

December 19, 2008

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 2009)

I present herewith the 74th 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, 2007 through October 31, 2008. 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 2009. 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 2008, 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 21, 2007.

During 2008, 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 (2009) dwelling unit figures formulated by each municipality in 2008.

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, 366 day period of November 1, 2007, through October 31, 2008 and projected for a twelve (12) month period in 2009. 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 2009, 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 366 day period from November 1, 2007, through October 31, 2008, and projected for 2009 and are based upon actual 2007-2008 operating statistics as well as a recent upgraded 2008 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	23,176.7140 MG/Year	63.3244 MGD
2.	BOD	17,552.6970 Tons/Year	95,916.3770 Lbs/Day
	TSS	13,498.4107 Tons/Year	73,761.8071 Lbs/Day
3.	Estimated Industrial Flow	733.8540 MG/Year	2.0051 MGD
4.	Estimated Industrial BOD	4,264.1246 Tons/Year	23,301.2273 Lbs/Day
5.	Estimated Industrial TSS	851.4519 Tons/Year	4,652.7426 Lbs/Day
6.	Estimated Total Operating Expenses in 2009		
			\$17,114,838 STP
			6,402,396 SDWF
			566,020 SDF
			637,290 Sewers
			<hr/> \$24,720,544 Total
7.	Estimated Total Dwelling Units in System		
			151,308 JM Members
			47,181 Elizabeth
			<hr/> 198,489 Total

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

Flow	30.2832499%
BOD	46.4423122%
Suspended Solids	23.2744379%

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 2009 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 2009**

**Treatment Plant**

	<u>Total for 2009</u>		<u>Domestic &amp; Commercial</u>		<u>Industrial</u>
Flow	23,176.7140	MG/Yr. <sup>1</sup>	22,442.8600	MG/Yr.	733.8540 MG/Yr.
BOD	17,552.6970	Tons/Yr. <sup>1</sup>	13,288.5724	Tons/Yr.	4,264.1246 Tons/Yr.
Suspended Solids	13,498.4107	Tons/Yr. <sup>1</sup>	12,646.9588	Tons/Yr.	851.4519 Tons/Yr.

(1) Based upon data from November 1, 2007 thru October 31, 2008 (366 days)

**Cost Allocation**

	<u>Total for 2009</u>		<u>Domestic &amp; Commercial</u>		<u>Industrial</u>
Flow	\$7,293,192.00		\$7,062,265.00		\$230,927.00
BOD	11,184,820.00		8,467,661.00		2,717,159.00
Suspended Solids	5,605,242.00		5,251,675.00		353,567.00
	\$24,083,254.00		\$20,781,601.00		\$3,301,653.00
	100.000000%		86.29066900%		13.70933100%

**Elizabeth Contribution**

Flow	-	5,829.6760	MG/Yr.
BOD	-	7,713.2205	Tons/Yr.
TSS	-	3,588.9400	Tons/Yr.

**Trunk Sewer Flow**<sup>1</sup>

	<u>Total for 2009</u>		<u>Domestic &amp; Commercial</u>		<u>Industrial</u>
	17,347.0380	MG/Yr. <sup>2</sup>	16,858.0670	MG/Yr.	488.971 MG/Yr.

(1) Based upon data from November 1, 2007 thru October 31, 2008 (366 days)

(2) (23,176.714 - 5,829.6760)

**COST ALLOCATION**

\$637,290.00	\$619,326.34	\$17,963.66
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Member municipalities will be assessed \$4.09 (\$619,326.34/151,380) for trunk sewer O&M per equivalent dwelling unit.

The estimated cost for treating industrial wastes has been determined to be \$314.68 per MG for flow, \$637.21 per ton of BOD, and \$415.25 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	\$230,927.00	/	733.8540	=	\$314.6770339	/MG
BOD	\$2,717,159.00	/	4,264.1246	=	\$637.2137906	/Ton
Suspended Solids	\$353,567.00	/	851.4519	=	\$415.2518774	/Ton

All industries within the member municipalities (excluding Elizabeth) will be required to pay an additional \$36.74/MG of flow for trunk sewer use ( $\$17,963.66/488.971 = \$36.738/\text{MG}$ ). This brings the total flow cost to \$351.42/MG ( $\$314.677 + \$36.74$ ) for the indicated industries of member municipalities.

Based upon the user charges for 2009, 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 2008 industrial waste survey of the service area. These are estimates for 2009 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 \$24,720,544 for 2009. 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 35.9798485% 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**  
**2009**

<u>Municipality</u>	<u>Dwelling Units <sup>1</sup></u>	<u>User Charges Industrial</u>
East Orange	7,225	\$ -
Hillside	8,530	466,569
Irvington	27,269	108,413
Maplewood	9,461	290,737
Millburn	9,819 <sup>4</sup>	-
Newark	17,427	-
Roselle Park	4,748	494
South Orange	7,879	-
Summit	14,101 <sup>2</sup>	71,451 <sup>3</sup>
Union	24,993	292,046
West Orange	19,856	-
Elizabeth	47,181	2,089,911
	<u>198,489</u>	<u>\$ 3,319,621</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 (3553)

(3) Includes Murray Hill

(4) Includes Livingston (409)

**Table III**  
**Joint Meeting of Essex and Union Counties**  
**Computation of Estimated Percent**  
**Contribution By City of Elizabeth**

**For Period 11/1/2007-10/31/2008 and Projected Contribution for 2009**

Flow:	Treatment Plant	Elizabeth Pumping Station		Joint Meeting	
	23,176.714 MG	5,829.676 MG		17,347.038 MG	
		<i>Industrial</i>	<i>D&amp;C</i>	<i>Industrial</i>	<i>D&amp;C</i>
		227.872	5,601.804	488.971	16,858.067
		\$ 71,706.09	\$ 1,762,759.07	\$ 171,831.60	\$ 5,924,172.79
Unit Charge \$ 314.6770339 Per MG for Elizabeth					
Unit Charge \$ 351.4147136 Per MG for Joint Meeting					
<b>BOD:</b>	17,552.697 Tons	7,713.2205 Tons		9,839.4765 Tons	
		<i>Industrial</i>	<i>D&amp;C</i>	<i>Industrial</i>	<i>D&amp;C</i>
		2,744.8148	4,968.4057	1,443.4084	8,396.0681
		\$ 1,749,033.84	\$ 3,165,936.63	\$ 919,759.74	
Unit Charge	\$637.2137906 Per Ton				
<b>TSS:</b>	13,498.4107 Tons	3,588.9400 Tons		9,909.4707 Tons	
		<i>Industrial</i>	<i>D&amp;C</i>	<i>Industrial</i>	<i>D&amp;C</i>
		506.7883	3,082.1517	332.6045	9,576.8662
		\$ 210,444.79	\$ 1,279,869.28	\$ 138,114.64	
Unit Charge	\$415.2518774 Per Ton				
			\$ 8,239,749.70	\$ 1,229,705.98	

City of Elizabeth (Contribution from Pumping Station) \$ 8,239,749.70

City of Elizabeth (Industry Tributary to Joint Meeting Trunk)

<b>Flow:</b>	17.0110 MG/Year at	\$ 314.6770339	5,352.97
<b>BOD:</b>	75.9014 Tons/Year at	637.2137906	48,365.42
<b>TSS:</b>	12.0591 Tons/Year at	415.2518774	5,007.56

Joint Meeting Industrial	1,229,705.98
Subtotal	\$ 9,528,181.63

Total 2009 Budget	\$ 24,720,544.00
Subtotal (above)	(9,528,181.63)
Subtotal (EDU's)	\$ 15,192,362.37

Joint Meeting EDU's (X + Y) + Elmora EDU's (X) = \$ 15,192,362  
 (Y = Additional Assessment to Member Municipalities for Trunk Sewer O&M)  
 151,308 (X + \$4.093149999) + 3905 (X) = \$ 15,192,362

Equivalent Units-Member Municipalities 151,308

Elmora EDU's = 3,905 \$93.8905634840 Per Unit = X  
 \$97.9837134830 Per Unit = X+Y

Joint Meeting EDU Assessment \$ 14,825,719.72  
 Elmora Area Assessment \$ 366,642.65

Total Anticipated Payment from the City of Elizabeth

Pumping Station \$ 8,239,749.70  
 Elmora EDU's 366,642.65  
 Elmora Industrial 58,725.95  
 \$ 8,665,118.30

Total Anticipated Payment from Member Municipalities

EDU's 14,825,719.72  
 Industrial 1,229,705.98  
 \$ 16,055,425.70

Estimated Percent Contribution of Treatment Plant, Sludge Dewatering and Sludge Drying Facility Budgets by  
 City of Elizabeth  
 \$ 8,665,118.30 / \$ 24,083,254.00 = 35.9798485%



**Table IV**  
**Joint Meeting of Essex and Union Counties**  
**Percent Allocation of Infiltration / Inflow**

Municipality	Capacity By Contract		Base Year - 1982		Base Year - 1982		Base Year - 1982		Base Year - 1982	
	Contract		Phase IIB - SSES <sup>1</sup>		Phase IIB - SSES <sup>2</sup>		Phase IIB - SSES <sup>2</sup>		Phase IIB - SSES <sup>2</sup>	
	(MGD)	(Percent)	Infiltration (GPD) <sup>3</sup>	(Percent)	Infiltration (GPD) <sup>4</sup>	(Percent)	Inflow (GPD)	(Percent)	Inflow (GPD) <sup>5</sup>	(Percent)
East Orange	5.50	4.88%	70,747	2.11%	39,478	2.18%	3,007,440	5.79%	274,104	0.53%
Hillside	12.20	10.83%	79,012	2.36%	29,699	1.64%	1,185,120	2.28%	218,160	0.53%
Irvington	18.61	16.52%	1,115,672	33.31%	715,498	39.51%	8,612,640	16.57%	1,489,472	2.88%
Maplewood	7.08	6.29%	389,078	11.62%	179,101	9.89%	5,449,680	10.48%	1,185,120	2.88%
Millburn	6.00	5.33%	191,609	5.72%	136,725	7.55%	2,729,520	5.25%	9,805,692	18.96%
Newark	15.50	13.76%	234,484	7.00%	165,700	9.15%	1,959,540	3.77%	7,791,840	18.96%
Roselle Park	9.44	8.38%	106,187	3.17%	58,493	3.23%	1,576,080	3.03%	2,689,325	5.20%
South Orange	7.00	6.22%	410,876	12.27%	75,335	4.16%	2,183,760	4.20%	2,137,680	5.20%
Summit	7.50	6.66%	171,657	5.13%	58,312	3.22%	3,651,120	7.02%	2,999,632	5.80%
Union	10.30	9.14%	329,127	9.83%	213,690	11.80%	14,534,640	27.96%	2,456,595	4.75%
West Orange	13.50	11.99%	250,811	7.48%	154,847	7.68%	7,097,040	13.65%	1,951,200	4.75%
					1,811,110				1,985,963	3.84%
	112.63	100.00%	3,349,260	100.00%	2,017,045	100.01%	51,986,580	100.00%	1,576,080	3.84%
									2,591,061	5.01%
									2,059,920	5.01%
									2,358,331	4.56%
									1,872,720	4.56%
									16,575,551	32.05%
									13,170,240	32.05%
									8,492,062	16.42%
									6,744,600	16.42%
									51,717,788	100.00%
									41,092,200	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) 2008 - Infiltration related to base year total = 2.017 MGD / 52.79 MGD = 3.82079939%

- Adjusted for period 11/1/2007 - 10/31/2008; (3.82079939% x 17,347,0380 = 662.79 MG / Year / 366 = 1,811,110 GPD)

(5) 2008 inflow adjusted for period 11/1/2007 - 10/31/2008 - (41.81" / 33.22") x (41,092,200) = 51,717,788 GPD

**Table IV - A**  
**Joint Meeting of Essex and Union Counties**  
**Adjusted 2008 - Summary of Infiltration and Inflow**

Municipality	Phase IIB		2008		Phase IIB			2008	
	SSES Infiltration (GPD)	2007 Infiltration (GPD)	Infiltration Removed (GPD)	2008 Infiltration (GPD)	SSES Inflow (GPD)	2007 Inflow (GPD)	Inflow Removed (GPD)	2008 Inflow (GPD)	2008 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	797,026	-	797,026	8,612,640	7,791,840	-	7,791,840	
Maplewood	389,078	199,485	-	199,485	5,449,680	2,137,680	-	2,137,680	
Millburn	191,609	152,240	-	152,240	2,729,520	2,384,640	-	2,384,640	
Newark	234,484	184,463	-	184,463	1,959,540	1,951,200	-	1,951,200	
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	2,059,920	-	2,059,920	
Summit	171,657	64,916	-	64,916	3,651,120	1,872,720	-	1,872,720	
Union	329,127	238,013	-	238,013	14,534,640	13,170,240	-	13,170,240	
West Orange	250,811	154,847	-	154,847	7,097,040	6,744,600	-	6,744,600	
Total	3,349,260	2,017,045	-	2,017,045	51,986,580	41,092,200	-	41,092,200	

Table V

## Joint Meeting of Essex and Union Counties

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

		Total	Domestic & Commercial	Industrial
Flow		17,347.0380 MG	16,858.0670 MG	488.9710 MG
		\$5,670,649.27	\$5,498,817.67	
Infiltration	3.8207994%	662.79	644.11	\$171,831.60
Inflow	9.9399102%	1,724.28	1,675.68	18.68
				48.6
BOD	at \$637.2137906 Per Ton	9,839.4765 Tons	8,396.0681 Tons	1,443.4084 Tons
		\$6,269,850.12	\$5,350,090.38	\$919,759.74
TSS	at \$415.2518774 Per Ton	9,909.4707 Tons	9,576.8662 Tons	332.6045 Tons
		\$4,114,926.31	\$3,976,811.67	\$138,114.64
Total		\$16,055,425.70 <sup>1</sup>	\$14,825,719.72	\$1,229,705.98

(1) Amount anticipated from Members after allocation of

35.9798485% to City of Elizabeth \$ 8,665,118.30

"Base Year - 1982"

Infiltration: 3.35 MGD / 52.79 MGD =

6.34590% (Per H&amp;S Phase IIB Report)

Inflow: 113 MGD (Excluding Elizabeth) / 137 MGD (Total) =

82.4817518% 1 inch of rain = 50 mg of inflow (Per H&amp;S Phase IIB Report)

"2007 - 2008"

Infiltration: 2.017 MGD/52.79MGD =

3.82079939%

X

17,347.0380

662.8 MG / Year

(November 1, 2007 - October 31, 2008)

Inflow: Rainfall = 41.81 Inches X 50 MG X 82.482%

1,724.28 MG / Year

Total D&amp;C

\$14,825,719.72

Less: Infiltration

(210,097.84)

Less: Inflow

(546,578.61)

Net after infiltration and inflow

\$14,069,043.27

Equivalent Dwelling Units

151,308

User Charge Per Unit

\$92.9828116821318

Table VI  
Joint Meeting of Essex and Union Counties  
Estimated Annual Operation Expenses To Member Municipalities  
2009

Domestic & Commercial									
Municipality	Dwelling Units	User Charge		Infiltration		Inflow		Total Cost	Unit Cost
		\$	Per Unit	Percent <sup>1</sup>	Amount	Percent <sup>2</sup>	Amount		
East Orange	7,225		\$671,800.81	2.18%	\$4,580.13	0.53%	\$2,896.87	\$679,277.81	\$94.0177
Hillside	8,530		793,143.38	1.64%	3,445.60	2.88%	15,741.46	812,330.44	95.2322
Irvington	27,269		2,535,548.29	39.51%	83,009.66	18.96%	103,631.30	2,722,189.25	99.8272
Maplewood	9,461		879,710.38	9.89%	20,778.68	5.20%	28,422.09	928,911.15	98.1832
Millburn	9,819 <sup>3</sup>		912,998.23	7.55%	15,862.39	5.80%	31,701.56	960,562.18	97.8269
Newark	17,427		1,620,411.46	9.15%	19,223.95	4.75%	25,962.48	1,665,597.89	95.5757
Roselle Park	4,748		441,482.39	3.23%	6,786.16	3.84%	20,988.62	469,257.17	98.8326
South Orange	7,879		732,611.57	4.16%	8,740.07	5.01%	27,383.59	768,735.23	97.5676
Summit	14,101 <sup>4</sup>		1,311,150.63	3.22%	6,765.15	4.56%	24,923.98	1,342,839.76	95.2301
Union	24,993		2,323,919.41	11.80%	24,791.55	32.05%	175,178.44	2,523,889.40	100.9839
West Orange	19,856		1,846,266.71	7.68%	16,135.51	16.42%	89,748.21	1,952,150.43	98.3154
	151,308		\$14,069,043.26	100.01%	\$210,118.85	100.00%	\$546,578.60	\$14,825,740.71	\$97.9839
(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 (409)									
									\$95.9708 2008
									\$89.5386 2007
									\$94.7379 2006
									\$90.2139 2005

(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 (409)

(4) Includes New Providence (3553)

Table VI (Continued)  
Joint Meeting of Essex and Union Counties  
Estimated Annual Operation Expenses To Member Municipalities  
2009

Industrial									
Municipality	BOD (Tons / Year)	BOD <sup>1</sup> (\$/Year)	TSS (Tons / Year)	TSS <sup>2</sup> (\$/Year)	Flow (MG / Year)			Flow <sup>3</sup> (\$/Year)	Total Cost
					Dry Weather	Infiltration 3.820799%	Inflow 9.939910%		
East Orange	0.0000	\$0.00	0.0000	\$0.00	0.00	0.00	0.00	\$0.00	\$0.00
Hillside	654.7372	417,207.57	47.2813	19,633.65	72.95	3.23	8.41	29,726.52	466,567.74
Irvington	112.6934	71,809.79	42.0073	17,443.61	47.02	2.08	5.42	19,159.13	108,412.53
Maplewood	413.6628	263,591.64	29.6274	12,302.83	36.42	1.61	4.20	14,842.35	290,736.82
Millburn	0.0000	0.00	0.0000	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
Roselle Park	0.1661	105.84	0.1845	76.61	0.76	0.03	0.09	311.00	493.45
South Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
Summit <sup>4</sup>	35.0480	22,333.07	39.2103	16,282.15	80.58	3.57	9.29	32,834.79	71,450.01
Union	227.1009	144,711.83	174.2937	72,375.79	183.95	8.15	21.20	74,957.81	292,045.43
West Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00
	1,443.4084	\$ 919,759.74	332.6045	\$138,114.64	421.69	18.68	48.60	\$171,831.60	\$1,229,705.98

(1) At \$637.2137906/Ton  
(2) At \$415.2518774/Ton  
(3) At \$351.4147136/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**  
**2009**

<b>Municipality</b>	<b>Total Assessments <sup>1</sup></b>	<b>Domestic &amp; Commercial</b>			
		<b>User Charge Domestic Sewage 92.98281168</b>	<b>User Charges Industrial</b>	<b>Infiltration / Inflow Charges</b>	<b>Assessment Percentage</b>
East Orange	\$679,277.81	\$671,800.81	\$0.00	\$7,477.00	4.2308%
Hillside	1,278,898.18	793,143.38	466,567.74	19,187.06	7.9655%
Irvington	2,830,601.78	2,535,548.29	108,412.53	186,640.96	17.6302%
Maplewood	1,219,647.97	879,710.38	290,736.82	49,200.77	7.5965%
Millburn	960,562.18	912,998.23	0.00	47,563.95	5.9828%
Newark	1,665,597.89	1,620,411.46	0.00	45,186.43	10.3740%
Roselle Park	469,750.62	441,482.39	493.45	27,774.78	2.9258%
South Orange	768,735.23	732,611.57	0.00	36,123.66	4.7880%
Summit	1,414,289.77	1,311,150.63	71,450.01	31,689.13	8.8088%
Union	2,815,934.83	2,323,919.41	292,045.43	199,969.99	17.5388%
West Orange	1,952,150.43	1,846,266.71	0.00	105,883.72	12.1588%
	<u>\$16,055,446.69</u>	<u>\$14,069,043.26</u>	<u>\$1,229,705.98</u>	<u>\$756,697.45</u>	<u>100.0000%</u>
Elizabeth	8,665,097.31				
<b>Total</b>	<b><u>\$24,720,544.00</u></b>				

(1) Reflects anticipated payment of \$8,665,097.31 from the City of Elizabeth which is 35.9798485% of allocation from Treatment Plant, Sludge Dewatering, and Sludge Drying budget. Exact 2009 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 2009 Assessment with 2008 Assessment**

<u>Municipality</u>	<u>2008</u>	<u>2009</u>		<u>Comparison</u>	
				<u>Amount</u>	<u>Percentage</u>
East Orange	\$662,167.61	\$679,277.81	(+)	\$17,110.20	2.58%
Hillside	1,173,565.12	1,278,898.18	(+)	105,333.06	8.98%
Irvington	2,736,006.08	2,830,601.78	(+)	94,595.70	3.46%
Maplewood	1,183,207.51	1,219,647.97	(+)	36,440.46	3.08%
Millburn	938,999.17	960,562.18	(+)	21,563.01	2.30%
Newark	1,627,428.90	1,665,597.89	(+)	38,168.99	2.35%
Roselle Park	459,904.05	469,750.62	(+)	9,846.57	2.14%
South Orange	750,420.69	768,735.23	(+)	18,314.54	2.44%
Summit	1,376,544.58	1,414,289.77	(+)	37,745.19	2.74%
Union	2,744,742.66	2,815,934.83	(+)	71,192.17	2.59%
West Orange	1,920,213.68	1,952,150.43	(+)	31,936.75	1.66%
	<u>\$15,573,200.05</u>	<u>\$16,055,446.69</u>	(+)	<u>\$482,246.64</u>	<u>3.10%</u>
Elizabeth	7,575,171.82	8,665,097.31	(+)	\$ 1,089,925.49	14.39%
<b>Total</b>	<u><b>\$23,148,371.87</b></u>	<u><b>\$24,720,544.00</b></u>	<u><b>(+)</b></u>	<u><b>\$1,572,172.13</b></u>	<u><b>6.79%</b></u>

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

City of Elizabeth percentage	
2005	31.38459700%
2006	32.13021810%
2007	32.78089120%
2008	33.62887370%

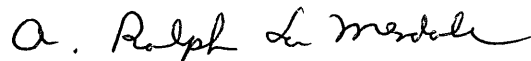
Table III, IV, V, VI, and VII, have been prepared to reflect the Domestic Sewer Usage and Industrial User assessment to each municipality for 2009 as a result of the Agreement with the City of Elizabeth which requires 35.9798485% of the 2009 Treatment Plant, Sludge Dewatering and Sludge Drying Budget to be paid in Quarterly assessments with adjustments made following the determination of the actual percentage of contribution for each quarter. The 35.9798485 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 2008.

### **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 2009 are apportioned as follows:

	<u>2009</u>	<u>2008</u>		<u>2009</u>	<u>2008</u>
East Orange	4.2308%	4.2520%	Roselle Park	2.9258%	2.9532%
Hillside	7.9655%	7.5358%	South Orange	4.7880%	4.8187%
Irvington	17.6302%	17.5687%	Summit	8.8088%	8.8392%
Maplewood	7.5965%	7.5977%	Union	17.5388%	17.6248%
Millburn	5.9828%	6.0296%	West Orange	12.1588%	12.3301%
Newark	10.3740%	10.4502%	<b>Total</b>	<b><u>100.0000%</u></b>	<b><u>100.0000%</u></b>

Respectfully submitted,



A. Ralph LaMendola  
Chief Engineer



**Joint Meeting of Essex and Union Counties**  
**Annual Report of the Sewer Contribution of the Municipalities**  
**Appendix A**  
**2009 Budget**

	<b>Treatment Plant</b>	<b>Dewatering Facility</b>	<b>Drying Facility</b>	<b>Sewer</b>	<b>Total</b>
Electric Service	\$ 1,899,963	\$ 216,824	\$ 28,225	\$ -	\$ 2,145,012
Gas Service	28,200	7,000	24,000	-	59,200
Fuel, Oil & Kerosene	163,500	260,500	-	-	424,000
Water Service	187,000	62,000	3,500	-	252,500
Chemicals	1,030,950	788,900	6,800	2,200	1,828,850
Sludge Disposal	-	2,232,707	-	-	2,232,707
Insurance	481,872	121,008	56,295	6,950	666,125
Administration	1,387,000	790,000	20,000	145,000	2,342,000
Labor	5,310,000	880,000	125,000	9,000	6,324,000
Benefits	2,533,420	434,040	47,200	63,190	3,077,850
Equipment	263,000	10,000	-	-	273,000
Printing & Stationery	15,000	2,000	-	1,000	18,000
Maintenance, Supplies & Spare Parts	1,204,933	409,917	5,000	256,750	1,876,600
Screening Disposal	130,000	-	-	-	130,000
Reserve Contingency	170,000	-	-	-	170,000
Miscellaneous Expenses	167,500	87,500	-	120,000	375,000
Technical & Professional Services	415,500	80,000	-	25,000	520,500
Replacement Fund	1,250,000	-	-	-	1,250,000
NJPDES & Miscellaneous Permit Fee:	477,000	20,000	250,000	8,200	755,200
	<b>\$ 17,114,838</b>	<b>\$ 6,402,396</b>	<b>\$ 566,020</b>	<b>\$ 637,290</b>	<b>\$ 24,720,544</b>
	69.23%	25.90%	2.29%	2.58%	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)**

	<u>Estimated Total Cost</u>	<u>Percent Flow</u>	<u>Cost Flow</u>	<u>Percent SS</u>	<u>Cost SS</u>	<u>Percent BOD</u>	<u>Cost BOD</u>
General Expenditures 1	\$ 2,110,772	80%	\$ 1,688,618	10%	\$ 211,077	10%	\$ 211,077
Power	1,899,963	40%	\$ 759,985	5%	\$ 94,998	55%	\$ 1,044,980
Chlorine	696,000	40%	\$ 278,400			60%	\$ 417,600
Maintenance, Equipment, Supplies, Spare Parts, & Replacement Fund	2,887,933	28%	\$ 808,621	27%	\$ 779,742	45%	\$ 1,299,570
Fuel, Oil & Kerosene	163,500	40%	\$ 65,400	30%	\$ 49,050	30%	\$ 49,050
Administration, Labor & Benefits (Payroll Retirement)	9,230,420	40%	3,692,168	10%	\$ 923,042	50%	\$ 4,615,210
Sludge Processing 2	126,250			50%	\$ 63,125	50%	\$ 63,125
<b>Total</b>	<b>\$17,114,838</b>	<b>100%</b>	<b>\$ 7,293,192</b>		<b>\$ 2,121,034</b>		<b>\$ 7,700,612</b>
			<b>42.6132693%</b>		<b>12.3929540%</b>		<b>44.9937767%</b>

(1) General Expenditures  
(From the Approved Budget)

(2) Sludge Processing

Insurance	\$ 481,872	Polymer	\$ 74,000
Technical & Professional Services	415,500	K2MnO4	52,250
Stationery & Printing	15,000		
Gas	28,200		
Water	187,000		
Miscellaneous	167,500		
Service Contracts	130,000		
Permit Fees	477,000		
Sodium Bisulfite & Misc. Chemicals	208,700		
	<u>\$2,110,772</u>		<u>\$ 126,250</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	\$ 17,114,838	\$ 7,293,192	\$ 2,121,034	\$ 7,700,612
Dewatering Facility	6,402,396		3,201,198	3,201,198
Drying Facility	566,020		283,010	283,010
	<u>\$ 24,083,254</u>	<u>\$ 7,293,192</u>	<u>\$ 5,605,242</u>	<u>\$11,184,820</u>
Subtotal	100.00%	30.2832499%	23.2744379%	46.4423122%
Sewers 1	\$ 637,290			
Total	<u>\$ 24,720,544</u>			

(1) Joint Meeting Members Only

**JOINT MEETING OF ESSEX & UNION COUNTIES**

**INDUSTRIAL USER CHARGE - 2009  
SUMMARY**

		<b>LOADINGS</b>	
<b>MUNICIPALITY</b>	<b>FLOW (MG)</b>	<b>BOD (tons)</b>	<b>TSS (tons)</b>
HILLSIDE	84.591	654.73719606	47.28127395
IRVINGTON	54.520	112.69344102	42.00729147
MAPLEWOOD	42.236	413.66281155	29.62742049
MURRAY HILL	31.125	10.49654052	5.41136313
ROSELLE PARK	0.885	0.16607025	0.18452250
SUMMIT	62.311	24.55150467	33.79886748
UNION	213.303	227.10090216	174.29365680
<i>MEMBERS TOTAL</i>	488.971	1443.40846623	332.60439582
<i>ELIZABETH</i>	244.883	2820.71624835	518.84742948
<b>GRAND TOTAL</b>	733.854	4264.12471458	851.45182530

		<b>COSTS</b>		
<b>MUNICIPALITY</b>	<b>FLOW</b>	<b>BOD</b>	<b>TSS</b>	<b>TOTAL</b>
HILLSIDE	\$29,726.52	\$417,207.57	\$19,633.64	\$466,567.73
IRVINGTON	\$19,159.13	\$71,809.81	\$17,443.61	\$108,412.55
MAPLEWOOD	\$14,842.35	\$263,591.65	\$12,302.84	\$290,736.84
MURRAY HILL	\$10,937.78	\$6,688.54	\$2,247.08	\$19,873.40
ROSELLE PARK	\$311.00	\$105.82	\$76.62	\$493.45
SUMMIT	\$21,897.00	\$15,644.56	\$14,035.04	\$51,576.60
UNION	\$74,957.81	\$144,711.83	\$72,375.77	\$292,045.41
<i>MEMBERS TOTAL</i>	\$171,831.60	\$919,759.78	\$138,114.60	\$1,229,705.98
<i>ELIZABETH</i>	\$77,059.06	\$1,797,399.29	\$215,452.37	\$2,089,910.72
<b>GRAND TOTAL</b>	\$248,890.66	\$2,717,159.07	\$353,566.97	\$3,319,616.70

**JOINT MEETING OF ESSEX & UNION COUNTIES**

**INDUSTRIAL USER CHARGE - 2009  
COST FACTORS**

	<b>FLOW</b>	<b>BOD</b>	<b>TSS</b>
<b>MEMBER MUNICIPALITIES</b>	\$351.4147136	\$637.2137906	\$415.2518774
<b>ELIZABETH</b>	\$314.6770339	\$637.2137906	\$415.2518774

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: HILLSIDE

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG \$551.4147136	BOD per Ton \$637.2137908	TSS per Ton \$415.2518774	
1035	ECD	2	28	3	10.836	1.2652	0.1356	\$5,269.08
		3	289	554	0.288	0.3471	0.6653	
	Totals:				11.124	1.6123	0.8009	
	Cost Analysis:				\$3,909.14	\$1,027.37	\$332.57	
1042	GEC Marconi / BAE	1	1	2	9.916	0.0413	0.0827	\$3,545.32
	Totals:				9.916	0.0413	0.0827	
	Cost Analysis:				\$3,484.63	\$26.35	\$34.34	
1050	Manhattan Drug Co.	4	380	229	0.537	0.8509	0.5128	\$943.87
	Totals:				0.537	0.8509	0.5128	
	Cost Analysis:				\$188.71	\$542.22	\$212.94	
1054	Oasis Foods	3	1719	313	5.765	41.3248	7.5245	\$32,991.05
		99	187	142	1.378	1.0746	0.8160	
	Totals:				7.143	42.3994	8.3405	
	Cost Analysis:				\$2,510.16	\$27,017.48	\$3,463.41	
1058	Quest Industries	1	294	360	0.005	0.0061	0.0075	\$329.32
		2	175	281	0.246	0.1795	0.2883	
	Totals:				0.251	0.1856	0.2958	
	Cost Analysis:				\$88.21	\$118.30	\$122.82	
1090	Union Beverages	1	2735	94	51.853	591.3809	20.3253	\$416,920.52
		2	1435	2136	1.707	10.2146	15.2045	
	Totals:				53.56	601.5955	35.5298	
	Cost Analysis:				\$18,821.77	\$383,344.93	\$14,753.81	
1091	Hillside Bottling	1	1378	69	0.349	2.0054	0.1004	\$3,715.74
		2	1369	108	0.541	3.0884	0.2436	
		99	187	142	0.013	0.0101	0.0077	
	Totals:				0.903	5.1040	0.3518	
	Cost Analysis:				\$317.33	\$3,252.34	\$146.07	
1092	A&H Products	1	631	290	1.105	2.9076	1.3363	\$2,852.84
		99	187	142	0.052	0.0405	0.0308	
	Totals:				1.157	2.9481	1.3671	
	Cost Analysis:				\$406.59	\$1,878.57	\$567.68	
HILLSIDE TOTALS					84.5910	654.7372	47.2813	\$466,567.73
					\$29,726.52	\$417,207.57	\$19,633.64	

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: IRVINGTON

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
					Flow per MG	BOD per Ton	TSS per Ton	
					\$351.4147136	\$637.2137906	\$415.2518774	
			BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	
2030	Hi-Speed Plating	1	150	14	0.026	0.0163	0.0015	
		99	187	142	0.078	0.0608	0.0462	
	Totals:				0.104	0.0771	0.0477	
	Cost Analysis:				\$36.55	\$49.12	\$19.81	\$105.48
2036	Intergel	1	1014	141	1.971	8.3341	1.1589	
	Totals:				1.971	8.3341	1.1589	
	Cost Analysis:				\$692.64	\$5,310.63	\$481.23	\$6,484.50
2040	Jocely (formerly Jabel)	99	187	142	0.130	0.1014	0.0770	
	Totals:				0.130	0.1014	0.0770	
	Cost Analysis:				\$45.68	\$64.60	\$31.97	\$142.25
2066	Wayne County Foods	1a	7085	152	0.306	9.0406	0.1940	
		1b	6369	242	0.300	7.9676	0.3027	
		99	187	142	0.281	0.2191	0.1664	
	Totals:				0.887	17.2273	0.6631	
	Cost Analysis:				\$311.70	\$10,977.50	\$275.35	\$11,564.55
2072	Clean-Tex Services	1	142	124	48.457	28.6933	25.0561	
		99	187	142	1.255	0.9786	0.7431	
	Totals:				49.712	29.6720	25.7993	
	Cost Analysis:				\$17,469.53	\$18,907.38	\$10,713.20	\$47,090.11
2074	Ciao Bella Gelato	1	8005	1993	1.716	57.2815	14.2613	
	Totals:				1.716	57.2815	14.2613	
	Cost Analysis:				\$603.03	\$36,500.59	\$5,922.05	\$43,025.67
IRVINGTON TOTALS					54.5200	112.6934	42.0073	
					\$19,159.13	\$71,809.81	\$17,443.61	\$108,412.55

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: MAPLEWOOD

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
					Flow per MG	BOD per Ton	TSS per Ton	
			BOD (mg/l)	TSS (mg/l)				
3020	Gleason Cleaners	1	228	63	0.671	0.6380	0.1763	
		99	187	142	0.146	0.1138	0.0865	
	Totals:				0.817	0.752	0.263	
	Cost Analysis:				\$287.11	\$479.06	\$109.10	\$875.27
3033	NJ Transit - Hilton Gar.	3a	395	344	7.807	12.8593	11.1990	
	Totals:				7.807	12.8593	11.1990	
	Cost Analysis:				\$2,743.49	\$8,194.12	\$4,650.40	\$15,588.02
3046	UniClean	1	161	17	2.844	1.9094	0.2016	
		99	187	142	0.208	0.1622	0.1232	
	Totals:				3.052	2.0716	0.3248	
	Cost Analysis:				\$1,072.52	\$1,320.03	\$134.86	\$2,527.42
3050	Maplewood Beverage	1	3123	140	30.560	397.9801	17.8409	
	Totals:				30.560	397.9801	17.8409	
	Cost Analysis:				\$10,739.23	\$253,598.43	\$7,408.48	\$271,746.14
MAPLEWOOD TOTALS					42.2360	413.6628	29.6274	
					\$14,842.35	\$263,591.65	\$12,302.84	\$290,736.84



## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: MURRAY HILL

IU #	INDUSTRY	SITE	Concentration	BOD (mg/l)	TSS (mg/l)	Cost Factors			ANNUAL PAYMENT
						Flow per MG \$651.41/47136	BOD per Ton \$687.21/37906	TSS per Ton \$415.25/18774	
5010	Bell Labs / Lucent	1	3	5	22.952	0.2871	0.4785		
	Totals:				22.952	0.2871	0.4785		
	Cost Analysis:				\$8,065.67	\$182.96	\$198.72		\$8,447.35
5011	Baxter Pharmaceutical	1	513	826	0.780	1.6686	2.6866		
	Totals:				0.780	1.6686	2.6866		
	Cost Analysis:				\$274.10	\$1,063.24	\$1,115.64		\$2,452.98
5020	Fablok Mills	4	408	89	4.681	7.9641	1.7373		
	Totals:				4.681	7.9641	1.7373		
	Cost Analysis:				\$1,644.97	\$5,074.81	\$721.40		\$7,441.19
5021	FRC-Electrical Ind	1	51	45	2.712	0.5768	0.5089		
	Totals:				2.712	0.5768	0.5089		
	Cost Analysis:				\$953.04	\$367.52	\$211.32		\$1,531.88
MURRAY HILL TOTALS					31.1250	10.4965	5.4114		
					\$10,937.78	\$6,688.54	\$2,247.08		\$19,873.40

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2009

Municipality: ROSELLE PARK

			Cost Factors					
			Concentration		Flow per MG \$351.44/17.36	BOD per Ton \$637.21/37.906	TSS per Ton \$445.25/18.774	
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT
6005	Hexacon Electric	2	45	50	0.885	0.1661	0.1845	
	Totals:				0.885	0.1661	0.1845	
	Cost Analysis:				\$311.00	\$105.82	\$76.62	\$493.45
ROSELLE PARK TOTALS					0.8850	0.1661	0.1845	
					\$311.00	\$105.82	\$76.62	\$493.45

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: SUMMIT

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG \$351,414.7138	BOD per Ton \$837,213.7906	TSS per Ton \$415,251.8774	
5511	Novartis Groundwater	4	1	6	1.18	0.0049	0.0295	
	Totals:				1.18	0.0049	0.0295	
	Cost Analysis:				\$414.67	\$3.14	\$12.26	\$430.06
5512	Summit Property Co.	03A	56	84	49.376	11.5303	17.2954	
		99	187	142	4.125	3.2166	2.4426	
	Totals:				53.501	14.7469	19.7380	
	Cost Analysis:				\$18,801.04	\$9,396.94	\$8,196.24	\$36,394.22
5513	Celgene Corporation	1	308	441	7.63	9.7997	14.0313	
	Totals:				7.63	9.7997	14.0313	
	Cost Analysis:				\$2,681.29	\$6,244.48	\$5,826.54	\$14,752.32
SUMMIT TOTALS					62.3110	24.5515	33.7989	
					\$21,897.00	\$15,644.56	\$14,035.04	\$51,576.60

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: UNION

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG \$351.41/1.136	BOD per Ton \$687.21/37.806	TSS per Ton \$415.25/187.41	
7015	ACuPowder	3 (99)	187	142	0.035	0.0273	0.0207	
		4	233	369	1.5	1.4574	2.3081	
	Totals:				1.535	1.4847	2.3288	
	Cost Analysis:				\$539.42	\$946.08	\$967.05	\$2,452.54
7035	American Products	1	173	169	0.657	0.4740	0.4630	
	Totals:				0.657	0.4740	0.4630	
	Cost Analysis:				\$230.88	\$302.02	\$192.26	\$725.16
7045	Breeze /TransTechnology	1	279	417	1.182	1.3752	2.0554	
	Totals:				1.182	1.3752	2.0554	
	Cost Analysis:				\$415.37	\$876.28	\$853.50	\$2,145.15
7070	Durex	1	37	58	3.213	0.4957	0.7771	
	Totals:				3.213	0.4957	0.7771	
	Cost Analysis:				\$1,129.10	\$315.89	\$322.69	\$1,767.67
7077	Siemens Water Technology	4	28	23	3.032	0.3540	0.2908	
	Totals:				3.032	0.3540	0.2908	
	Cost Analysis:				\$1,065.49	\$225.58	\$120.75	\$1,411.83
7080	Foremost Mfg	2	19	204	16.758	1.3277	14.2557	
	Totals:				16.758	1.3277	14.2557	
	Cost Analysis:				\$5,889.01	\$846.05	\$5,919.70	\$12,654.76
7092	International Paint	2	160	207	5.402	3.6042	4.6630	
	Totals:				5.402	3.6042	4.6630	
	Cost Analysis:				\$1,898.34	\$2,296.66	\$1,936.30	\$6,131.30
7105	Stonco Lighting	2	305	483	0.746	0.9488	1.5025	
	Totals:				0.746	0.9488	1.5025	
	Cost Analysis:				\$262.16	\$604.59	\$623.93	\$1,490.67
7145	Schering	5	20	24	142.917	11.9193	14.3031	
	Totals:				142.917	11.9193	14.3031	
	Cost Analysis:				\$50,223.14	\$7,595.13	\$5,939.40	\$63,757.67
7150	SS Studios	1	270	281	0.112	0.1261	0.1312	
	Totals:				0.112	0.1261	0.1312	
	Cost Analysis:				\$39.36	\$80.35	\$54.50	\$174.21
7155	Tessler & Weiss	22	145	120	1.484	0.8973	0.7426	
	Totals:				1.484	0.8973	0.7426	
	Cost Analysis:				\$521.50	\$571.77	\$308.36	\$1,401.64
7167	Turbo Braze	1	286	248	0.228	0.2719	0.2358	
	Totals:				0.228	0.2719	0.2358	
	Cost Analysis:				\$80.12	\$173.27	\$97.91	\$351.30

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: UNION

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
					Flow per MG	BOD per Ton	TSS per Ton	
			BOD (mg/l)	TSS (mg/l)	\$351.4147136	\$697.2137906	\$415.2518774	
7191	Cintas	1	280	115	13.005	15.1846	6.2365	
	Totals:				13.005	15.1846	6.2365	
	Cost Analysis:				\$4,570.15	\$9,675.86	\$2,589.74	\$16,835.75
7192	Merril Corporation	1	1449	737	0.436	2.6345	1.3400	
	Totals:				0.436	2.6345	1.3400	
	Cost Analysis:				\$153.22	\$1,678.71	\$556.42	\$2,388.35
7193	Lioni Latticini	1	3928	2344	6.779	111.0384	66.2612	
		99	187	142	0.322	0.2511	0.1907	
	Totals:				7.101	111.2895	66.4519	
	Cost Analysis:				\$2,495.40	\$70,915.19	\$27,594.26	\$101,004.85
7194	BASF Catalysts	1	19	210	0.066	0.0052	0.0578	
		99	187	142	3.454	2.6934	2.0453	
	Totals:				3.520	2.6986	2.1030	
	Cost Analysis:				\$1,236.98	\$1,719.60	\$873.29	\$3,829.87
7195	Deep Foods	1	1595	1250	10.675	71.0010	55.6434	
		99	187	142	1.300	1.0137	0.7698	
	Totals:				11.975	72.0148	56.4132	
	Cost Analysis:				\$4,208.19	\$45,888.79	\$23,425.70	\$73,522.68
UNION TOTALS					213.3030	227.1009	174.2937	
					\$74,957.81	\$144,711.83	\$72,375.77	\$292,045.41

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: ELIZABETH

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
					Flow per MG	BOD per Ton	TSS per Ton	
					\$814.6770939	\$637.2137906	\$415.2518774	
			BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	
0033	Cargill Flavor Systems	1	778	95	1.863	6.0441	0.7380	
	Totals:				1.863	6.0441	0.7380	
	Cost Analysis:				\$586.24	\$3,851.36	\$306.47	\$4,744.07
0037	Deb-El Foods	1	2557	424	5.569	59.3805	9.8464	
	Totals:				5.569	59.3805	9.8464	
	Cost Analysis:				\$1,752.44	\$37,838.09	\$4,088.75	\$43,679.27
0062	Garcia Laundry	2	1168	310	3.552	17.3002	4.5917	
		99	187	142	0.131	0.1022	0.0776	
	Totals:				3.683	17.4024	4.6692	
	Cost Analysis:				\$1,158.96	\$11,089.04	\$1,938.91	\$14,186.90
0067	Actavis (formerly Purepac)	3	1070	170	17.011	75.9014	12.0591	
	Totals:				17.011	75.9014	12.0591	
	Cost Analysis:				\$5,352.97	\$48,365.41	\$5,007.56	\$58,725.94
0070	LORCO	2	7529	80	24.236	760.9118	8.0851	
	Totals:				24.236	760.9118	8.0851	
	Cost Analysis:				\$7,626.51	\$484,863.47	\$3,357.37	\$495,847.34
0075	Mastercraft Electroplating	99	187	142	0.022	0.0172	0.0130	
	Totals:				0.022	0.0172	0.0130	
	Cost Analysis:				\$6.92	\$10.93	\$5.41	\$23.26
0078	Magnolia Beef	1	1222	353	0.139	0.7083	0.2046	
		99	187	142	0.185	0.1443	0.1095	
	Totals:				0.324	0.8526	0.3142	
	Cost Analysis:				\$101.96	\$543.27	\$130.45	\$775.68
0091	NJ Turnpike Authority	1	3	6	1.182	0.0148	0.0296	
	Totals:				1.182	0.0148	0.0296	
	Cost Analysis:				\$371.95	\$9.42	\$12.28	\$393.65
0093	OENJ	4	5	45	10.489	0.2187	1.9683	
	Totals:				10.489	0.2187	1.9683	
	Cost Analysis:				\$3,300.65	\$139.36	\$817.32	\$4,257.33
0098	Olympia Trails	1	399	402	1.698	2.8252	2.8464	
		99	187	142	0.428	0.3338	0.2534	
	Totals:				2.126	3.1589	3.0999	
	Cost Analysis:				\$669.00	\$2,012.92	\$1,287.22	\$3,969.14
0100	Michaels Foods - North Avenue Facility	4	2935	960	69.665	852.6265	278.8829	
		4a	1065	275	7.539	33.4811	8.6453	
		4b	468	120	2.659	5.1892	1.3306	
		99	187	142	0.620	0.4835	0.3671	
	Totals:				80.483	891.7802	289.2260	
	Cost Analysis:				\$25,326.15	\$568,254.64	\$120,101.63	\$713,682.42

## JOINT MEETING OF ESSEX &amp; UNION COUNTIES

## INDUSTRIAL USER CHARGE - 2009

Municipality: ELIZABETH

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG (\$/MG)	BOD per Ton (\$/Ton)	TSS per Ton (\$/Ton)	
0105	Michaels Foods - Papetti Plaza Facility	2	3444	586	61.450	882.5129	150.1604	
		2a	1627	209	8.093	54.9077	7.0533	
		2b	2068	318	1.879	16.2037	2.4917	
		3	385	652	0.717	1.1511	1.9494	
		Totals:			72.139	954.7754	161.6548	
	Cost Analysis:				\$22,700.49	\$608,396.06	\$67,127.47	\$698,224.01
0120	Phelps Dodge	99	187	142	0.448	0.3493	0.2653	
		Totals:			0.448	0.3493	0.2653	
		Cost Analysis:			\$140.98	\$222.61	\$110.16	\$473.74
0148	Superior Powder Coating	1	54	27	2.829	0.6370	0.3185	
		99	187	142	0.547	0.4265	0.3239	
		Totals:			3.376	1.0636	0.6424	
		Cost Analysis:			\$1,062.35	\$677.73	\$266.77	\$2,006.84
0155	Duro Bag	1	302	140	4.843	6.0990	2.8273	
		2	55	86	2.933	0.6727	1.0518	
		3	260	301	1.147	1.2436	1.4397	
		Totals:			8.923	8.0152	5.3189	
	Cost Analysis:				\$2,807.86	\$5,107.42	\$2,208.66	\$10,123.95
0165	Wakefern Food Corp.	2	193	154	4.293	3.4550	2.7569	
		3a	237	351	2.769	2.7366	4.0529	
		4	533	883	0.525	1.1669	1.9331	
		7	6	14	0.347	0.0087	0.0203	
		Totals:			7.934	7.3672	8.7631	
	Cost Analysis:				\$2,496.65	\$4,694.47	\$3,638.91	\$10,830.03
0175	Prince Donut Co.	3	4342	1252	1.362	24.6606	7.1108	
		99	187	142	0.239	0.1864	0.1415	
		Totals:			1.601	24.8469	7.2523	
	Cost Analysis:				\$503.80	\$15,832.81	\$3,011.53	\$19,348.14
0178	814 Americas	3	389	341	2.587	4.1965	3.6786	
		99	187	142	0.047	0.0367	0.0278	
		Totals:			2.634	4.2331	3.7065	
	Cost Analysis:				\$828.86	\$2,697.39	\$1,539.12	\$5,065.37
0185	Cavalier Chemical	1	11145	1538	0.077	3.5785	0.4938	
		99	187	142	0.208	0.1622	0.1232	
		Totals:			0.285	3.7407	0.6170	
	Cost Analysis:				\$89.68	\$2,383.65	\$256.21	\$2,729.55
0186	One Great Burger	1	266	165	0.416	0.4614	0.2862	
		2	312	504	0.139	0.1808	0.2921	
		Totals:			0.555	0.6423	0.5784	
	Cost Analysis:				\$174.65	\$409.27	\$240.17	\$824.08
ELIZABETH TOTALS					244.8830	2,820.7162	518.8474	
					\$77,059.06	\$1,797,399.29	\$215,452.37	