

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

**RESOLUTION #2023-06-19 A**

**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 - 2021 Allocation of Operation and Maintenance and Capital Costs and the attached Table II - Surcharge Program Cost Update Based on 2021 Data which includes the updated surcharge formula.

2. The updated high strength waste surcharge fee shall be effective July 1, 2023.


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 All Resolutions or parts of Resolutions inconsistent with this Resolution are hereby repealed insofar, but only insofar, as the same are inconsistent herewith.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 19th day of June, 2023.

EASTON AREA JOINT SEWER AUTHORITY

By:   
Robert Lammi, Board Chairman

  
Stephen Riegel, Secretary

(SEAL)

TABLE I  
TO RESOLUTION

2021 Allocation of Operation and Maintenance and Capital Costs

(attached hereto)

**TABLE I  
EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2021  
ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS**

ITEM	Actual 2021	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	\$1,476,276.00	30.0	\$442,883	25.0	\$369,069	25.0	\$369,069	20.0	\$295,255
Health, Disability, Workers Comp, Other Benefits	\$467,620.00	30.0	\$140,286	25.0	\$116,905	25.0	\$116,905	20.0	\$93,524
Social Security	\$113,098.00	30.0	\$33,929	25.0	\$28,275	25.0	\$28,275	20.0	\$22,620
Pension Contributions	\$221,271.00	30.0	\$66,381	25.0	\$55,318	25.0	\$55,318	20.0	\$44,254
Training and Dues	\$3,535.00	30.0	\$1,061	25.0	\$884	25.0	\$884	20.0	\$707
General, Lab and Other Costs	\$40,278.00	30.0	\$12,083	25.0	\$10,070	25.0	\$10,070	20.0	\$8,056
Heating Fuel	\$27,083.00	30.0	\$8,125	25.0	\$6,771	25.0	\$6,771	20.0	\$5,417
Vehicle Fuel and Maintenance	\$6,599.00	30.0	\$1,980	25.0	\$1,650	25.0	\$1,650	20.0	\$1,320
Clothing and Uniforms	\$8,603.00	30.0	\$2,581	25.0	\$2,151	25.0	\$2,151	20.0	\$1,721
Auditing Services	\$8,800.00	30.0	\$2,640	25.0	\$2,200	25.0	\$2,200	20.0	\$1,760
Computer and Data Contracted Services	\$11,856.00	30.0	\$3,557	25.0	\$2,964	25.0	\$2,964	20.0	\$2,371
Telephone	\$64,238.00	30.0	\$19,271	25.0	\$16,060	25.0	\$16,060	20.0	\$12,848
Engineering Services - Contract Lab	\$101,799.00	30.0	\$30,540	25.0	\$25,450	25.0	\$25,450	20.0	\$20,360
Indirect Costs	\$508,317.00	30.0	\$152,495	25.0	\$127,079	25.0	\$127,079	20.0	\$101,663
Repairs, Maintenance and Machinery	\$419,900.00	30.0	\$125,970	25.0	\$104,975	25.0	\$104,975	20.0	\$83,980
Insurances - Property, Casualty	\$204,000.00	30.0	\$61,200	25.0	\$51,000	25.0	\$51,000	20.0	\$40,800
Electricity	\$400,727.00	40.0	\$160,291	25.0	\$100,182	15.0	\$60,109	20.0	\$80,145
Water	\$46,367.00	30.0	\$13,910	25.0	\$11,592	25.0	\$11,592	20.0	\$9,273
Solid Waste	\$342,987.00	15.0	\$51,448	30.0	\$102,896	50.0	\$171,494	5.0	\$17,149
Chemicals	\$866,768.00	40.0	\$346,707	0.0	\$0	40.0	\$346,707	20.0	\$173,354
Subtotal - Directly Allocable Costs	\$5,340,122.00	31.4	\$1,677,338.05	21.3	\$1,135,487.85	28.3	\$1,510,719.75	19.0	\$1,016,576.35

**TABLE I  
EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2021  
ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2021		Hydraulic Loading		BOD		Suspended Solids		NH3-N	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>Indirectly Allocable Costs</b>										
Solicitor Services/Outside Legal	\$54,338.00	31.4	\$17,068	21.3	\$11,554	28.3	\$15,372	19.0	\$10,344	19.0
Board/Officer Compensation	\$11,350.00	31.4	\$3,565	21.3	\$2,413	28.3	\$3,211	19.0	\$2,161	19.0
Administrative/Recording Secretary	\$10,282.00	31.4	\$3,230	21.3	\$2,186	28.3	\$2,909	19.0	\$1,957	19.0
Auditor / CPA	\$14,400.00	31.4	\$4,523	21.3	\$3,062	28.3	\$4,074	19.0	\$2,741	19.0
Accountant	\$23,755.00	31.4	\$7,461	21.3	\$5,051	28.3	\$6,720	19.0	\$4,522	19.0
Administrative, Meeting, Office	\$34,462.00	31.4	\$10,825	21.3	\$7,328	28.3	\$9,749	19.0	\$6,560	19.0
Fringe Benefits	\$1,819.00	31.4	\$571	21.3	\$387	28.3	\$515	19.0	\$346	19.0
Consulting Engineer- General Services	\$137,560.00	31.4	\$43,208	21.3	\$29,250	28.3	\$38,916	19.0	\$26,187	19.0
Consulting Engineer- Pretreatment Services	\$16,000.00	31.4	\$5,026	21.3	\$3,402	28.3	\$4,526	19.0	\$3,046	19.0
Contract Lab Services	\$74,306.00	31.4	\$23,340	21.3	\$15,800	28.3	\$21,021	19.0	\$14,145	19.0
Liability and Vehicle Insurance	\$22,727.00	31.4	\$7,139	21.3	\$4,833	28.3	\$6,429	19.0	\$4,326	19.0
Debt Service - Bonds 2015	\$1,855,584.00	31.4	\$582,841	21.3	\$394,559	28.3	\$524,944	19.0	\$353,240	19.0
Debt Service - Bonds 2021	\$167,925.00	31.4	\$52,745	21.3	\$35,706	28.3	\$47,506	19.0	\$31,967	19.0
Bond Fees	\$1,500.00	31.4	\$471	21.3	\$319	28.3	\$424	19.0	\$286	19.0
Contingencies	\$0.00	31.4	\$0	21.3	\$0	28.3	\$0	19.0	\$0	19.0
Capital Costs	\$346,968.00	31.4	\$108,983	21.3	\$73,777	28.3	\$98,157	19.0	\$66,051	19.0
Permits and Licensing	\$13,905.00	31.4	\$4,368	21.3	\$2,957	28.3	\$3,934	19.0	\$2,647	19.0
<b>Subtotal - Indirectly Allocable Costs</b>	<b>\$2,786,881.00</b>	<b>31.4</b>	<b>\$875,362.31</b>	<b>21.3</b>	<b>\$592,583.75</b>	<b>28.3</b>	<b>\$788,408.24</b>	<b>19.0</b>	<b>\$530,526.70</b>	<b>19.0</b>

**TABLE I  
EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2021  
ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2021	Hydraulic Loading		BOD		Suspended Solids		NH3-N	
		%	Amount	%	Amount	%	Amount	%	Amount
<b>CAPITAL COST ALLOCATION</b>									
<b>1988 Directly Allocable Costs</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>1998 &amp; 2002 thru 2021 Directly Allocable Costs</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
<b>Subtotal - Directly Allocable Costs</b>	<b>\$28,560,856.30</b>	<b>35.7</b>	<b>\$10,201,031</b>	<b>12.8</b>	<b>\$3,658,203</b>	<b>38.2</b>	<b>\$10,897,298</b>	<b>12.6</b>	<b>\$3,586,324</b>

**TABLE I  
EASTON AREA JOINT SEWER AUTHORITY - SURCHARGE PROGRAM COSTS FOR YEAR 2021  
ALLOCATION OF OPERATION & MAINTENANCE (O & M) AND CAPITAL COSTS (Continued)**

Item	Actual 2021		Hydraulic Loading		BOD		Suspended Solids		NH3-N	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>1988 Indirectly Allocable Costs</b>										
Mobilization	\$63,013.40	35.7	\$22,506	12.8	\$8,071	38.2	\$24,043	12.6	\$7,912	12.6
Sitework	\$919,584.85	35.7	\$328,447	12.8	\$117,785	38.2	\$350,864	12.6	\$115,470	12.6
Control Building & Lab Addition	\$231,488.25	35.7	\$82,680	12.8	\$29,650	38.2	\$88,324	12.6	\$29,067	12.6
Retaining Wall	\$64,630.25	35.7	\$23,084	12.8	\$8,278	38.2	\$24,659	12.6	\$8,115	12.6
New Garage	\$249,331.50	35.7	\$89,053	12.8	\$31,935	38.2	\$95,132	12.6	\$31,308	12.6
Underground Piping	\$1,039,060.00	35.7	\$371,119	12.8	\$133,087	38.2	\$396,450	12.6	\$130,472	12.6
Electrical Contract 5	\$562,491.70	35.7	\$200,904	12.8	\$72,046	38.2	\$214,617	12.6	\$70,631	12.6
Plumbing Contract 6	\$91,030.00	35.7	\$32,513	12.8	\$11,660	38.2	\$34,732	12.6	\$11,430	12.6
HVAC Contract 7	\$130,830.00	35.7	\$46,728	12.8	\$16,757	38.2	\$49,918	12.6	\$16,428	12.6
Administrative Costs	\$1,898,505.00	35.7	\$678,086	12.8	\$243,169	38.2	\$724,368	12.6	\$238,391	12.6
<b>1998 &amp; 2002 thru 2021 Indirectly Allocable Costs</b>										
Mobilization	\$68,207.00	35.7	\$24,361	12.8	\$8,736	38.2	\$26,024	12.6	\$8,565	12.6
Sitework	\$97,000.00	35.7	\$34,645	12.8	\$12,424	38.2	\$37,010	12.6	\$12,180	12.6
Underground Piping	\$95,700.00	35.7	\$34,181	12.8	\$12,258	38.2	\$36,514	12.6	\$12,017	12.6
Electrical Contract	\$1,460,935.52	35.7	\$521,800	12.8	\$187,123	38.2	\$557,415	12.6	\$183,446	12.6
HVAC Contract	\$61,294.00	35.7	\$21,892	12.8	\$7,851	38.2	\$23,387	12.6	\$7,697	12.6
Sludge Cover	\$74,400.00	0.0	\$0	0.0	\$0	80.0	\$59,520	20.0	\$14,880	20.0
Digester Stairs	\$9,675.00	0.0	\$0	0.0	\$0	80.0	\$7,740	20.0	\$1,935	20.0
Maintenance Shop	\$61,200.00	25.0	\$15,300	25.0	\$15,300	25.0	\$15,300	25.0	\$15,300	25.0
Aeration Basin Coating	\$106,908.00	0.0	\$0	0.0	\$0	80.0	\$85,526	20.0	\$21,382	20.0
Grit System	\$121,965.00	0.0	\$0	10.0	\$12,197	90.0	\$109,769	0.0	\$0	0.0
Sludge Conveyor System	\$7,230.00	0.0	\$0	0.0	\$0	75.0	\$5,423	25.0	\$1,808	25.0
Aerobic Digester No. 1 Rehab	\$115,708.00	0.0	\$0	0.0	\$0	75.0	\$86,781	25.0	\$28,927	25.0
Administrative Cost	\$1,286,722.00	35.7	\$459,576	12.8	\$164,809	38.2	\$490,944	12.6	\$161,571	12.6
Subtotal - Indirectly Allocable Costs	\$8,816,909.47	35.7	\$2,986,876.89	12.8	\$1,093,136.89	38.2	\$3,544,458.88	12.6	\$1,128,933.06	12.6
<b>Annual O &amp; M Costs</b>										
Directly Allocable Costs	\$5,340,122.00		\$1,677,338.05		\$1,135,487.85		\$1,510,719.75		\$1,016,576.35	
Indirectly Allocable Costs	\$2,786,881.00		\$875,362		\$592,584		\$788,408		\$530,527	
<b>Total Annual O &amp; M Costs</b>	\$8,127,003		\$2,552,700		\$1,728,072		\$2,299,128		\$1,547,103	
<b>Capital Costs</b>										
Directly Allocable Costs	\$28,560,856.30		\$10,201,031		\$3,658,203		\$10,897,298		\$3,586,324	
Indirectly Allocable Costs	\$8,816,909.47		\$2,986,877		\$1,093,137		\$3,544,459		\$1,128,933	
<b>Total Capital Costs</b>	\$37,377,765.77		\$13,187,908		\$4,751,340		\$14,441,757		\$4,715,257	

TABLE II  
TO RESOLUTION

Surcharge Program Cost Update Based on 2021 Data

(attached hereto)



**TABLE II  
EASTON AREA JOINT SEWER AUTHORITY  
SURCHARGE PROGRAM COST UPDATE BASED ON 2021 DATA**

EXPENDITURE <sup>(1)</sup>	BOD-5	TSS	NH3-N
- Annual Operational Cost	\$1,728,072	\$2,299,128	\$1,547,103
- Capital Amortization <sup>(2)</sup>	277,742	844,201	275,633
<b>TOTAL</b>	<b>\$2,005,814</b>	<b>\$3,143,329</b>	<b>\$1,822,736</b>

**2021 AVERAGE DAILY VALUES FOR:**

Plant Flow	=	5.73 MGD
BOD-5 Influent	=	288 mg/l
TSS Influent	=	227 mg/l
NH3-N Influent	=	33 mg/l

**2021 ANNUAL PLANT LOADINGS FOR:**

BOD-5	=	288 mg/l	x 8.34 x 5.28 x 365	=	5,023	x 10x3 lbs./year
TSS	=	227 mg/l	x 8.34 x 5.28 x 365	=	3,959	x 10x3 lbs./year
NH3-N	=	33 mg/l	x 8.34 x 5.28 x 365	=	576	x 10x3 lbs./year

**2021 TREATMENT COSTS FOR:**

BOD-5	=	\$2,005,814	/	5,023	10x3 lbs./year	=	\$399.29	/10x3 lbs.
TSS	=	\$3,143,329	/	3,959	10x3 lbs./year	=	\$793.87	/10x3 lbs.
NH3-N	=	\$1,822,736	/	576	10x3 lbs./year	=	\$3,166.62	/10x3 lbs.

**UPDATED SURCHARGE FORMULA (SF) <sup>(3)</sup>** =  $0.00834 \times Q1 \times [(BOD-5 - 250) \times \$399.29 + (TSS - 250) \times \$793.87 + (NH3-N - 25) \times \$3,166.62]$

- 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 six 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.