

December 14, 2001

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 2002)

I present herewith the 67th 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, 2000 through October 31, 2001. 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 2002. 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 2001, 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 15, 2000.

During 2001, 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 (2002) dwelling unit figures formulated by each municipality in 2001.

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, 2000, through October 31, 2001 and projected for a twelve (12) month period in 2002. 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 2002, 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, 2000, through October 31, 2001, and projected for 2002 and are based upon actual 2000-2001 operating statistics as well as a recent upgraded 2001 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	23,146.9130 MG/Year	63.4162 MGD
2.	BOD	17,934.8834 Tons/Year	98,273.3337 Lbs/Day
	TSS	14,145.5167 Tons/Year	77,509.6805 Lbs/Day
3.	Estimated Industrial Flow	937.1190 MG/Year	2.5674 MGD
4.	Estimated Industrial BOD	2,394.5972 Tons/Year	13,121.0805 Lbs/Day
5.	Estimated Industrial TSS	929.0389 Tons/Year	5,090.6241 Lbs/Day
6.	Estimated Total Operating Expenses in 2002		
			\$11,445,826 STP
			3,737,854 SDWF
			1,408,167 SDF
			398,273 Sewers
			<hr/> \$16,990,120 Total
7.	Estimated Total Dwelling Units in System		
			148,176 JM Members
			47,181 Elizabeth
			<hr/> 195,357 Total

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

Flow	29.3030728%
BOD	46.3100190%
Suspended Solids	24.3869082%

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 2002 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 2002

Treatment Plant

	<u>Total for 2002</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	23,146.9130 MG/Yr. ¹	22,209.7940 MG/Yr.	937.1190 MG/Yr.
BOD	17,934.8834 Tons/Yr. ¹	15,540.2862 Tons/Yr.	2,394.5972 Tons/Yr.
Suspended Solid	14,145.5167 Tons/Yr. ¹	13,216.4778 Tons/Yr.	929.0389 Tons/Yr.

(1) Based upon data from November 1, 2000 thru October 31, 2001 (365 days)

Cost Allocation

	<u>Total for 2002</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	\$4,861,921.00	\$4,665,083.00	\$196,838.00
BOD	7,683,687.50	6,657,791.00	1,025,896.50
Suspended Solid	4,046,238.50	3,780,493.00	265,745.50
	<u>\$16,591,847.00</u>	<u>\$15,103,367.00</u>	<u>\$1,488,480.00</u>
	100.000000%	91.02884690%	8.97115310%

Elizabeth Contribution

Flow	-	5,848.3620 MG/Yr.
BOD	-	7,069.1967 Tons/Yr.
TSS	-	3,802.6744 Tons/Yr.

Trunk Sewer Flow¹

<u>Total for 2002</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
17,298.5510 MG/Yr. ²	16,641.1510 MG/Yr.	657.400 MG/Yr.

(1) Based upon data from November 1, 2000 thru October 31, 2001 (365 days)

(2) (23,146.913 - 5,848.3620)

COST ALLOCATION

\$398,273.00	\$383,137.36	\$15,135.64
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Member municipalities will be assessed \$2.56 (\$383,137.36/148,176) for trunk sewer O&M per equivalent dwelling unit.

The estimated cost for treating industrial wastes has been determined to be \$233.08 per MG for flow, \$428.42 per ton of BOD, and \$286.04 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	\$196,838.00	/	937.1190	=	\$210.0458960 /MG
BOD	\$1,025,896.50	/	2,394.5972	=	\$428.4213228 /Ton
Suspended Solids	\$265,745.50	/	929.0389	=	\$286.0434585 /Ton

All industries within the member municipalities (excluding Elizabeth) will be required to pay an additional \$23.04/MG of flow for trunk sewer use ($\$15,135.64/657.400 = \$23.038/\text{MG}$). This brings the total flow cost to \$233.08/MG ($\$210.046 + \23.038) for the indicated industries of member municipalities.

Based upon the user charges for 2002, 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 2001 industrial waste survey of the service area. These are estimates for 2002 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 \$16,990,120.00 for 2002. 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 34.0541124% 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
2002

<u>Municipality</u>	<u>Dwelling Units ¹</u>	<u>User Charges Industrial</u>
East Orange	7,218	\$ -
Hillside	8,434	33,620
Irvington	26,641	26,310
Maplewood	9,283	28,030
Millburn	9,769 ⁴	-
Newark	16,972	-
Roselle Park	4,739	563
South Orange	6,835	-
Summit	13,943 ²	92,564 ³
Union	24,630	546,986
West Orange	19,712	8,068
Elizabeth	47,181	767,476
	<u>195,357</u>	<u>\$ 1,503,617</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 (3633)

(3) Includes Murray Hill

(4) Includes Livingston (407)

Table III
Joint Meeting of Essex and Union Counties
Computation of Estimated Percent
Contribution By City of Elizabeth
For Period 11/1/2000-10/31/2001 and Projected Contribution for 2002

Flow:	Treatment Plant	Elizabeth Pumping Station		Joint Meeting	
	23,146.913 MG	5,848.362 MG		17,298.551 MG	
		Industrial	D&C	Industrial	D&C
		245.679	5,602.683	657.4	16,641.151
		\$ 51,603.87	\$ 1,176,820.57	\$ 153,219.81	\$ 3,878,542.79
Unit Charge	\$ 210.0458960 Per MG for Elizabeth				
Unit Charge	\$ 233.0693825 Per MG for Joint Meeting				
BOD:	17934.8834 Tons	7,069.1967 Tons		10,865.6867 Tons	
		Industrial	D&C	Industrial	D&C
		1,323.1817	5,746.015	1,017.9414	9,847.7453
		\$ 566,879.25	\$ 2,461,715.35	\$ 436,107.80	
Unit.Charge	428.4213228 Per Ton				
TSS:	14,145.5167 Tons	3,802.6744 Tons		10,342.8423 Tons	
		Industrial	D&C	Industrial	D&C
		394.6564	3,408.018	513.2491	9,829.5932
		\$ 112,888.88	\$ 974,841.26	\$ 146,811.55	
Unit Charge	286.0434585 Per Ton				
			\$ 5,344,749.18	\$ 736,139.16	

City of Elizabeth (Contribution from Pumping Station) \$ 5,344,749.18

City of Elizabeth (Industry Tributary to Joint Meeting Trunk)

Flow:	34.0400 MG/Year at	\$ 210.0458960	7,149.96
BOD:	53.4741 Tons/Year at	428.4213228	22,909.44
TSS:	21.1334 Tons/Year at	286.0434585	6,045.07

Joint Meeting Industrial	736,139.16
Subtotal	\$ 6,116,992.81

Total 2002 Budget	\$ 16,990,120.00
Subtotal (above)	(6,116,992.81)
Subtotal (EDU's)	\$ 10,873,127.19

Joint Meeting EDU's (X + Y) + Elmora EDU's (X) = \$ 10,873,127
 (Y = Additional Assessment to Member Municipalities for Trunk Sewer O&M)
 148,176 (X + \$2.58569107) + 3905 (X) = \$ 10,873,127

Equivalent Units-Member Municipalities 148,176

Elmora EDU's = 3,905 \$68.9763338620 Per Unit = X
 \$71.5620249320 Per Unit = X+Y

Joint Meeting EDU Assessment \$ 10,603,774.61
 Elmora Area Assessment \$ 269,352.58

Total Anticipated Payment from the City of Elizabeth

Pumping Station \$ 5,344,749.18
 Elmora EDU's 269,352.58
 Elmora Industrial 36,104.47
 \$ 5,650,206.23

Total Anticipated Payment from Member Municipalities

EDU's 10,603,774.61
 Industrial 736,139.16
 \$ 11,339,913.77

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

\$ 5,650,206.23 / \$ 16,591,847.00 = 34.0541124%

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

Municipality	Base Year - 1982				Base Year - 1982				SSES - November 2001 (GPD) ⁵ (Percent)	SSES - November 2001 (Percent)	
	Capacity By Contract (MGD)	Capacity By Contract (Percent)	Phase IIB - SSES ¹		Phase IIB - SSES ²						
			Infiltration (GPD) ³ (Percent)	SSES - November 2001 (GPD) ⁴ (Percent)	Inflow (GPD)	(Percent)					
East Orange	5.50	4.88%	70,747	2.11%	48,738	54,327	2.61%	3,007,440	5.79%	3,197,525	6.20%
Hillside	12.20	10.83%	79,012	2.36%	32,980	715,763	1.59%	1,185,120	2.28%	1,258,381	2.44%
Irvington	18.61	16.52%	1,115,672	33.31%	797,026	179,081	38.33%	8,612,640	16.57%	8,277,463	16.05%
Maplewood	7.08	6.29%	389,078	11.62%	199,485	136,691	9.59%	5,449,680	10.48%	5,791,646	11.23%
Millburn	6.00	5.33%	191,609	5.72%	152,240	194,206	7.32%	2,729,520	5.25%	2,532,233	4.91%
Newark	15.50	13.76%	234,484	7.00%	216,248	58,449	10.40%	1,959,540	3.77%	2,083,548	4.04%
Roselle Park	9.44	8.38%	106,187	3.17%	65,147	75,255	3.13%	1,576,080	3.03%	1,576,080	3.25%
South Orange	7.00	6.22%	410,876	12.27%	83,906	76,749	4.03%	2,183,760	4.20%	2,315,627	4.49%
Summit	7.50	6.66%	171,657	5.13%	85,416	213,627	4.11%	3,651,120	7.02%	2,042,640	4.21%
Union	10.30	9.14%	329,127	9.83%	238,013	139,119	11.44%	14,534,640	27.96%	15,105,726	29.29%
West Orange	13.50	11.99%	250,811	7.48%	154,847	1867,369	7.45%	7,097,040	13.65%	7,163,488	13.89%
	112.63	100.00%	3,349,260	100.00%	2,079,635	51,986,580	100.00%	51,572,982	100.00%	48,534,120	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) 2001 - Infiltration related to base year total = 2.080 MGD / 52.79 MGD = 3.94014018%

- Adjusted for period 11/1/2000 - 10/31/2001; (3.94014018% x 17,298.5510 = 681.58 MG / Year / 365 = 1,867,369 GPD)

(5) 2001 inflow adjusted for period 11/1/2000 - 10/31/2001 - (35.3" / 33.22") x (48,534,120) = 51,572,982 GPD

Table IV - A
Joint Meeting of Essex and Union Counties
Adjusted 2001 - Summary of Infiltration and Inflow

Adjusted 2001 - Summary of Sewerage												
Municipality	Phase IIB			2001		Phase IIB			2001		2001 Inflow Removed (GPD)	2001 Inflow (GPD)
	SSES Infiltration (GPD)	2000 Infiltration (GPD)	2001 Infiltration (GPD)	SSES Inflow (GPD)	2000 Inflow (GPD)	2001 Inflow (GPD)	2000 Inflow (GPD)					
East Orange	70,747	54,327	-	54,327	3,007,440	-	3,007,440	-	-	-	-	3,007,440
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	-	5,449,680	-	-	-	-	5,449,680
Millburn	191,609	152,240	-	152,240	2,729,520	-	2,384,640	-	-	-	-	2,384,640
Newark	234,484	216,248	-	216,248	1,959,540	-	1,959,840	-	-	-	-	1,959,840
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	-	2,178,000	-	-	-	-	2,178,000
Summit	171,657	85,416	-	85,416	3,651,120	-	2,079,360	-	36,720	-	-	2,042,640
Union	329,127	238,013	-	238,013	14,534,640	-	14,246,640	-	32,400	-	-	14,214,240
West Orange	250,811	154,847	-	154,847	7,097,040	-	6,744,600	-	-	-	-	6,744,600
Total	3,349,260	2,079,635	-	2,079,635	51,986,580	-	48,603,240	-	69,120	-	-	48,534,120

Table V

Joint Meeting of Essex and Union Counties

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

		Total	Domestic & Commercial	Industrial
Flow		17,298.5510 MG	16,641.1510 MG	657.4000 MG
		\$3,726,319.52	\$3,573,099.71	
Infiltration	3.9401402%	681.58	655.68	\$153,219.81
Inflow	8.4157338%	1,455.80	1,400.47	25.9
				\$55.33
BOD	at \$428.4213228 Per Ton	10,865.6867 Tons	9,847.7453 Tons	1,017.9414 Tons
		\$4,655,091.87	\$4,218,984.07	\$436,107.80
TSS	at \$286.0434585 Per Ton	10,342.8423 Tons	9,829.5932 Tons	513.2491 Tons
		\$2,958,502.38	\$2,811,690.83	\$146,811.55
Total		\$11,339,913.77	\$10,603,774.61	\$736,139.16

(1) Amount anticipated from Members after allocation of

34.0541124% to City of Elizabeth

\$ 5,650,206.23

"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)

"2000 - 2001"

Infiltration: 2.080 MGD/52.79MGD =

3.94014018%

X

681.59 MG / Year

(November 1, 2000 - October 31, 2001)

Inflow: Rainfall = 35.3 Inches X 50 MG X 82.482%

1,455.80 MG / Year

Total D&C

\$10,603,774.61

Less: Infiltration

(140,784.13)

Less: Inflow

(300,701.49)

Net after infiltration and inflow

\$10,162,288.99

Equivalent Dwelling Units

148,176

User Charge Per Unit

\$68.5825571617536

Table VI
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
2002

Domestic & Commercial									
Municipality	Dwelling Units	User Charge		Infiltration		Inflow		Total Cost	Unit Cost
		\$	Per Unit	Percent ¹	Amount	Percent ²	Amount		
East Orange	7,218		\$495,028.90	2.61%	\$3,674.47	6.20%	\$18,643.49	\$517,346.86	\$71.6745
Hillside	8,434		578,425.29	1.59%	2,238.47	2.44%	7,337.12	588,000.88	69.7179
Irvington	26,641		1,827,107.91	38.33%	53,962.56	16.05%	48,262.59	1,929,333.06	72.4197
Maplewood	9,283		636,651.88	9.59%	13,501.20	11.23%	33,768.78	683,921.86	73.6747
Millburn	9,769 ³		669,983.00	7.32%	10,305.40	4.91%	14,764.44	695,052.84	71.1488
Newark	16,972		1,163,983.16	10.40%	14,641.55	4.04%	12,148.34	1,190,773.05	70.1610
Roselle Park	4,739		325,012.74	3.13%	4,406.54	3.25%	9,772.80	339,192.08	71.5746
South Orange	6,835		468,761.78	4.03%	5,673.60	4.49%	13,501.50	487,936.88	71.3880
Summit	13,943 ⁴		956,246.59	4.11%	5,786.23	4.21%	12,659.53	974,692.35	69.9055
Union	24,630		1,689,188.38	11.44%	16,105.70	29.29%	88,075.47	1,793,369.55	72.8124
West Orange	19,712		1,351,899.37	7.45%	10,488.42	13.89%	41,767.44	1,404,155.23	71.2335
	148,176		\$10,162,289.00	100.00%	\$140,784.14	100.00%	\$300,701.50	\$10,603,774.64	\$71.5620
									\$68.7300 2001
									\$68.4775 2000
									\$63.5817 1999
									\$75.6967 1998

(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 (407)

(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 (407)

(4) Includes New Providence (3633)

Table VI (Continued)
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
2002

2002											
Industrial											
Municipality	BOD (Tons / Year)	BOD ¹ (\$/Year)	TSS (Tons / Year)	TSS ² (\$/Year)	Flow (MG / Year)			Inflow 8.415734%	Total	Flow ³ (\$/Year)	Total Cost
					Dry Weather	Infiltration 3.940140%					
East Orange	0.0000	\$0.00	0.0000	\$0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
Hillside	44.4867	19,059.05	12.2194	3,495.28	41.61	1.87	4.00	47.48	11,065.67		33,620.00
Irvington	27.2917	11,692.35	24.1296	6,902.11	29.02	1.30	2.79	33.11	7,715.99		26,310.45
Maplewood	53.3371	22,850.75	7.9560	2,275.76	10.92	0.49	1.05	12.45	2,902.65		28,029.16
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	0.1860	79.69	0.2026	57.95	1.60	0.07	0.15	1.82	424.65		562.29
South Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Summit ⁴	91.2956	39,112.98	37.9745	10,862.36	160.15	7.20	15.38	182.73	42,587.60		92,562.94
Union	796.0830	341,058.93	426.7698	122,074.71	315.32	14.18	30.28	359.77	83,852.30		546,985.94
West Orange	5.2613	2,254.05	3.9972	1,143.37	17.56	0.79	1.69	20.04	4,670.94		8,068.36
	1,017.9414	\$ 436,107.80	513.2491	\$146,811.54	576.17	25.90	55.33	657.40	\$153,219.81		\$736,139.15

(1) At \$428.4213228/Ton

(2) At \$286.0434585/Ton

(3) At \$233.0693825/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
2002

Municipality	Total Assessments ¹	Domestic & Commercial			
		User Charge Domestic Sewage 68.58255716	User Charges Industrial	Infiltration / Inflow Charges	Assessment Percentage
East Orange	\$517,346.86	\$495,028.90	\$0.00	\$22,317.96	4.5622%
Hillside	621,620.88	578,425.29	33,620.00	9,575.59	5.4817%
Irvington	1,955,643.51	1,827,107.91	26,310.45	102,225.15	17.2457%
Maplewood	711,951.02	636,651.88	28,029.16	47,269.98	6.2783%
Millburn	695,052.84	669,983.00	0.00	25,069.84	6.1293%
Newark	1,190,773.05	1,163,983.16	0.00	26,789.89	10.5007%
Roselle Park	339,754.37	325,012.74	562.29	14,179.34	2.9961%
South Orange	487,936.88	468,761.78	0.00	19,175.10	4.3028%
Summit	1,067,255.29	956,246.59	92,562.94	18,445.76	9.4115%
Union	2,340,355.49	1,689,188.38	546,985.94	104,181.17	20.6382%
West Orange	1,412,223.57	1,351,899.37	8,068.36	52,255.86	12.4535%
	<u>\$11,339,913.77</u>	<u>\$10,162,289.00</u>	<u>\$736,139.15</u>	<u>\$441,485.64</u>	<u>100.0000%</u>
Elizabeth	5,650,206.23				
Total	<u><u>\$16,990,120.00</u></u>				

(1) Reflects anticipated payment of \$5,650,206.23 from the City of Elizabeth which is 34.0541124% of allocation from Treatment Plant, Sludge Dewatering, and Sludge Drying budget. Exact 2002 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 2002 Assessment with 2001 Assessment

Municipality	2001	2002		Comparison	
				Amount	Percentage
East Orange	\$497,030.22	\$517,346.86	(+)	\$20,316.64	4.09%
Hillside	584,991.43	621,620.88	(+)	36,629.45	6.26%
Irvington	1,882,444.48	1,955,643.51	(+)	73,199.03	3.89%
Maplewood	670,238.24	711,951.02	(+)	41,712.78	6.22%
Millburn	666,647.89	695,052.84	(+)	28,404.95	4.26%
Newark	1,141,631.88	1,190,773.05	(+)	49,141.17	4.30%
Roselle Park	326,287.58	339,754.37	(+)	13,466.79	4.13%
South Orange	469,262.08	487,936.88	(+)	18,674.80	3.98%
Summit	996,650.51	1,067,255.29	(+)	70,604.78	7.08%
Union	2,258,022.89	2,340,355.49	(+)	82,332.60	3.65%
West Orange	1,347,947.71	1,412,223.57	(+)	64,275.86	4.77%
	<u>\$10,841,154.91</u>	<u>\$11,339,913.77</u>	(+)	<u>\$498,758.86</u>	<u>4.60%</u>
Elizabeth	5,978,801.09	5,650,206.23	(-)	\$ (328,594.86)	-5.50%
Total	<u>\$16,819,956.00</u>	<u>\$16,990,120.00</u>	(+)	<u>\$170,164.00</u>	<u>1.01%</u>

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

City of Elizabeth percentage	
1998	34.89536790%
1999	31.17283950%
2000	37.78119050%
2001	36.20564720%

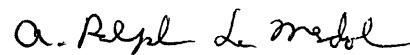
Table III, IV, V, VI, and VII, have been prepared to reflect the Domestic Sewer Usage and Industrial User assessment to each municipality for 2002 as a result of the Agreement with the City of Elizabeth which requires 34.0541124% of the 2002 Treatment Plant, Sludge Dewatering and Sludge Drying Budget to be paid in Quarterly assessments with adjustments made following the determination of the actual percentage of contribution for each quarter. The 34.0541124% 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 2001.

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 2002 are apportioned as follows:

	<u>2002</u>	<u>2001</u>		<u>2002</u>	<u>2001</u>
East Orange	4.5622%	4.5847%	Roselle Park	2.9961%	3.0097%
Hillside	5.4817%	5.3960%	South Orange	4.3028%	4.3285%
Irvington	17.2457%	17.3639%	Summit	9.4115%	9.1932%
Maplewood	6.2783%	6.1824%	Union	20.6382%	20.8283%
Millburn	6.1293%	6.1492%	West Orange	12.4535%	12.4336%
Newark	10.5007%	10.5305%	Total	<u>100.0000%</u>	<u>100.0000%</u>

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
2002 Budget

	Treatment Plant	Dewatering Facility	Drying Facility	Sewer	Total
Electric Service	\$ 1,352,700	\$ 134,460	\$ 132,840	\$ -	\$ 1,620,000
Gas Service	11,500	27,000	530,000	-	568,500
Fuel, Oil & Kerosene	94,800	117,700	-	-	212,500
Water Service	174,000	62,000	14,000	-	250,000
Chemicals	283,700	467,400	16,600	2,200	769,900
Sludge Disposal	-	838,740	-	-	838,740
Insurance	271,576	71,604	30,677	5,123	378,980
Administration	1,094,500	573,200	20,000	51,300	1,739,000
Labor	3,806,000	735,000	144,000	11,000	4,696,000
Benefits	1,286,050	224,550	41,550	18,350	1,570,500
Equipment	167,000	38,000	-	-	205,000
Printing & Stationery	23,000	6,000	4,000	4,000	37,000
Maintenance, Supplies & Spare Parts	1,103,000	310,500	50,000	175,500	1,639,000
Screening Disposal	125,000	-	-	-	125,000
Reserve Contingency	116,000	-	-	-	116,000
Miscellaneous Expenses	150,500	50,000	37,000	110,000	347,500
Technical & Professional Services	276,500	80,000	130,000	15,000	501,500
Replacement Fund	850,000	-	-	-	850,000
NJPDES & Miscellaneous Permit Fee	260,000	1,700	257,500	5,800	525,000
	\$ 11,445,826	\$ 3,737,854	\$ 1,408,167	\$ 398,273	\$ 16,990,120
	67.37%	22.00%	8.29%	2.34%	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	\$ 1,407,776	80%	\$ 1,126,221	10%	\$ 140,778	10%	\$ 140,777
Power	1,352,700	40%	\$ 541,080	5%	\$ 67,635	55%	\$ 743,985
Chlorine	140,000	40%	\$ 56,000			60%	\$ 84,000
Maintenance, Equipment, Supplies, Spare Parts, & Replacement Fund	2,236,000	28%	\$ 626,080	27%	\$ 603,720	45%	\$ 1,006,200
Fuel, Oil & Kerosene	94,800	40%	\$ 37,920	30%	\$ 28,440	30%	\$ 28,440
Administration, Labor & Benefits (Payroll Retirement)	6,186,550	40%	2,474,620	10%	\$ 618,655	50%	\$ 3,093,275
Sludge Processing ²	28,000			50%	\$ 14,000	50%	\$ 14,000
Total	\$11,445,826		\$ 4,861,921		\$ 1,473,228		\$ 5,110,677
	100%		42.4776770%		12.8713122%		44.6510108%

(1) General Expenditures
(From the Approved Budget)

(2) Sludge Processing

Insurance	\$ 271,576	Polymer	\$ 28,000
Technical & Professional Services	276,500	K2MnO4	-
Stationery & Printing	23,000		
Gas	11,500		
Water	174,000		
Miscellaneous	150,500		
Service Contracts	125,000		
Permit Fees	260,000		
Sodium Bisulfite & Misc. Chemicals	115,700		
	<u>\$1,407,776</u>		<u>\$ 28,000</u>

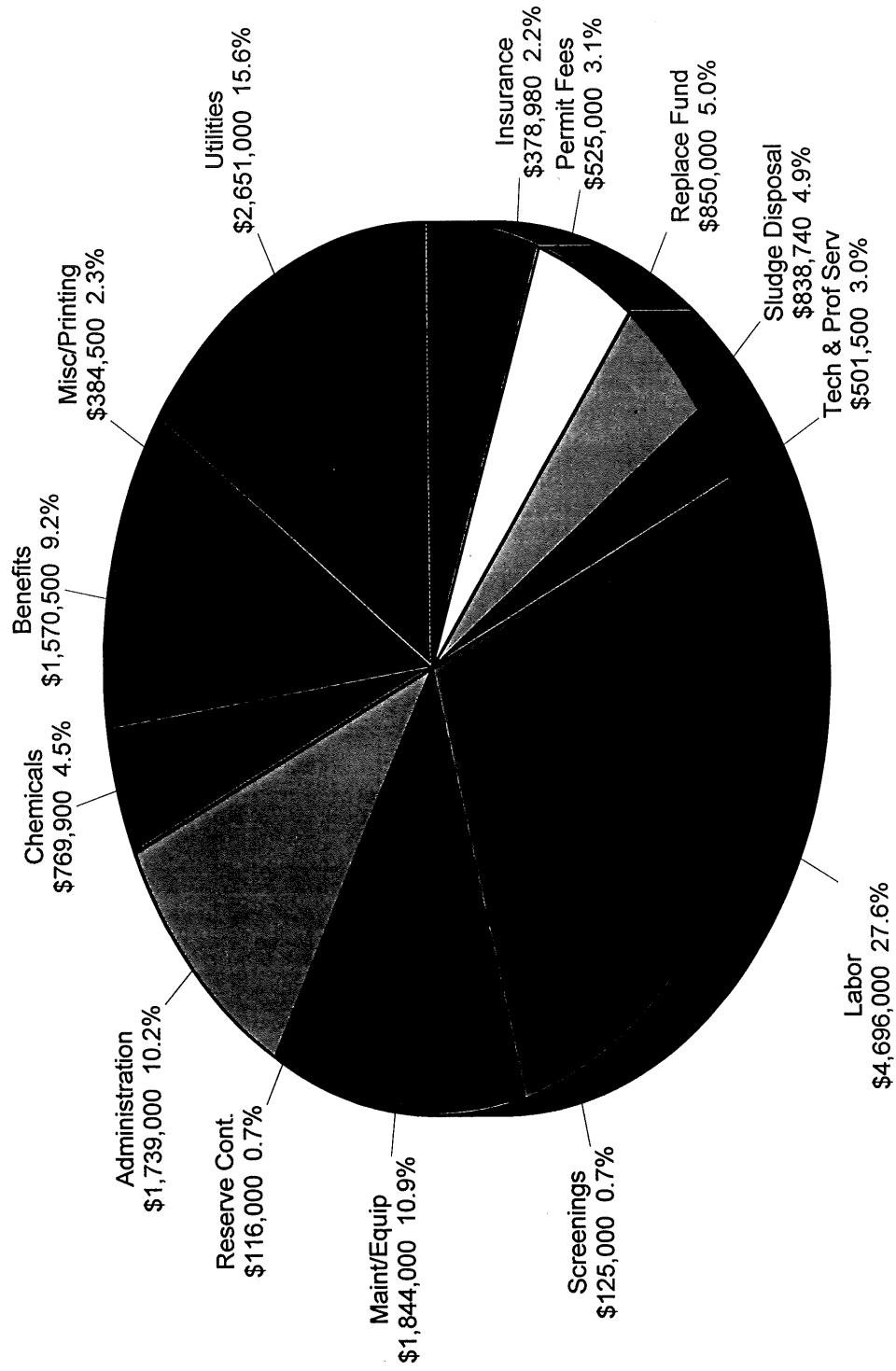
Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A (Continued)
Operations and Management Allocations

	Estimated			
	Total Cost	Cost Flow	Cost TSS	Cost BOD
Treatment Plant	\$ 11,445,826	\$ 4,861,921	\$ 1,473,228	\$ 5,110,677
Dewatering Facility	3,737,854		1,868,927	1,868,927
Drying Facility	1,408,167		704,084	704,084
	<u>\$ 16,591,847</u>	<u>\$ 4,861,921</u>	<u>\$ 4,046,239</u>	<u>\$ 7,683,688</u>
Subtotal	100.00%	29.3030728%	24.3869082%	46.3100190%
Sewers ¹	\$ 398,273			
Total	<u>\$ 16,990,120</u>			

(1) Joint Meeting Members Only

Joint Meeting of Essex & Union Counties

2002 O&M Budget



JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002 SUMMARY

MUNICIPALITY	LOADINGS		
	FLOW (MG)	BOD (tons)	TSS (tons)
HILLSSIDE	47.478	44.48670771	12.21936025
IRVINGTON	33.106	27.29170758	24.12955488
MAPLEWOOD	12.454	53.33712309	7.95597636
MURRAY HILL	98.743	21.74899779	9.78444213
ROSELLE PARK	1.822	0.18599868	0.20255358
SUMMIT	83.982	69.54661365	28.19007570
UNION	359.774	796.08300732	426.76982628
WEST ORANGE	20.041	5.26129317	3.99716184
<i>MEMBERS TOTAL</i>	657.400	1017.94144899	513.24895102
<i>ELIZABETH</i>	279.719	1376.65575258	415.78983681
GRAND TOTAL	937.119	2394.59720157	929.03878783

MUNICIPALITY	COSTS			TOTAL
	FLOW	BOD	TSS	
HILLSSIDE	\$11,065.67	\$19,059.05	\$3,495.27	\$33,619.99
IRVINGTON	\$7,715.99	\$11,692.35	\$6,902.10	\$26,310.45
MAPLEWOOD	\$2,902.65	\$22,850.76	\$2,275.75	\$28,029.16
MURRAY HILL	\$23,013.97	\$9,317.73	\$2,798.78	\$35,130.48
ROSELLE PARK	\$424.65	\$79.69	\$57.94	\$562.28
SUMMIT	\$19,573.63	\$29,795.25	\$8,063.59	\$57,432.47
UNION	\$83,852.30	\$341,058.94	\$122,074.72	\$546,985.96
WEST ORANGE	\$4,670.94	\$2,254.05	\$1,143.36	\$8,068.36
<i>MEMBERS TOTAL</i>	\$153,219.81	\$436,107.82	\$146,811.51	\$736,139.14
<i>ELIZABETH</i>	\$58,753.83	\$589,788.68	\$118,933.96	\$767,476.47
GRAND TOTAL	\$211,973.64	\$1,025,896.50	\$265,745.47	\$1,503,615.61

JOINT MEETING OF ESSEX & UNION COUNTIES

**INDUSTRIAL USER CHARGE - 2002
COST FACTORS**

	FLOW	BOD	TSS
MEMBER MUNICIPALITIES	\$233.0693825	\$428.4213228	\$286.0434585
ELIZABETH	\$210.0458960	\$428.4213228	\$286.0434585

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: HILLSIDE

			Cost Factors					
			Concentration		Flow per MG	BOD per Ton	TSS per Ton	
					\$233.0693825	\$428.4213228	\$286.0434585	
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT
1012	Atlantic Metal	1	23	119	4.690	0.4498	2.3273	
		2	31	136	5.682	0.7345	3.2224	
		99	190	149	0.888	0.7036	0.5517	
		Totals:			11.26	1.8879	6.1014	
	Cost Analysis:			\$2,624.36	\$808.81	\$1,745.28	\$5,178.45	
1015	Bristol-Myers R&D	1	131	91	7.024	3.8370	2.6654	
		Totals:			7.024	3.8370	2.6654	
		Cost Analysis:			\$1,637.08	\$1,643.85	\$762.42	\$4,043.35
1020	Bristol Myers Pilot	5	58	83	0.060	0.0145	0.0208	
		Totals:			0.060	0.0145	0.0208	
		Cost Analysis:			\$13.98	\$6.22	\$5.94	\$26.14
1025	Certified Processing	1	1334	25	2.277	12.6665	0.2374	
		Totals:			2.277	12.6665	0.2374	
		Cost Analysis:			\$530.70	\$5,426.60	\$67.91	\$6,025.20
1035	ECD	2	3	18	7.584	0.0949	0.5693	
		3	105	165	0.271	0.1187	0.1865	
		Totals:			7.855	0.2135	0.7557	
		Cost Analysis:			\$1,830.76	\$91.48	\$216.17	\$2,138.41
1042	GEC Marconi / BAE	1	4	12	8.046	0.1342	0.4026	
		Totals:			8.046	0.1342	0.4026	
		Cost Analysis:			\$1,875.28	\$57.49	\$115.16	\$2,047.93
1050	Manhattan Drug Co.	2	284	194	0.136	0.1611	0.1100	
		3	1478	214	0.144	0.8875	0.1285	
		99	190	149	0.156	0.1236	0.0969	
		Totals:			0.436	1.1722	0.3355	
		Cost Analysis:			\$101.62	\$502.18	\$95.95	\$699.75
1054	Oasis Foods	3	596	28	9.584	23.8193	1.1190	
		99	190	149	0.936	0.7416	0.5816	
		Totals:			10.520	24.5609	1.7006	
		Cost Analysis:			\$2,451.89	\$10,522.41	\$486.44	\$13,460.75
HILLSIDE TOTALS					47.4780	44.4867	12.2194	
					\$11,065.67	\$19,059.05	\$3,495.27	\$33,619.99

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: IRVINGTON

			Cost Factors					
			Concentration		Flow per MG	BOD per Ton	TSS per Ton	
					\$233.0693825	\$428.4213228	\$286.0434585	
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT
2008	Archon Vitamin	2	81	38	0.444	0.1500	0.0704	
		3	702	156	0.410	1.2002	0.2667	
	Totals:			0.854	1.3502	0.3371		
	Cost Analysis:			\$199.04	\$578.45	\$96.42	\$873.90	
2035	Industrial Retaining	2	69	62	1.166	0.3355	0.3015	
		99	190	149	0.208	0.1648	0.1292	
	Totals:			1.374	0.5003	0.4307		
	Cost Analysis:			\$320.24	\$214.34	\$123.20	\$657.77	
2036	Intergel	1	687	110	1.281	3.6698	0.5876	
					1.281	3.6698	0.5876	
	Totals:							
	Cost Analysis:			\$298.56	\$1,572.22	\$168.08	\$2,038.86	
2040	Jabel	1	178	119	0.729	0.5411	0.3618	
					0.729	0.5411	0.3618	
	Totals:							
	Cost Analysis:			\$169.91	\$231.82	\$103.48	\$505.21	
2050	Max Marx Color	2	220	135	8.987	8.2447	5.0592	
					8.987	8.2447	5.0592	
	Totals:							
	Cost Analysis:			\$2,094.59	\$3,532.19	\$1,447.16	\$7,073.95	
2055	Revlon	5	106	348	4.156	1.8370	6.0310	
					4.156	1.8370	6.0310	
	Totals:							
	Cost Analysis:			\$968.64	\$787.03	\$1,725.13	\$3,480.80	
2057	SAL Cleaners	1	527	65	2.146	4.7160	0.5817	
		99	190	149	0.106	0.0840	0.0659	
	Totals:			2.252	4.8000	0.6475		
	Cost Analysis:			\$524.87	\$2,056.43	\$185.22	\$2,766.52	
2060	Cintas	1	113	190	13.473	6.3486	10.6747	
					13.473	6.3486	10.6747	
	Totals:							
	Cost Analysis:			\$3,140.14	\$2,719.88	\$3,053.42	\$8,913.44	
IRVINGTON TOTALS					33.1060	27.2917	24.1296	
					\$7,715.99	\$11,692.35	\$6,902.10	

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: MAPLEWOOD

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)		BOD per Ton	TSS per Ton	
					\$233.0693825	\$428.4213228	\$286.0434585	
3020	Gleason Cleaners	1	293	85	1.138	1.3904	0.4034	
	Totals:				1.138	1.3904	0.4034	
	Cost Analysis:				\$265.23	\$595.69	\$115.38	\$976.30
3033	NJ Transit - Hilton Gar.	3	297	201	7.459	9.2379	6.2519	
	Totals:				7.459	9.2379	6.2519	
	Cost Analysis:				\$1,738.46	\$3,957.71	\$1,788.32	\$7,484.49
3045	Carlton Chain	2	20	17	0.067	0.0056	0.0047	
	Totals:				0.067	0.0056	0.0047	
	Cost Analysis:				\$15.62	\$2.39	\$1.36	\$19.37
3050	Maplewood Beverage	1	2702	82	3.790	42.7032	1.2960	
	Totals:				3.790	42.7032	1.2960	
	Cost Analysis:				\$883.33	\$18,294.97	\$370.70	\$19,549.00
MAPLEWOOD TOTALS					12.4540	53.3371	7.9560	
					\$2,902.65	\$22,850.76	\$2,275.75	\$28,029.16

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: MURRAY HILL

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG \$233.0693825	BOD per Ton \$428.4213228	TSS per Ton \$286.0434585	
5010	Bell Labs / Lucent	1	7	15	74.461	2.1735	4.6575	
	Totals:				74.461	2.1735	4.6575	
	Cost Analysis:				\$17,354.58	\$931.18	\$1,332.26	\$19,618.02
5011	Baxter Pharmaceutical	1	176	244	1.000	0.7339	1.0175	
	Totals:				1.000	0.7339	1.0175	
	Cost Analysis:				\$233.07	\$314.43	\$291.04	\$838.54
5020	Fablok Mills	2	270	57	14.742	16.5980	3.5040	
	Totals:				14.742	16.5980	3.5040	
	Cost Analysis:				\$3,435.91	\$7,110.94	\$1,002.30	\$11,549.16
5021	FRC-Electrical Ind	1	63	17	8.540	2.2435	0.6054	
	Totals:				8.540	2.2435	0.6054	
	Cost Analysis:				\$1,990.41	\$961.18	\$173.17	\$3,124.77
MURRAY HILL TOTALS					98.7430	21.7490	9.7844	
					\$23,013.97	\$9,317.73	\$2,798.78	\$35,130.48

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: ROSELLE PARK

					Cost Factors			
			Concentration		Flow per MG	BOD per Ton	TSS per Ton	
					\$233.0693825	\$428.4213228	\$286.0434585	
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT
6005	Hexacon Electric	1	6	13	1.639	0.0410	0.0889	
		99	190	149	0.183	0.1450	0.1137	
		Totals:			1.822	0.1860	0.2026	
	Cost Analysis:			\$424.65	\$79.69	\$57.94	\$562.28	
ROSELLE PARK TOTALS					1.8220	0.1860	0.2026	
					\$424.65	\$79.69	\$57.94	\$562.28

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: SUMMIT

					Cost Factors			
					Flow per MG	BOD per Ton	TSS per Ton	
					\$233.0693825	\$428.4213228	\$286.0434585	
			Concentration					
IU #	INDUSTRY	SITE	BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	ANNUAL PAYMENT
5505	Ticona	1	135	136	14.501	8.1633	8.2238	
		Totals:			14.501	8.1633	8.2238	
		Cost Analysis:			\$3,379.74	\$3,497.35	\$2,352.37	\$9,229.45
5510	Novartis	3a	218	56	58.769	53.4245	13.7237	
		4	2	2	0.674	0.0056	0.0056	
		99	190	149	10.038	7.9531	6.2369	
		Totals:			69.481	61.3833	19.9663	
		Cost Analysis:			\$16,193.89	\$26,297.90	\$5,711.22	\$48,203.02
SUMMIT TOTALS					83.9820	69.5466	28.1901	
					\$19,573.63	\$29,795.25	\$8,063.59	\$57,432.47

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: UNION

IU #	INDUSTRY	SITE	Cost Factors					ANNUAL PAYMENT
			Concentration	Flow per MG	BOD per Ton	TSS per Ton		
				\$233.0693825	\$428.4213228	\$286.0434585		
			BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	
7015	ACuPowder	3	120	245	0.292	0.1461	0.2983	
		4	55	281	1.863	0.4273	2.1830	
		Totals:			2.155	0.5734	2.4813	
		Cost Analysis:			\$502.26	\$245.66	\$709.77	\$1,457.69
7025	Allied Processing	1	2	3	0.472	0.0039	0.0059	
		Totals:			0.472	0.0039	0.0059	
		Cost Analysis:			\$110.01	\$1.69	\$1.69	\$113.38
7045	Breeze /TransTechnology	1	298	461	1.007	1.2514	1.9358	
		Totals:			1.007	1.2514	1.9358	
		Cost Analysis:			\$234.70	\$536.11	\$553.73	\$1,324.54
7060	National Envelope	1	517	557	2.376	5.1224	5.5187	
		Totals:			2.376	5.1224	5.5187	
		Cost Analysis:			\$553.77	\$2,194.54	\$1,578.59	\$4,326.91
7070	Durex	1	43	74	9.368	1.6798	2.8908	
		Totals:			9.368	1.6798	2.8908	
		Cost Analysis:			\$2,183.39	\$719.65	\$826.89	\$3,729.93
7077	Electrocatalytic	2	46	23	0.183	0.0351	0.0176	
		3	178	167	0.380	0.2821	0.2646	
		Totals:			0.563	0.3172	0.2822	
		Cost Analysis:			\$131.22	\$135.88	\$80.72	\$347.81
7080	Foremost Mfg	2	42	389	21.039	3.6848	34.1280	
		Totals:			21.039	3.6848	34.1280	
		Cost Analysis:			\$4,903.55	\$1,578.63	\$9,762.09	\$16,244.27
7088	Hanovia	1	58	29	2.076	0.5021	0.2511	
		Totals:			2.076	0.5021	0.2511	
		Cost Analysis:			\$483.85	\$215.11	\$71.81	\$770.77
7092	International Paint	2	503	242	2.747	5.7619	2.7721	
		Totals:			2.747	5.7619	2.7721	
		Cost Analysis:			\$640.24	\$2,468.50	\$792.94	\$3,901.69
7105	Stonco Lighting	2	80	120	3.292	1.0982	1.6473	
		Totals:			3.292	1.0982	1.6473	
		Cost Analysis:			\$767.26	\$470.50	\$471.20	\$1,708.97
7110	NEI DoAll	1	43	11	0.857	0.1537	0.0393	
		99	190	149	0.166	0.1315	0.1031	
		Totals:			1.023	0.2852	0.1425	
		Cost Analysis:			\$238.43	\$122.18	\$40.75	\$401.36
7145	Schering	5	40	28	184.816	30.8273	21.5791	
		Totals:			184.816	30.8273	21.5791	
		Cost Analysis:			\$43,074.95	\$13,207.08	\$6,172.57	\$62,454.59

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: UNION

IU #	INDUSTRY	SITE	Concentration		Flow per MG	Cost Factors		ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	\$233.0693825	BOD per Ton \$428.4213228	TSS per Ton \$286.0434585	
7150	SS Studios	1	127	84	0.442	0.2341	0.1548	
					0.442	0.2341	0.1548	
					\$103.02	\$100.28	\$44.29	
7155	Tessler & Weiss	22	194	124	1.795	1.4521	0.9282	
					1.795	1.4521	0.9282	
					\$418.36	\$622.12	\$265.49	
7167	Turbo Braze	1	131	119	1.137	0.6211	0.5642	
					1.137	0.6211	0.5642	
					\$265.00	\$266.10	\$161.39	
7170	Tuscan Dairy	2a	1464	705	111.54	680.9383	327.9109	
		2b	1063	406	13.926	61.7299	23.5770	
		Totals:			125.466	742.6682	351.4879	
		Cost Analysis:			\$29,242.28	\$318,174.91	\$100,540.80	
UNION TOTALS					359.7740	796.0830	426.7698	
					\$83,852.30	\$341,058.94	\$122,074.72	

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: WEST ORANGE

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
					Flow per MG \$233.0693825	BOD per Ton \$428.4213228	TSS per Ton \$286.0434585	
			BOD (mg/l)	TSS (mg/l)	FLOW (MG)	BOD (Tons)	TSS (Tons)	
8030	Organon	1	64	48	19.614	5.2346	3.9259	
	Totals:				19.614	5.2346	3.9259	
	Cost Analysis:				\$4,571.42	\$2,242.61	\$1,122.99	\$7,937.02
8040	Turtle Back Zoo	1	15	40	0.427	0.0267	0.0712	
	Totals:				0.427	0.0267	0.0712	
	Cost Analysis:				\$99.52	\$11.44	\$20.37	\$131.34
WEST ORANGE TOTALS					20.0410	5.2613	3.9972	
					\$4,670.94	\$2,254.05	\$1,143.36	\$8,068.36

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: ELIZABETH

IU #	INDUSTRY	SITE	Concentration	BOD (mg/l)	TSS (mg/l)	Cost Factors			ANNUAL PAYMENT
						Flow per MG \$210.0458960	BOD per Ton \$428.4213228	TSS per Ton \$286.0434585	
0002	Accufleet	1	35	22	2.105	0.3072	0.1931		
	Totals:				2.105	0.3072	0.1931		
	Cost Analysis:				\$442.15	\$131.62	\$55.24		\$629.01
0025	Interbake Foods	3	809	242	30.867	104.1308	31.1491		
	Totals:				30.867	104.1308	31.1491		
	Cost Analysis:				\$6,483.49	\$44,611.83	\$8,910.00		\$60,005.32
0037	Deb-EI Foods	1	951	249	3.929	15.5811	4.0796		
	Totals:				3.929	15.5811	4.0796		
	Cost Analysis:				\$825.27	\$6,675.28	\$1,166.94		\$8,667.50
0062	Garcia Laundry	1	420	131	3.086	5.4048	1.6858		
	Totals:				3.086	5.4048	1.6858		
	Cost Analysis:				\$648.20	\$2,315.54	\$482.21		\$3,445.95
0067	Purepac Pharmaceutical	1	1777	148	4.005	29.6774	2.4717		
	99		190	149	30.035	23.7967	18.6616		
	Totals:				34.0400	53.4741	21.1334		
	Cost Analysis:				\$7,149.96	\$22,909.46	\$6,045.06		\$36,104.49
0078	Magnolia Beef	1	418	152	0.403	0.7025	0.2554		
	Totals:				0.403	0.7025	0.2554		
	Cost Analysis:				\$84.65	\$300.95	\$73.07		\$458.66
0091	NJ Turnpike Authority	1	17	7	1.212	0.0859	0.0354		
	Totals:				1.212	0.0859	0.0354		
	Cost Analysis:				\$254.58	\$36.81	\$10.12		\$301.50
0093	OENJ	4	24	57	13.971	1.3982	3.3208		
	Totals:				13.971	1.3982	3.3208		
	Cost Analysis:				\$2,934.55	\$599.03	\$949.88		\$4,483.46
0095	OK Towel & Uniform	2	197	148	16.139	13.2580	9.9603		
	Totals:				16.139	13.2580	9.9603		
	Cost Analysis:				\$3,389.93	\$5,680.02	\$2,849.09		\$11,919.04
0100	Papetti's Hygrade Eggs	4	1245	258	65.440	339.7416	70.4043		
	99		190	149	17.749	14.0625	11.0280		
	Totals:				83.189	353.8041	81.4323		
	Cost Analysis:				\$17,473.51	\$151,577.22	\$23,293.17		\$192,343.90
0105	Jersey Pride Foods	2	2801	843	66.796	780.1886	234.8086		
	2a		821	195	3.630	12.4276	2.9517		
	2b		928	193	2.178	8.4283	1.7529		
	Totals:				72.604	801.0445	239.5133		
	Cost Analysis:				\$15,250.17	\$343,184.56	\$68,511.20		\$426,945.93
0120	Phelps Dodge	1	12	30	0.438	0.0219	0.0548		
	99		190	149	1.125	0.8913	0.6990		
	Totals:				1.563	0.9133	0.7538		
	Cost Analysis:				\$328.30	\$391.26	\$215.62		\$935.18

JOINT MEETING OF ESSEX & UNION COUNTIES

INDUSTRIAL USER CHARGE - 2002

Municipality: ELIZABETH

IU #	INDUSTRY	SITE	Concentration		Cost Factors			ANNUAL PAYMENT
			BOD (mg/l)	TSS (mg/l)	Flow per MG \$210.0458960	BOD per Ton \$428.4213228	TSS per Ton \$286.0434585	
0148	Superior Powder Coating	1	91	70	1.279	0.4853	0.3733	
		99	190	149	0.326	0.2583	0.2026	
		Totals:			1.605	0.7436	0.5759	
		Cost Analysis:			\$337.12	\$318.59	\$164.73	
0155	S&G Packaging	1	381	339	3.128	4.9697	4.4218	
		2	103	149	0.706	0.3032	0.4387	
		3	244	288	0.338	0.3439	0.4059	
		Totals:			4.172	5.6168	5.2664	
		Cost Analysis:			\$876.31	\$2,406.36	\$1,506.42	
0165	Wakefern Food Corp.	2	268	286	3.085	3.4477	3.6792	
		3	550	447	6.528	14.9720	12.1681	
		4	72	92	0.899	0.2699	0.3449	
		7	1,118	181	0.322	1.5012	0.2430	
		Totals:			10.834	20.1907	16.4353	
		Cost Analysis:			\$2,275.64	\$8,650.14	\$4,701.21	\$15,626.99
ELIZABETH TOTALS					279.7190	1,376.6558	415.7898	
					\$58,753.83	\$589,788.68	\$118,933.96	\$767,476.47