

December 16, 2022

To the Joint Meeting

Ladies and Gentlemen:

ANNUAL REPORT OF THE SEWAGE CONTRIBUTION
OF THE MUNICIPALITIES ORGANIZED IN
JOINT MEETING FOR THE PURPOSE OF
ASSESSMENT FOR THE YEAR 2023

I present herewith the 88th Annual Report for the eleven municipalities organized in Joint Meeting, covering their respective contribution to Section One of the Supplementary Joint Trunk Sewer and to the Treatment Plant, as called for under the terms of the 1926 Contract.

Article X of the 1926 Contract requires that an estimate be made for the purpose of assessing the costs of maintenance and operation each year.

In order that the amount of work necessary for the preparation of this estimate be completed in time for consideration by the Joint Meeting before the date specified by law for the adoption of the new budget, it has been customary to use the twelve-month period immediately prior thereto as the basis of consideration for the assessment purpose only.

You will please note that this is the first of the two Annual Reports prepared each year, and that it covers the twelve-month period from November 1, 2021 through October 31, 2022. Subsequently, at the beginning of each succeeding year, a second and final report is prepared covering the previously completed calendar year, which coincides with the fiscal year of the Joint Meeting.

Pursuant to the Federal Water Pollution Control Act Amendments of 1972, PL 92-500 and as a requirement of our Construction Grant for the expansion in Secondary Treatment, a "User Charge System" is used to apportion the operation and maintenance costs for the Joint Meeting for 2023. During the year 1978, a User Charge System was prepared and adopted by the member municipalities and is entitled "An Ordinance Establishing and Defining User Charges in Connection with the Collection and Treatment of Wastewater and Providing for the Payment of Said User Charges". During the year 2022, this "User Charge System" was utilized by the various municipalities for collection of the charges associated with the operation and maintenance of the trunk sewer system, the treatment plant, and the Sludge Dewatering Facility, the percentage of assessment based upon a report dated December 17, 2021.

During 2022, the various municipalities computed the actual dwelling units for each of their respective towns in accordance with the revised schedule included in the Sewer Use Ordinance. Table II depicts the new (2023) dwelling unit figures formulated by each municipality in 2022.

It should be noted that the methodology used to assess the City of Elizabeth for services rendered by the Joint Meeting is based on quantity and quality of sewage as measured at the Trenton Avenue Pumping Station, plus the Equivalent Dwelling Units (EDU's) tributary to the gravity Joint Meeting sewer through the Elmora Avenue Area in Elizabeth, plus the tributary area from the City of Linden. This methodology was approved by the Joint Meeting and the Elizabeth City Council. The percentage used in this assessment report for the City will be based upon a twelve (12) month, 365 day period of November 1, 2021, through October 31, 2022 and projected for a twelve (12) month period in 2023. This allocation will be assessed and paid in accordance with the member municipalities billing procedure. Then, based on the analysis of the samples taken at the Trenton Avenue Pumping Station, an adjustment is made (on a quarterly basis) to the percent allocation from the City. At the end of 2023, utilizing twelve (12) months of data, the actual percent contribution by the City will be calculated and certified thereto.

The accompanying computations include the total Dwelling Unit number of 47,181 for the City. (This Equivalent Dwelling Unit number was computed by Elson T. Killam Associates during the period November 8, 1979 and December 12, 1979 and revised by the City Engineer on February 9, 1982).

USER CHARGE APPORTIONMENT

Set forth below are the basis factors concerning flow, waste characteristics and projected cost of operations of the Facilities derived for the 365 day period from November 1, 2021, through October 31, 2022, and projected for 2023 and are based upon actual 2021-2022 operating statistics as well as a recent upgraded 2022 industrial waste survey. The industrial waste figures take into consideration actual yearly operational time for each industry (i.e., 5 day or 7 day working week, etc.).

1.	Flow	19,402.3080	MG/Year	53.1570	MGD
2.	BOD	19,769.2269	Tons/Year	108,324.5310	Lbs/Day
	TSS	15,672.1750	Tons/Year	85,874.9315	Lbs/Day
3.	Estimated Industrial Flow	572.6150	MG/Year	1.5688	MGD
4.	Estimated Industrial BOD	5,503.8423	Tons/Year	30,158.0400	Lbs/Day
5.	Estimated Industrial TSS	601.8736	Tons/Year	3,297.9376	Lbs/Day
6.	Estimated Total Operating Expenses in 2023				
				\$28,883,313	STP
				10,313,087	SDWF
				320,168	SDF
				1,616,180	Sewers
				<u>\$41,132,748</u>	Total
7.	Estimated Total Dwelling Units in System				
				150,865	JM Members
				47,181	Elizabeth
				<u>198,046</u>	Total

In addition to the foregoing, it has been determined that the following cost allocations would fairly represent the actual costs of treatment.

Flow	33.7118335%
BOD	44.1568922%
Suspended Solids	22.1312743%

The basis for these cost allocations is set forth in Appendix A.

Based upon the foregoing allocations, Table I has been prepared which shows the projected and estimated flow and waste characteristics for 2023 and the projected estimated cost allocation between domestic sewage treated from residential and commercial establishments, and the industrial waste treatment reflecting industrial flow from industries in the collection system. This system takes into consideration the fact that the City of Elizabeth does not use the trunk sewer and will accordingly not be charged for its use. The trunk sewer charge is assessed only against member municipalities, and their respective industries.

Table I
Joint Meeting of Essex & Union Counties
Estimated Flow Waste Characteristics and Cost Allocation for Treatment in 2023

Treatment Plant

	<u>Total for 2023</u>		<u>Domestic & Commercial</u>		<u>Industrial</u>
Flow	19,402.3080	MG/Yr. ¹	18,829.6930	MG/Yr.	572.6150 MG/Yr.
BOD	19,769.2269	Tons/Yr. ¹	14,265.3846	Tons/Yr.	5,503.8423 Tons/Yr.
Suspended Solids	15,672.1750	Tons/Yr. ¹	15,070.3014	Tons/Yr.	601.8736 Tons/Yr.

(1) Based upon data from November 1, 2021 thru October 31, 2022 (365 days)

Cost Allocation

	<u>Total for 2023</u>		<u>Domestic & Commercial</u>		<u>Industrial</u>
Flow	\$13,320,074.00		\$12,926,962.00		\$393,112.00
BOD	17,447,080.50		12,589,734.00		4,857,346.50
Suspended Solids	8,744,413.50		8,408,593.00		335,820.50
	<u>\$39,511,568.00</u>		<u>\$33,925,289.00</u>		<u>\$5,586,279.00</u>
	100.000000%		85.86166210%		14.13833790%

Elizabeth Contribution

Flow	-	5,972.1890	MG/Yr.
BOD	-	9,119.0681	Tons/Yr.
TSS	-	4,041.6986	Tons/Yr.

Trunk Sewer Flow¹

<u>Total for 2023</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
13,430.1190 MG/Yr. ²	13,025.1730 MG/Yr.	404.946 MG/Yr.

(1) Based upon data from November 1, 2021 thru October 31, 2022 (365 days)

(2) (19,402.308 - 5,972.1890)

COST ALLOCATION

\$1,616,180.00	\$1,567,448.81	\$48,731.19
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Member municipalities will be assessed \$10.39 (\$1,567,448.81/150,865) for trunk sewer O&M per equivalent dwelling unit.

The estimated cost for treating industrial wastes has been determined to be \$686.52 per MG for flow, \$882.54 per ton of BOD, and \$557.96 per ton of suspended solids. These estimates are predicated upon the cost allocation to industry and the estimates of flow and strength characteristics of the industrial waste, all as indicated on Table I. These costs were determined as follows:

Flow	\$393,112.00	/	572.6150	=	\$686.5206116	/MG
BOD	\$4,857,346.50	/	5,503.8423	=	\$882.5373685	/Ton
Suspended Solids	\$335,820.50	/	601.8736	=	\$557.9584963	/Ton

All industries within the member municipalities (excluding Elizabeth) will be required to pay an additional \$120.34/MG of flow for trunk sewer use (\$48,731.19/404.946 = \$120.340/MG). This brings the total flow cost to \$806.86/MG (\$686.520 + \$120.340) for the indicated industries of member municipalities.

Based upon the user charges for 2023, a computation has been made to show the budget prepayment for each municipality of the Joint Meeting. These estimates are subject to revision annually, dependent upon the actual number of dwelling units which must be determined for each municipality in accordance with the schedule of dwelling units set forth in the ordinance. In addition thereto, the computation for the industrial user charges has been based upon actual calculations of flow and waste characteristics for the industries in the district as a result of the 2022 industrial waste survey of the service area. These are estimates for 2023 and must be verified on an annual basis to reflect the actual flow and waste characteristics.

The basis for the industrial waste flow and characteristics are set forth in Appendix B of this report. The dwelling unit figures have been compiled by each municipality with the exception of Elizabeth in accordance with the revised Schedule of Dwelling Units incorporated into the User Charge Ordinance.

Table VII sets forth the cost to each municipality to establish the budget requirements of \$41,132,748.00 for 2023. However, it should be noted that in accordance with the Agreement between the Joint Meeting and the City of Elizabeth noted previously, and as a result of the monitoring of the Trenton Avenue Pumping Station, the City would provide for 37.9166650% of the treatment plant, sludge dewatering facility and sludge drying facility budgets initially with adjustments made quarterly. Upon completion and verification of the quality and quantity of the City's contribution as measured at the Trenton Avenue Pumping Station, plus the EDU's from the Elmora Avenue area, plus the City of Linden's contribution, an adjustment will then be made for the member municipalities.

Table II
Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Municipality Dwelling Units and Industrial User Charge
2023

<u>Municipality</u>	<u>Dwelling Units ¹</u>	<u>User Charges Industrial</u>
East Orange	7,981	\$ -
Hillside	8,573	1,895,687
Irvington	26,627	345,442
Maplewood	9,912	21,893
Millburn	10,111 ⁴	-
Newark	12,989	-
Roselle Park	4,935	859
South Orange	8,300	-
Summit	14,422 ²	53,814 ³
Union	26,176	707,254
West Orange	20,839	-
Elizabeth	47,181	2,610,060
	<u>198,046</u>	<u>\$ 5,635,009</u>

(1) Based on actual calculation and verification by Municipalities; City of Elizabeth computed by Elson T. Killam Associates in 1979 and updated by City Engineer on February 9, 1982.

(2) Includes New Providence (3571)

(3) Includes Murray Hill

(4) Includes Livingston (485)

Table III
Joint Meeting of Essex and Union Counties
Computation of Estimated Percent
Contribution By City of Elizabeth
For Period 11/1/2021-10/31/2022 and Projected Contribution for 2023

Flow:	<u>Treatment Plant</u>	<u>Elizabeth Pumping Station</u>		<u>Joint Meeting</u>	
	19,402.308 MG	5,972.189 MG		13,430.119 MG	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		153.576	5,818.613	404.946	13,025.173
		\$ 105,433.09	\$ 3,994,597.76	\$ 326,734.97	\$ 10,509,498.68
Unit Charge \$ 686.5206116 Per MG for Elizabeth					
Unit Charge \$ 806.8605829 Per MG for Joint Meeting					
BOD:	19,769.2269 Tons	9,119.0681 Tons		10,650.1588 Tons	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		2,657.4509	6,461.6172	2,808.1923	7,841.9665
		\$ 2,345,299.72	\$ 5,702,618.64	\$ 2,478,334.64	
Unit Charge	\$882.5373685 Per Ton				
TSS:	15,672.1750 Tons	4,041.6986 Tons		11,630.4764 Tons	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		202.504	3,839.1946	394.08052	11,236.39588
		\$ 112,988.83	\$ 2,142,111.25	\$ 219,880.57	
Unit Charge	\$557.9584963 Per Ton				
			\$ 14,403,049.29	\$ 3,024,950.18	

City of Elizabeth (Contribution from Pumping Station) \$ 14,403,049.29

City of Elizabeth (Industry Tributary to Joint Meeting Trunk)

Flow:	14.0930 MG/Year at	\$ 686.5206116	9,675.13
BOD:	38.1991 Tons/Year at	882.5373685	33,712.13
TSS:	5.2891 Tons/Year at	557.9584963	2,951.10

Joint Meeting Industrial	3,024,950.18
Subtotal	\$ 17,474,337.83

Total 2023 Budget	\$ 41,132,748.00
Subtotal (above)	(17,474,337.83)
Subtotal (EDU's)	\$ 23,658,410.17

Joint Meeting EDU's (X + Y) + Elmora EDU's (X) = \$ 23,658,410
 (Y = Additional Assessment to Member Municipalities for Trunk Sewer O&M)
 150,865 (X + \$10.38974454) + 3737 (X) = \$ 23,658,410

Equivalent Units-Member Municipalities 150,865

Elmora EDU's =	3,737	\$ 142.8892340330	Per Unit = X
		\$ 153.2789785730	Per Unit = X+Y

Joint Meeting EDU Assessment	\$ 23,124,433.10
Elmora Area Assessment	\$ 533,977.07

Total Anticipated Payment from the City of Elizabeth

Pumping Station	\$ 14,403,049.29
Elmora EDU's	533,977.07
Elmora Industrial	46,338.36
	<hr/>
	\$ 14,983,364.72

Total Anticipated Payment from Member Municipalities

EDU's	23,124,433.10
Industrial	3,024,950.18
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	\$ 26,149,383.28

Estimated Percent Contribution of Treatment Plant, Sludge Dewatering and Sludge Drying Facility Budgets by
 City of Elizabeth

\$ 14,983,364.72	/	\$ 39,516,568.00	=	37.9166650%
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Table IV
Joint Meeting of Essex and Union Counties
Percent Allocation of Infiltration / Inflow

Municipality	Capacity By Contract (MGD)	Capacity By Contract (Percent)	Base Year - 1982 Phase IIB - SSES ¹		Base Year - 1982 Phase IIB - SSES ²		Base Year - 1982 Phase IIB - SSES ²		Base Year - 1982 Phase IIB - SSES ²	
			Infiltration (GPD) ³	(Percent)	SSES - November 2022 (GPD) ⁴	(Percent)	Inflow (GPD)	(Percent)	SSES - November 2022 (GPD) ⁵	(Percent)
					30,684				231,980	
East Orange	5.50	4.88%	70,747	2.11%	44,022	2.53%	3,007,440	5.79%	218,160	0.65%
					23,043				1,252,692	
Hillside	12.20	10.83%	79,012	2.36%	32,980	1.90%	1,185,120	2.28%	1,185,120	3.51%
					374,026				7,169,968	
Irvington	18.61	16.52%	1,115,672	33.31%	536,583	30.84%	8,612,640	16.57%	6,782,445	20.09%
					137,410				2,005,735	
Maplewood	7.08	6.29%	389,078	11.62%	197,233	11.33%	5,449,680	10.48%	1,897,920	5.62%
					106,120				2,466,126	
Millburn	6.00	5.33%	191,609	5.72%	152,240	8.75%	2,729,520	5.25%	2,333,520	6.91%
					130,739				2,027,149	
Newark	15.50	13.76%	234,484	7.00%	187,506	10.78%	1,959,540	3.77%	1,915,875	5.68%
					45,359				1,666,687	
Roselle Park	9.44	8.38%	106,187	3.17%	65,147	3.74%	1,576,080	3.03%	1,576,080	4.67%
					58,457				1,862,978	
South Orange	7.00	6.22%	410,876	12.27%	83,906	4.82%	2,183,760	4.20%	1,761,840	5.22%
					45,116				1,684,532	
Summit	7.50	6.66%	171,657	5.13%	64,802	3.72%	3,651,120	7.02%	1,594,800	4.72%
					163,485				8,540,434	
Union	10.30	9.14%	329,127	9.83%	234,523	13.48%	14,534,640	27.96%	8,079,280	23.93%
					98,358				6,780,956	
West Orange	13.50	11.99%	250,811	7.48%	141,147	8.11%	7,097,040	13.65%	6,413,400	19.00%
					1,212,797				35,689,237	
	112.63	100.00%	3,349,260	100.00%	1,740,089	100.00%	51,986,580	100.00%	33,758,440	100.00%

(1) Identified by Hazen & Sawyer Phase IIB SSES (pg. S-2) with trunk sewer infiltration allocated based on contract capacity.

(2) Identified by Hazen & Sawyer Phase IIB SSES (pg. S-3)

(3) "Base Year - 1982" Infiltration: 3.35 MGD / 52.79 MGD = 6.346%

(4) 2022 - Infiltration related to base year total = 1.740 MGD / 52.79 MGD = 3.29607880%

- Adjusted for period 11/1/2021 - 10/31/2022; (3.29607880% x 13,430.1190 = 442.67 MG / Year / 365 = 1,212,797 GPD)

(5) 2022 inflow adjusted for period 11/1/2021 - 10/31/2022 - (35.12" / 33.22") x (33,758,440) = 35,689,237 GPD

Table IV - A
Joint Meeting of Essex and Union Counties
Adjusted 2022 - Summary of Infiltration and Inflow

Municipality	Phase IIB SSES Infiltration (GPD)	2021 Infiltration (GPD)	2022 Infiltration Removed (GPD)	2022 Infiltration (GPD)	Phase IIB SSES Inflow (GPD)	2021 Inflow (GPD)	2022 Inflow Removed (GPD)	2022 Inflow (GPD)
East Orange	70,747	44,022	-	44,022	3,007,440	218,160	-	218,160
Hillside	79,012	32,980	-	32,980	1,185,120	1,185,120	-	1,185,120
Irvington	1,115,672	790,023	253,440	536,583	8,612,640	6,782,445	-	6,782,445
Maplewood	389,078	197,233	-	197,233	5,449,680	1,897,920	-	1,897,920
Millburn	191,609	152,240	-	152,240	2,729,520	2,333,520	-	2,333,520
Newark	234,484	187,506	-	187,506	1,959,540	1,915,875	-	1,915,875
Roselle Park	106,187	65,147	-	65,147	1,576,080	1,576,080	-	1,576,080
South Orange	410,876	83,906	-	83,906	2,183,760	1,761,840	-	1,761,840
Summit	171,657	64,916	114	64,802	3,651,120	1,604,880	10,080	1,594,800
Union	329,127	234,523	-	234,523	14,534,640	8,079,280	-	8,079,280
West Orange	250,811	141,147	-	141,147	7,097,040	6,413,400	-	6,413,400
Total	3,349,260	1,993,643	253,554	1,740,089	51,986,580	33,768,520	10,080	33,758,440

Table V

Joint Meeting of Essex and Union Counties

Cost Allocation - Flow, BOD & TSS with Infiltration / Inflow

			<u>Total</u>		<u>Domestic & Commercial</u>		<u>Industrial</u>	
Flow			13,430.1190	MG	13,025.1730	MG	404.9460	MG
			\$10,260,897.04		\$9,934,162.07		\$326,734.97	
Infiltration	3.2960788%		442.67		429.32	\$327,437.84	13.35	
Inflow	10.7845656%		1,448.38		1,404.71	\$1,071,357.50	43.67	
BOD	at	\$882.5373685 Per Ton	10,650.1588	Tons	7,841.9665	Tons	2,808.1923	Tons
			\$9,399,163.12		\$6,920,828.48		\$2,478,334.64	
TSS	at	\$557.9584963 Per Ton	11,630.4764	Tons	11,236.3959	Tons	394.0805	Tons
			\$6,489,323.12		\$6,269,442.55		\$219,880.57	
Total			\$26,149,383.28	¹	\$23,124,433.10		\$3,024,950.18	

(1) Amount anticipated from Members after allocation of 37.9166650% to City of Elizabeth \$ 14,983,364.72

"Base Year - 1982"

Infiltration: 3.35 MGD / 52.79 MGD = 6.34590% (Per H&S Phase IIB Report)

Inflow: 113 MGD (Excluding Elizabeth) / 137 MGD (Total) = 82.4817518% 1 inch of rain = 50 MG of inflow (Per H&S Phase IIB Report)

"2021 - 2022"

Infiltration: 1.740 MGD/52.79MGD = 3.29607880% X 13,430.1190 442.67 MG / Year
(November 1, 2021 - October 31, 2022)

Inflow: Rainfall = 35.12 Inches X 50 MG X 82.482% 1,448.38 MG / Year

Total D&C	\$23,124,433.10
Less: Infiltration	(327,437.84)
Less: Inflow	(1,071,357.50)
Net after infiltration and inflow	<u>\$21,725,637.76</u>
Equivalent Dwelling Units	150,865
User Charge Per Unit	\$144.00714387035

Table VI
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
2023

Domestic & Commercial								
Municipality	Dwelling Units	User Charge	Infiltration		Inflow		Total Cost	Unit Cost
		\$ 144.00714387	Percent ¹	Amount	Percent ²	Amount		
		Per Unit						
East Orange	7,981	\$1,149,321.02	2.53%	\$8,284.18	0.65%	\$6,963.82	\$1,164,569.02	\$145.9177
Hillside	8,573	1,234,573.24	1.90%	6,221.32	3.51%	37,604.65	1,278,399.21	149.1192
Irvington	26,627	3,834,478.22	30.84%	100,981.83	20.09%	215,235.72	4,150,695.77	155.8830
Maplewood	9,912	1,427,398.81	11.33%	37,098.71	5.62%	60,210.29	1,524,707.81	153.8244
Millburn	10,111 ³	1,456,056.23	8.75%	28,650.81	6.91%	74,030.80	1,558,737.84	154.1626
Newark	12,989	1,870,508.79	10.78%	35,297.80	5.68%	60,853.11	1,966,659.70	151.4096
Roselle Park	4,935	710,675.26	3.74%	12,246.18	4.67%	50,032.40	772,953.84	156.6269
South Orange	8,300	1,195,259.29	4.82%	15,782.50	5.22%	55,924.86	1,266,966.65	152.6466
Summit	14,422 ⁴	2,076,871.03	3.72%	12,180.69	4.72%	50,568.07	2,139,619.79	148.3580
Union	26,176	3,769,531.00	13.48%	44,138.62	23.93%	256,375.85	4,070,045.47	155.4877
West Orange	20,839	3,000,964.87	8.11%	26,555.21	19.00%	203,557.93	3,231,078.01	155.0496
	150,865	\$21,725,637.76	100.00%	\$327,437.85	100.00%	\$1,071,357.50	\$23,124,433.11	\$153.2790

(1) See Table IV - Infiltration for November of the Prior Year

(2) See Table IV - Inflow for November of the Prior Year

(3) Includes Livingston (485)

(4) Includes New Providence (3571)

\$159.4100 2022

\$147.2083 2021

\$145.3391 2020

\$150.2422 2019

Table VI (Continued)
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
2023

Industrial										
Municipality	BOD (Tons / Year)	BOD ¹ (\$/Year)	TSS (Tons / Year)	TSS ² (\$/Year)	Flow (MG / Year)			Flow ³ (\$/Year)	Total Cost	
					Dry Weather	Infiltration 3.296079%	Inflow 10.784566%			
East Orange	0.0000	\$0.00	0.0000	\$0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
Hillside	1,855.9540	1,637,948.76	165.8770	92,552.48	175.90	6.75	22.08	204.73	165,186.15	1,895,687.39
Irvington	356.0790	314,253.02	9.7639	5,447.85	27.41	1.05	3.44	31.90	25,741.27	345,442.14
Maplewood	14.2003	12,532.30	5.8579	3,268.47	6.49	0.25	0.81	7.55	6,092.60	21,893.37
Millburn	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Newark	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roselle Park	0.2169	191.42	0.3317	185.07	0.51	0.02	0.06	0.60	482.50	858.99
South Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Summit ⁴	13.6151	12,015.83	10.6687	5,952.70	38.17	1.46	4.79	44.43	35,845.59	53,814.12
Union	568.1270	501,393.31	201.5813	112,474.00	99.44	3.82	12.48	115.74	93,386.85	707,254.16
West Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2,808.1923	\$2,478,334.64	394.0805	\$219,880.57	347.93	13.35	43.67	404.95	\$326,734.97	\$3,024,950.18

(1) At \$882.5373685/Ton

(2) At \$557.9584963/Ton

(3) At \$806.8605829/MG

(4) Includes Murray Hill

Table VII
Joint Meeting of Essex and Union Counties
Summary of Estimated Annual Operational and Maintenance Expenses To Member Municipalities
2023

Domestic & Commercial					
Municipality	Total Assessments ¹	User Charge	User Charges Industrial	Infiltration / Inflow Charges	Assessment Percentage
		Domestic Sewage 144.0071439			
East Orange	\$1,164,569.02	\$1,149,321.02	\$0.00	\$15,248.00	4.4535%
Hillside	3,174,086.60	1,234,573.24	1,895,687.39	43,825.97	12.1383%
Irvington	4,496,137.91	3,834,478.22	345,442.14	316,217.55	17.1940%
Maplewood	1,546,601.18	1,427,398.81	21,893.37	97,309.00	5.9145%
Millburn	1,558,737.84	1,456,056.23	0.00	102,681.61	5.9609%
Newark	1,966,659.70	1,870,508.79	0.00	96,150.91	7.5209%
Roselle Park	773,812.83	710,675.26	858.99	62,278.58	2.9592%
South Orange	1,266,966.65	1,195,259.29	0.00	71,707.36	4.8451%
Summit	2,193,433.91	2,076,871.03	53,814.12	62,748.76	8.3881%
Union	4,777,299.63	3,769,531.00	707,254.16	300,514.47	18.2693%
West Orange	3,231,078.01	3,000,964.87	0.00	230,113.14	12.3562%
	\$26,149,383.29	\$21,725,637.76	\$3,024,950.18	\$1,398,795.35	100.0000%
Elizabeth	14,983,364.71				
Total	\$41,132,748.00				

(1) Reflects anticipated payment of \$14,983,364.71 from the City of Elizabeth which is 37.916665% of allocation from Treatment Plant, Sludge Dewatering, and Sludge Drying budget. Exact 2023 percent contribution to be calculated at the end of fiscal year. Quarterly adjustments to be made in accordance with Agreement between Elizabeth and Joint Meeting.

Table VIII
Joint Meeting of Essex and Union Counties
Comparison of 2023 Assessment with 2022 Assessment

Municipality	2022	2023		Comparison	
				Amount	Percentage
East Orange	\$1,201,956.08	\$1,164,569.02	(-)	(\$37,387.06)	-3.11%
Hillside	3,137,144.90	3,174,086.60	(+)	36,941.70	1.18%
Irvington	4,708,419.25	4,496,137.91	(-)	(212,281.34)	-4.51%
Maplewood	1,589,485.54	1,546,601.18	(-)	(42,884.36)	-2.70%
Millburn	1,597,278.93	1,558,737.84	(-)	(38,541.09)	-2.41%
Newark	2,017,762.28	1,966,659.70	(-)	(51,102.58)	-2.53%
Roselle Park	806,817.90	773,812.83	(-)	(33,005.07)	-4.09%
South Orange	1,313,922.02	1,266,966.65	(-)	(46,955.37)	-3.57%
Summit	2,259,521.64	2,193,433.91	(-)	(66,087.73)	-2.92%
Union	4,732,954.29	4,777,299.63	(+)	44,345.34	0.94%
West Orange	3,339,935.09	3,231,078.01	(-)	(108,857.08)	-3.26%
	\$26,705,197.92	\$26,149,383.29	(-)	(\$555,814.63)	-2.08%
Elizabeth	11,749,802.08	14,983,364.71	(+)	\$ 3,233,562.63	27.52%
Total	\$38,455,000.00	\$41,132,748.00	(+)	\$2,677,748.00	6.96%

Note: City of Elizabeth percentage contribution of Treatment Plant, Sludge Dewatering, and Sludge Drying Budget:

City of Elizabeth percentage	
2019	32.79334100%
2020	35.79934530%
2021	32.66022930%
2022	31.88894820%

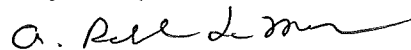
Table III, IV, V, VI, and VII, have been prepared to reflect the Domestic Sewer Usage and Industrial User assessment to each municipality for 2023 as a result of the Agreement with the City of Elizabeth which requires 37.9166650% of the 2023 Treatment Plant, Sludge Dewatering and Sludge Drying Budget to be paid in Quarterly assessments with adjustments made following the determination of the actual percentage of contribution for each quarter. The 37.9166650% figure is an estimate based upon actual monitoring of quality and quantity at the Trenton Avenue Pumping Station, etc., in accordance with the Agreement. The actual percentage of contribution will be determined following the completion of the annual audit of expenses. In addition, these tables reflect the costs associated with Infiltration / Inflow for the member municipalities, the percentages of which were determined from the Phase IIB SSES Reports, adjusted as a result of rehabilitation work, and updated in 2017.

Summary and Certification

On the basis of the measured usage of Section One of the Supplementary Joint Trunk Sewer and the Treatment Plant, including the Sludge Dewatering and Sludge Drying Facilities, and an estimate of Dwelling Units and Waste Characteristics for the municipalities organized in Joint Meeting, and in accordance with the provisions of the 1926 contract, I hereby certify that the estimated maintenance and operating costs of the Joint Meeting for the 2023 are apportioned as follows:

	<u>2023</u>	<u>2022</u>		<u>2023</u>	<u>2022</u>
East Orange	4.4535%	4.5008%	Roselle Park	2.9592%	3.0212%
Hillside	12.1383%	11.7473%	South Orange	4.8451%	4.9201%
Irvington	17.1940%	17.6311%	Summit	8.3881%	8.4610%
Maplewood	5.9145%	5.9520%	Union	18.2693%	17.7230%
Millburn	5.9609%	5.9812%	West Orange	12.3562%	12.5066%
Newark	7.5209%	7.5557%	Total	<u>100.0000%</u>	<u>100.0000%</u>

Respectfully submitted,



A. Ralph LaMendola. P.E., BCEE

**Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A
2023 Budget**

	Treatment Plant	Dewatering Facility	Drying Facility	Sewer	Total
Electric Service	\$ 1,200,000	\$ 400,000	\$ -	\$ -	\$ 1,600,000
Gas Service	1,026,400	135,800	-	-	1,162,200
Fuel, Oil & Kerosene	115,250	114,750	-	-	230,000
Water Service	130,000	120,000	3,000	-	253,000
Chemicals	5,985,443	1,208,400	6,800	9,000	7,209,643
Sludge Disposal	-	3,468,528	-	-	3,468,528
Insurance	789,979	157,996	73,731	31,599	1,053,305
Administration	3,489,428	2,090,663	10,000	401,747	5,991,838
Labor	5,175,211	1,059,844	143,177	364,619	6,742,851
Benefits	3,822,102	723,856	78,460	100,965	4,725,383
Equipment	265,000	72,000	-	-	337,000
Printing & Stationery	17,000	2,000	-	1,000	20,000
Maintenance, Supplies & Spare Parts	2,211,500	589,250	5,000	612,250	3,418,000
Screening Disposal	280,000	-	-	-	280,000
Reserve Contingency	250,000	-	-	-	250,000
Miscellaneous Expenses	390,000	100,000	-	60,000	550,000
Technical & Professional Services	1,061,000	50,000	-	25,000	1,136,000
Replacement Fund	2,000,000	-	-	-	2,000,000
NJPDES & Miscellaneous Permit Fee	675,000	20,000	-	10,000	705,000
	\$ 28,883,313	\$ 10,313,087	\$ 320,168	\$ 1,616,180	\$ 41,132,748
	70.22%	25.07%	0.78%	3.93%	100.00%

Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A (Continued)
Operations and Management Cost Allocations
(Treatment Plant)

	Estimated Total Cost	Percent Flow	Cost Flow	Percent SS	Cost SS	Percent BOD	Cost BOD
General Expenditures 1	\$ 6,213,822	80%	\$ 4,971,058	10%	\$ 621,382	10%	\$ 621,382
Power	1,200,000	40%	\$ 480,000	5%	\$ 60,000	55%	\$ 660,000
Chlorine	3,762,000	40%	\$ 1,504,800			60%	\$ 2,257,200
Maintenance, Equipment, Supplies, Spare Parts, & Replacement Fund	4,726,500	28%	\$ 1,323,420	27%	\$ 1,276,155	45%	\$ 2,126,925
Fuel, Oil & Kerosene	115,250	40%	\$ 46,100	30%	\$ 34,575	30%	\$ 34,575
Administration, Labor & Benefits (Payroll Retirement)	12,486,741	40%	4,994,696	10%	\$ 1,248,674	50%	\$ 6,243,371
Sludge Processing 2	374,000			50%	\$ 187,000	50%	\$ 187,000
Total	\$28,878,313	100%	\$ 13,320,074		\$ 3,427,786		\$ 12,130,453
			46.1248342%		11.8697585%		42.0054073%

(1) General Expenditures
(From the Approved Budget)

Insurance	\$ 789,979
Technical & Professional Services	1,061,000
Stationery & Printing	17,000
Gas	1,026,400
Water	130,000
Miscellaneous	390,000
Service Contracts	280,000
Permit Fees	675,000
Sodium Bisulfite & Misc. Chemicals	1,844,443
	<u>\$6,213,822</u>

(2) Sludge Processing

Polymer	\$ 324,000
K2MnO4	50,000
	<u>\$ 374,000</u>

**Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A (Continued)
Operations and Management Allocations**

	Estimated			
	Total Cost	Cost Flow	Cost TSS	Cost BOD
Treatment Plant	\$ 28,878,313	\$ 13,320,074	\$ 3,427,786	\$12,130,453
Dewatering Facility	10,313,087		5,156,544	5,156,544
Drying Facility	320,168		160,084	160,084
	<u>\$ 39,511,568</u>	<u>\$ 13,320,074</u>	<u>\$ 8,744,414</u>	<u>\$17,447,081</u>
Subtotal	100.00%	33.7118335%	22.1312743%	44.1568922%
Sewers 1	\$ 1,616,180			
Total	<u>\$ 41,132,748</u>			

(1) Joint Meeting Members Only

JOINT MEETING OF ESSEX & UNION COUNTIES

**INDUSTRIAL USER CHARGE - 2023
SUMMARY**

MUNICIPALITY	FLOW (MG)	LOADINGS	
		BOD (tons)	TSS (tons)
HILLSIDE	204.727	1855.954	165.877
IRVINGTON	31.903	356.079	9.7639
MAPLEWOOD	7.551	14.2003	5.8579
MURRAY HILL	12.292	0.2563	1.2302
ROSELLE PARK	0.598	0.2169	0.3317
SUMMIT	32.134	13.3588	9.43852
UNION	115.741	568.127	201.5813
<i>MEMBERS TOTAL</i>	404.946	2808.193	394.0802
<i>ELIZABETH</i>	167.669	2695.650	207.7931
GRAND TOTAL	572.615	5503.8428	601.8732

MUNICIPALITY	FLOW	COSTS		TOTAL
		BOD	TSS	
HILLSIDE	\$165,186.15	\$1,637,948.78	\$92,552.31	\$1,895,687.23
IRVINGTON	\$25,741.27	\$314,253.08	\$5,447.84	\$345,442.20
MAPLEWOOD	\$6,092.60	\$12,532.31	\$3,268.48	\$21,893.39
MURRAY HILL	\$9,917.93	\$226.18	\$686.39	\$10,830.51
ROSELLE PARK	\$482.50	\$191.47	\$185.05	\$859.02
SUMMIT	\$25,927.66	\$11,789.63	\$5,266.30	\$42,983.59
UNION	\$93,386.85	\$501,393.68	\$112,474.00	\$707,254.53
<i>MEMBERS TOTAL</i>	\$326,734.97	\$2,478,335.13	\$219,880.38	\$3,024,950.48
<i>ELIZABETH</i>	\$115,108.22	\$2,379,011.81	\$115,939.91	\$2,610,059.95
GRAND TOTAL	\$441,843.19	\$4,857,346.95	\$335,820.29	\$5,635,010.42

JOINT MEETING OF ESSEX & UNION COUNTIES

**INDUSTRIAL USER CHARGE - 2023
COST FACTORS**

	FLOW	BOD	TSS
MEMBER MUNICIPALITIES	\$806.8605829	\$882.5373685	\$557.9584963
ELIZABETH	\$686.5206116	\$882.5373685	\$557.9584963

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: HILLSIDE

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685		\$557.9584963	
					FLOW (MG)	BOD (Tons)	TSS (Tons)		
1050	Manhattan Drug Co.	4	581	707	0.574	1.3907	1.6923		
		99	250	196	0.062	0.0646	0.0507		
	Totals:				0.636	1.4553	1.7429		
	Cost Analysis:				\$513.16	\$1,284.36	\$972.49		\$2,770.01
1094	AAK Foodservice	3	3880	2035	13.800	223.2785	117.1061		
	(Formerly Oasis Foods)	99	250	196	1.266	1.3198	1.0347		
	Totals:				15.066	224.5983	118.1408		
	Cost Analysis:				\$12,156.16	\$198,216.38	\$65,917.68		\$276,290.22
1090	Union Beverage	1	2115	53	180.642	1593.1812	39.9237		
		99	250	196	1.315	1.3709	1.0748		
	Totals:				181.957	1594.5520	40.9985		
	Cost Analysis:				\$146,813.93	\$1,407,251.76	\$22,875.44		\$1,576,941.13
1091	Hillside Beverage	2	1598	66	3.884	25.8817	1.0690		
		99	250	196	0.199	0.2075	0.1626		
	Totals:				4.083	26.0891	1.2316		
	Cost Analysis:				\$3,294.41	\$23,024.62	\$687.18		\$27,006.21
1092	A&H Products	1	775	309	2.808	9.0748	3.6182		
		99	250	196	0.177	0.1845	0.1447		
	Totals:				2.985	9.2593	3.7629		
	Cost Analysis:				\$2,408.48	\$8,171.66	\$2,099.52		\$12,679.65
1093	*Sam Hak Foods	1	0	0	0.000	0.0000	0.0000		
		99	0	0	0.000	0.0000	0.0000		
	Totals:				0.000	0.0000	0.0000		
	Cost Analysis:				\$0.00	\$0.00	\$0.00		\$0.00

HILLSIDE TOTALS

204.7270	1,855.9540	165.8767	
\$165,186.15	\$1,637,948.78	\$92,552.31	\$1,895,687.23

*Sam Hak Foods - Did not discharge during this Assessment Period

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: IRVINGTON

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685	TSS per Ton \$557.9584963	
2066	Wayne County Foods	1	6333	154	0.178	4.7007	0.1143	
		99	250	196	0.113	0.1178	0.0924	
	Totals:			0.291	4.8185	0.2067		
	Cost Analysis:			\$234.80	\$4,252.54	\$115.31		
2081	CP Laundry (Formerly Clean-Tex)	1	218	50	6.720	6.1089	1.4011	
		99	250	196	0.286	0.2982	0.2338	
	Totals:			7.006	6.4070	1.6349		
	Cost Analysis:			\$5,652.87	\$5,654.45	\$912.19		
2078	City Barrel	1	167	9	0.476	0.3315	0.0179	
		99	250	196	0.197	0.2054	0.1610	
	Totals:			0.673	0.5369	0.1789		
	Cost Analysis:			\$543.02	\$473.79	\$99.81		
3050	Maplewood Beverage	2	3493	76	23.616	343.9862	7.4844	
		99	250	196	0.317	0.3305	0.2591	
	Totals:			23.933	344.3166	7.7435		
	Cost Analysis:			\$19,310.59	\$303,872.30	\$4,320.54		
IRVINGTON TOTALS					31.9030	356.0791	9.7639	
					\$25,741.27	\$314,253.08	\$5,447.84	\$345,442.20

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: MAPLEWOOD

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685		\$557.9584963	
					FLOW (MG)	BOD (Tons)		TSS (Tons)	
3033	NJ Transit - Hilton Gar.	3a	335	734	1.724	2.4083		5.2768	
		4	897	25	2.703	10.1105		0.2818	
	Totals:				4.427	12.5189		5.5586	
	Cost Analysis:				\$3,571.97	\$11,048.38		\$3,101.45	\$17,721.81
3046	UniClean	1	120	10	2.906	1.4542		0.1212	
		99	250	196	0.218	0.2273		0.1782	
	Totals:				3.124	1.6814		0.2994	
	Cost Analysis:				\$2,520.63	\$1,483.92		\$167.03	\$4,171.58
MAPLEWOOD TOTALS					7.5510	14.2003		5.8579	
					\$6,092.60	\$12,532.31		\$3,268.48	\$21,893.39

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: MURRAY HILL

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685		\$557.9584963	
					FLOW (MG)	BOD (Tons)		TSS (Tons)	
5010	Nokla	1	5	24	12.292	0.2563		1.2302	
		Totals:			12.292	0.2563		1.2302	
		Cost Analysis:			\$9,917.93	\$226.18		\$686.39	\$10,830.51
MURRAY HILL TOTALS					12.2920	0.2563		1.2302	
					\$9,917.93	\$226.18		\$686.39	\$10,830.51

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: ROSELLE PARK

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685	TSS per Ton \$557.9584963	
6005	Hexacon Electric	2	87	133				
	Totals:				0.598	0.2169	0.3317	
	Cost Analysis:				0.598	0.2169	0.3317	
					\$482.50	\$191.47	\$185.05	\$859.02
ROSELLE PARK TOTALS					0.5980	0.2169	0.3317	
					\$482.50	\$191.47	\$185.05	\$859.02

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: SUMMIT

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685		\$557.9584963	
5511	Novartis Groundwater	4	1	2	0.813	0.0034	0.0068		
	Totals:				0.813	0.0034	0.0068		
	Cost Analysis:				\$655.98	\$2.99	\$3.78		\$662.75
5514	Celgene West 556	03A	102	72	31.267	13.2991	9.3876		
		99	250	196	0.054	0.0563	0.0441		
	Totals:				31.321	13.3554	9.4317		
	Cost Analysis:				\$25,271.68	\$11,786.64	\$5,262.52		\$42,320.84
SUMMIT TOTALS					32.1340	13.3588	9.4385		
					\$25,927.66	\$11,789.63	\$5,266.30		\$42,983.59

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: UNION

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors	TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685	\$557.9584963	
7015	ACuPowder	3 (99) 4	250	196	0.019	0.0198	0.0155	
			80	135	2.282	0.7613	1.2847	
					2.301	0.7811	1.3002	
			Totals:		\$1,856.59	\$689.33	\$725.45	
	Cost Analysis:							\$3,271.37
7070	Durex	1	100	150	3.293	1.3732	2.0598	
					3.293	1.3732	2.0598	
			Totals:		\$2,656.99	\$1,211.88	\$1,149.27	
			Cost Analysis:					\$5,018.14
7080	Foremost Mfg	2	8	132	5.665	0.1890	3.1182	
					5.665	0.1890	3.1182	
			Totals:		\$4,570.87	\$166.79	\$1,739.85	
			Cost Analysis:					\$6,477.50
7092	International Paint	5 99	2	2	13.308	0.1110	0.1110	
			250	196	0.030	0.0313	0.0245	
			Totals:		13.338	0.1423	0.1355	
			Cost Analysis:		\$10,761.91	\$125.55	\$75.61	\$10,963.07
7197	1011 Morris Avenue Urban Renewal	1	1	8	0.010	0.0000	0.0003	
					0.010	0.0000	0.0003	
			Totals:		\$8.07	\$0.04	\$0.19	
			Cost Analysis:					\$8.29
7191	Cintas (Location 111)	1	1161	661	26.843	129.9569	73.9892	
					26.843	129.9569	73.9892	
			Totals:		\$21,658.56	\$114,691.82	\$41,282.93	
			Cost Analysis:					\$177,633.30
7193	Lioni Latticini	1 99	5464	743	9.856	224.5678	30.5369	
			250	196	0.506	0.5275	0.4136	
			Totals:		10.362	225.0953	30.9505	
			Cost Analysis:		\$8,360.69	\$198,655.00	\$17,269.10	\$224,284.79
7194	BASF Corporation	1 99	16	606	0.15	0.0100	0.3791	
			250	196	1.192	1.2427	0.9742	
			Totals:		1.342	1.2527	1.3533	
			Cost Analysis:		\$1,082.81	\$1,105.53	\$755.08	\$2,943.42
7195	Deep Foods	7 01 (99) 02 (99) 05 (99) 06 (99)	1083	434	44.888	202.7191	81.2374	
			250	196	1.268	1.3219	1.0364	
			250	196	1.901	1.9818	1.5537	
			250	196	0.774	0.8069	0.6326	
			250	196	0.065	0.0678	0.0531	
			Totals:		48.896	206.8975	84.5132	
			Cost Analysis:		\$39,452.26	\$182,594.76	\$47,154.87	
								\$269,201.89
7196	Cintas (Location 16F)	1 99	154	274	3.518	2.2592	4.0196	
			250	196	0.173	0.1804	0.1414	
			Totals:		3.691	2.4395	4.1610	
			Cost Analysis:		\$2,978.12	\$2,152.99	\$2,321.66	\$7,452.77

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: UNION

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$806.8605829	BOD per Ton \$882.5373685		\$557.9584963	
					FLOW (MG)	BOD (Tons)		TSS (Tons)	
	UNION TOTALS				115.7410 \$93,386.85	568.1274 \$501,393.68		201.5813 \$112,474.00	\$707,254.53

JOINT MEETING OF ESSEX UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: ELIZABETH

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors	TSS per Ton	ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$686.5206116	BOD per Ton \$882.5373685	\$557.9584963	
0199	Prodallm USA (formerly Wild Flavors)	1	2586	243	0.278	2.9978	0.2817	\$2,993.74
	Totals:				0.278	2.9978	0.2817	
	Cost Analysis:				\$190.85	\$2,645.71	\$157.18	
0037	Deb-El Foods	2	4100	891	20.228	345.8381	75.1565	\$361,828.26
		99	250	196	0.384	0.4003	0.3139	
	Totals:				20.612	346.2384	75.4704	
	Cost Analysis:				\$14,150.56	\$305,568.36	\$42,109.34	
0062	Garcia Uniforms, Inc.	2	595	181	2.481	6.1557	1.8726	\$8,364.32
		99	250	196	0.089	0.0928	0.0727	
	Totals:				2.570	6.2485	1.9453	
	Cost Analysis:				\$1,764.36	\$5,514.55	\$1,085.41	
0193	Actavis	3	650	90	14.093	38.1991	5.2891	\$46,338.35
	Totals:				14.093	38.1991	5.2891	
	Cost Analysis:				\$9,675.13	\$33,712.11	\$2,951.10	
0070	LORCO	2	16984	121	22.483	1592.3198	11.3442	\$1,427,046.39
	Totals:				22.483	1592.3198	11.3442	
	Cost Analysis:				\$15,435.04	\$1,405,281.73	\$6,329.62	
0075	Mastercraft Electroplating	99	250	196	0.019	0.0198	0.0155	\$39.19
	Totals:				0.019	0.0198	0.0155	
	Cost Analysis:				\$13.04	\$17.48	\$8.66	
0093	The Mills at Jersey Gardens	4	8	29	7.260	0.2422	0.8780	\$5,687.75
	Totals:				7.260	0.2422	0.8780	
	Cost Analysis:				\$4,984.14	\$213.74	\$489.86	
0098	Olympia Trails	1	249	97	2.131	2.2127	0.8620	\$4,224.64
		99	250	196	0.159	0.1658	0.1300	
	Totals:				2.290	2.3784	0.9919	
	Cost Analysis:				\$1,572.13	\$2,099.06	\$553.45	
0100	Michaels Foods - North Avenue Facility	4	2752	299	28.352	325.3630	35.3501	\$372,562.87
		4a	1806	227	4.356	32.8051	4.1233	
		4b	842	168	2.492	8.7498	1.7458	
		99	250	196	0.766	0.7986	0.6261	
	Totals:				35.966	367.7165	41.8453	
	Cost Analysis:				\$24,691.40	\$324,523.51	\$23,347.96	

JOINT MEETING OF ESSEX UNION COUNTIES

INDUSTRIAL USER CHARGE - 2023

Municipality: ELIZABETH

			Concentration		Flow per MG	Cost Factors	BOD per Ton	TSS per Ton		
					\$686.5206116		\$882.5373685	\$557.9584963		
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT		
0105	Michaels Foods - Papetti Plaza Facility	2	1747	293	38.505	280.5085	47.0458			
		2a	896	178	5.794	21.6482	4.3007			
		2b	724	175	1.791	5.4072	1.3070			
		3	298	294	0.311	0.3865	0.3813			
		Totals:			46.401	307.9504	53.0347			
	Cost Analysis:				\$31,855.24	\$271,777.75	\$29,591.17		\$333,224.16	
0148	Superior Powder Coating	1	245	99	3.021	3.0864	1.2472			
		99	250	196	0.546	0.5692	0.4463			
		Totals:			3.567	3.6556	1.6934			
	Cost Analysis:				\$2,448.82	\$3,226.21	\$944.86		\$6,619.89	
0195	Duro Hilex Poly LLC	1	591	382	1.676	4.1305	2.6698			
		2	208	265	0.866	0.7511	0.9570			
		3(99)	250	196	0.575	0.5994	0.4700			
		Totals:			3.117	5.4810	4.0967			
	Cost Analysis:				\$2,139.88	\$4,837.21	\$2,285.79		\$9,262.88	
0165	Wakefern Food Corp.	2	176	145	1.158	0.8499	0.7002			
		3a	116	218	5.308	2.5676	4.8253			
		4	549	262	0.484	1.1080	0.5288			
		(7) 99	250	196	0.075	0.0782	0.0613			
	Totals:			7.025	4.6037	6.1156				
Cost Analysis:				\$4,822.81	\$4,062.93	\$3,412.23		\$12,297.96		
0178	Smithfield Packaged Meats	3	585	251	0.981	2.3931	1.0268			
		99	250	196	0.040	0.0417	0.0327			
	Totals:			1.021	2.4348	1.0595				
Cost Analysis:				\$700.94	\$2,148.80	\$591.14		\$3,440.88		
0189	Prince Donut Co.	3	4591	1098	0.782	14.9710	3.5805			
		99	250	196	0.185	0.1929	0.1512			
	Totals:			0.967	15.1638	3.7317				
Cost Analysis:				\$663.87	\$13,382.65	\$2,082.14		\$16,128.66		
0194	*Erie Street (former MGP Site)	3	0	0	0.000	0.0000	0.0000			
		Totals:			0.000	0.0000	0.0000			
	Cost Analysis:				\$0.00	\$0.00	\$0.00		\$0.00	
ELIZABETH TOTALS					167.6690	2,695.650	207.7931			
					\$115,108.22	\$2,379,011.81	\$115,939.91		\$2,610,059.95	

*Erie Street (Former MGP Site) Did not discharge during this Assessment Period.