AUTHORITY  
SURCHARGE PROGRAM COST UPDATE BASED ON 2022 DATA**

EXPENDITURE <sup>(1)</sup>	BOD-5	TSS	NH3-N
- Annual Operational Cost	\$1,833,242	\$2,380,360	\$1,595,288
- Capital Amortization <sup>(2)</sup>	295,554	843,626	287,459
<b>TOTAL</b>	<b>\$2,128,796</b>	<b>\$3,223,986</b>	<b>\$1,882,747</b>

2022 AVERAGE DAILY VALUES FOR:

Plant Flow	=	5.68 MGD
BOD-5 Influent	=	318 mg/l
TSS Influent	=	234 mg/l
NH3-N Influent	=	29.3 mg/l

2022 ANNUAL PLANT LOADINGS FOR:

BOD-5	=	318 mg/l	x 8.34 x 5.68 x 365	=	5,498	x 10x3 lbs./year
TSS	=	234 mg/l	x 8.34 x 5.68 x 365	=	4,046	x 10x3 lbs./year
NH3-N	=	29.3 mg/l	x 8.34 x 5.68 x 365	=	507	x 10x3 lbs./year

2022 TREATMENT COSTS FOR:

BOD-5	=	\$2,128,796	/	5,498	10x3 lbs./year	=	\$387.17	/10x3 lbs.
TSS	=	\$3,223,986	/	4,046	10x3 lbs./year	=	\$796.84	/10x3 lbs.
NH3-N	=	\$1,882,747	/	507	10x3 lbs./year	=	\$3,716.35	/10x3 lbs.

UPDATED SURCHARGE

$$\text{FORMULA (SF)}^{(3)} = 0.00834 \times Q1 \times [(BOD-5 - 250) \times \$387.17 + (TSS - 250) \times \$796.84 + (NH3-N - 25) \times \$3,716.35]$$

WHERE:

- SF is the surcharge amount when concentrations for BOD-5, TSS and NH3-N exceed normal domestic levels listed below.
- The factor "0.00834" is a constant to convert concentration expressed as mg/l to 10x3 pounds per million gallons.
- Q1 is the industrial user's wastewater volume for the time period, expressed in million gallons.
- BOD-5, TSS and NH3-N represent respectively, five-day biological oxygen demand, total suspended solids and ammonia-nitrogen with all concentrations expressed in mg/l.
- The values 250, 250 and 25 are constants which express the waste load concentration of BOD-5, TSS and NH3-N, respectively, determined to be normal values for domestic sewage.

(1) See Table I for the development of the cost factors for the three conventional pollutants.

(2) This cost represents the amount necessary to recover the total capital cost allocation over a twenty-five year period at 5.5 percent interest per year.

(3) If BOD-5 values are less than 250 mg/l, TSS values are less than 250 mg/l or NH3-N values are less than 25 mg/l, any negative values calculated are set equal to zero and not considered as part of this equation.