March 19, 2007 CAC Meeting. The purpose of this meeting was to update the committee on discussions with IDEM

The agenda and summaries from each of the meetings are included in Appendix VI.

14.3 PUBLIC MEETINGS

Public meetings specifically for the purpose of presenting and discussing the Long Term Control Plan were held on July 25, 2002 and on March 11, 2004. Documentation from these meetings is included in Appendix VI.

14.4 BOARD MEETINGS

During the preparation of the Long Term Control Plan various updates and presentations were made to the Board of Sanitary Commissioners at their regularly scheduled board meetings. These meeting are open to the public and the local press. Minutes are kept to document the proceedings. Copies of presentation material for Board Meetings held on January 24, 2002, July24, 2003 and on October 23, 2003 are included in Appendix VI.

14.5 CITY NEWSLETTER

The City of East Chicago publishes a newsletter in both English and Spanish that is distributed to each household within the City. Copies of articles concerning the LTCP that were published in the newsletter are included in Appendix VI.

APPENDIX I

SUMMARY OF MRO DATA
January 2000 to February 2002

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q+3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.6 AWL	1063 AML 1601 AWL	2.3 AWL <MDL	188 AML 751 DML		
1	Sat	0.01	6.90	15.0	6.80						0.000	0.00																					
2	Sun	0.02	8.89	14.0	8.88						0.000	0.00	72	5398	41	3074	99	7423	8.72	504													
3	Mon	0.05	9.30	16.3	9.48						0.000	0.00	74	5740	48	3723	109	8454	7.28	565	< 5.5	< 4.8	11.4	0.02	< 5.5	427	< 4.6	357	2.6	202	0.04	3.1		
4	Tue	0.00	10.02	15.8	10.45						0.000	0.00	118	9861	71	5933	145	12117	8.83	571	7.0 <	3.5	10.0	0.02	4.0	334	< 4.0	334	2.7	226	< 0.02	1.7		
5	Wed	0.00	9.50	14.6	10.21						0.000	0.00	115	9111	52	4120	156	12360	8.55	619	7.2 <	3.3	13.2	0.02	3.9	309	< 3.3	261	8.2	491	< 0.02	1.6		
6	Thu	0.00	9.32	14.8	9.99						0.000	0.00	123	9561	83	6451	136	10571	9.13	710	8.0 <	3.5	10.2	0.03	4.3	334	< 3.5	272	2.0	155	< 0.02	1.6		
7	Fri	0.00	9.26	14.0	10.61						0.000	0.00			76	5869	112	8650	9.52	735		4.2	11.8	0.04			< 4.6	355	3.1	239	< 0.02	1.5		
8	Sat	0.07	8.80	14.0	9.94						0.000	0.00																					
9	Sun	0.09	9.74	15.8	10.90						0.000	0.00	81	6580	64	5199	96	7798	8.55	532													
10	Mon	0.15	11.04	19.2	12.49						0.000	0.00	96	8839	84	7734	164	15100	7.22	665	6.2 <	3.3	10.2	0.05	< 3.7	341	< 3.3	304	2.4	221	0.07	6.4		
11	Tue	0.00	9.73	15.0	10.64						0.000	0.00	88	7141	75	6086	81	6573	5.60	454	7.3 <	3.5	9.2	0.05	< 4.0	325	< 3.5	284	2.4	195	0.07	5.7		
12	Wed	0.00	9.21	14.3	9.83						0.000	0.00	103	7912	96	7374	88	8759	7.62	585	6.0 <	3.5	10.6	0.06	< 4.0	307	< 3.5	269	2.1	161	0.06	4.6		
13	Thu	snow	9.48	40.0	8.97						0.000	0.00	153	12097	117	9250	337	26644	6.34	859	6.3 <	3.3	10.8	0.03	< 3.7	293	< 3.3	261	4.2	332	0.02	1.6		
14	Fri	0.00	9.06	15.0	9.19						0.000	0.00			44	3325	85	6423	8.78	512	<	3.5	11.0	0.06			< 3.5	264	2.6	212	0.03	2.3		
15	Sat	0.00	8.87	16.0	8.90						0.000	0.00																					
16	Sun	0.00	8.49	13.5	8.46						0.000	0.00	64	4532	48	3399	63	4461	5.88	416					< 3.7	262	< 3.3	234	1.8	127	0.06	4.2		
17	Mon	snow	9.01	15.0	9.83						0.000	0.00	64	6312	73	5485	68	5110	7.73	581	3.7 <	3.3	11.0	0.06	< 3.7	278	< 3.3	248	2.6	210	0.03	2.3		
18	Tue	snow	9.18	16.6	10.24	6.000	0.290				0.000	0.00	101	7733	84	6431	66	6584	8.68	665	10.0	3.4	20.2	0.04	3.9	299	< 3.5	268	3.4	260	0.03	2.3		
19	Wed	0.00	9.81	22.0	11.58						0.000	0.00	76	6218	54	4418	97	7936	8.72	550	6.7	3.3	16.4	0.05	4.0	327	< 3.2	262	2.6	213	0.05	4.1		
20	Thu	0.00	10.65	17.0	12.99						0.000	0.00	79	7017	60	5329	92	6172	8.10	542	6.0	3.3	9.4	0.04	3.7	329	< 3.5	311	3.2	284	0.04	3.6		
21	Fri	0.00	8.88	13.0	10.40						0.000	0.00			64	4740	72	5332	5.52	483		3.3	12.8	0.04			2.1	155	3.8	267	0.03	2.2		
22	Sat	0.00	8.74	16.1	9.84						0.000	0.00																					
23	Sun	0.00	8.72	12.1	9.96						0.000	0.00	88	6400	69	5018	63	4582	7.03	511					4.5	327	3.5	255	3.4	247	0.07	5.1		
24	Mon	0.00	8.55	12.9	11.34						0.000	0.00	98	6988	72	5134	86	6132	7.50	535	9.4	3.6	11.7	0.07	5.6	399	3.0	214	4.4	314	0.05	3.6		
25	Tue	snow	8.76	13.8	9.54						0.000	0.00	92	6721	67	4895	119	8694	7.17	524	8.4	2.8	5.2	0.02	3.9	285 <	3.5	256	4.0	292	0.02	1.5		
26	Wed	snow	8.84	11.8	10.72						0.000	0.00	68	5013	58	5013	61	5972	7.67	565	5.0 <	3.2	10.0	0.07	< 3.5	256 <	3.2	236	2.8	206	0.05	3.7		
27	Thu	0.00	9.44	12.9	9.67						0.000	0.00	90	7066	74	5826	77	6062	8.90	701	7.4 <	3.5	9.2	0.05	< 4.0	315 <	3.5	276	3.4	268	0.01	0.8		
28	Fri	0.00	8.61	12.3	8.74						0.000	0.00			66	4739	124	8904	8.67	615		3.3	10.4	0.05			< 3.3	237	3.6	259	0.03	2.2		
29	Sat	0.00	8.58	12.5	8.21						0.000	0.00																					
30	Sun	snow	9.08	16.0	9.01						0.000	0.00	76	5782	52	3942	97	7354	7.20	546					< 4.0	303 <	3.5	265	4.0	303 <	0.02	1.5		
31	Mon	0.00	9.14	16.8	9.22						0.000	0.000	93	7089	54	4116	114	8690	6.55	499	9.4	3.3	10.8	0.03	7.9	602	2.9	221	8.0	610	0.02	1.5		
Total		0.39	285.71		306.81	6.00	0.29	0.00	0.00		0.00	0.00																					
Mean			9.22		9.96	6.00	0.29				0.00	0.00	92	7232	58	5255	110	8571	7.32	567	7.3	3.5	11.2	0.04	4.3	335	3.4	264	3.3	255	0.04	2.9		
Maximum		0.15	11.04	40.0	12.99	6.00	0.29	0.00	0.00		0.00	0.00	153	12097	117	9250	337	26644	9.52	735	10.0	4.6	20.2	0.07	7.9	602	4.6	357	8.0	610	0.07	8.4		
Minimum			8.49		8.21	6	0.29	0	0		0	0	64	64	41	41	63	63	5.6	5.6	3.7	2.8	5.2	0.02	3.5	3.5	2.1	2.1	1.6	1.6	0.01	0.01		
# of Data		25	31	31	31	1	1	0	0	0	31	31	22	22	26	26	26	26	28	26	17	21	21	21	22	22	26	26	26	26	25	25		
# of Data<MDL																					1	13					11		21			5		
Wk1: 01/02-01/08/00			9.31		9.93								100	7934	62	4862	126	9929	7.67	601					4.3	348	3.9	323	3.0	255	0.03	2.3		
Wk2: 01/09-01/15/00			9.59		10.10								104	8514	80	6495	142	11543	7.02	568					4.2	366	3.3	284	2.8	236	0.05	4.3		
Wk3: 01/16-01/22/00			9.25		10.48								81	6362	64	4967	80	6266	6.94	539					3.8	337	3.2	279	2.9	259	0.04	3.5		
Wk4: 01/23-01/29/00			8.79		9.74								87	6442	59	5104	92	8724	7.81	575					4.3	370	3.3	277	3.6	301	0.04	3.3		

Total Est. Bypass Flow (MG): 0.29 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data					Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																									
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MG)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Tue	0.00	9.64	17.0	10.32						0.000	0.00	189	15510	103	8453	1071	87892	8.46	694	9.6	3.3	12.6	0.01	4.4	361	< 3.7	304	3.2	263	0.03	2.5		
2	Wed	0.00	8.19	13.2	8.23						0.000	0.00	110	7514	65	4440	122	6333	8.29	568	12.0	5.3	18.2	0.03	5.1	348	< 4.0	273	8.0	546	0.01	0.7		
3	Thu	0.00	9.33	14.0	9.60						0.000	0.00	93	7237	56	4357	115	8948	7.39	575	8.2	< 4.0	14.8	0.02	< 4.8	358	< 4.0	311	3.6	280	0.03	2.3		
4	Fri	0.00	9.48	14.1	9.19						0.000	0.00			60	4744	68	5376	9.18	726		< 4.0	13.0	0.09			< 4.0	316	2.3	182	0.03	2.4		
5	Sat	0.00	8.62	13.0	9.00						0.000	0.00																						
6	Sun	0.00	8.18	12.0	8.29						0.000	0.00	74	5046	57	3889	65	4434	7.56	516					4.6	314	< 3.5	239	1.6	109	0.01	0.7		
7	Mon	0.00	9.07	14.0	9.36						0.000	0.00	60	4539	47	3555	63	4766	7.73	585	< 4.0	< 3.5	9.8	0.01	< 4.0	303	< 3.5	265	2.6	197	0.03	2.3		
8	Tue	0.00	9.19	13.8	9.52						0.000	0.00	74	5672	72	5518	77	5902	6.94	532	6.3	3.5	12.4	0.08	< 4.0	307	< 3.5	268	3.2	245	0.03	2.3		
9	Wed	0.00	10.22	16.5	11.26						0.000	0.00	118	10058	78	6648	141	12018	9.02	769	9.9	3.5	14.2	0.20	4.2	358	< 3.7	315	2.0	170	0.13	11.1		
10	Thu	0.00	9.14	13.4	10.19						0.000	0.00	70	5336	51	3888	72	5488	7.90	602	8.6	< 4.0	12.0	0.13	< 4.6	351	< 4.0	305	2.4	183	< 0.02	1.5		
11	Fri	0.00	8.93	13.5	9.86						0.000	0.00			51	3798	102	7597	8.88	512		< 3.5	12.8	0.08			< 3.5	261	1.0	74	0.05	3.7		
12	Sat	0.00	8.61	13.0	9.37						0.000	0.00																						
13	Sun	0.00	8.86	12.6	9.27						0.000	0.00	67	4951	48	3547	73	5394	7.22	534					4.6	340	2.1	155	3.7	273	0.04	3.0		
14	Mon	0.00	9.05	14.0	10.42						0.000	0.00	125	9435	59	4453	120	9057	7.56	571	10.5	3.8	16.4	0.22	5.6	423	2.7	204	3.8	287	0.17	12.8		
15	Tue	0.00	9.12	14.0	10.78						0.000	0.00	81	8181	53	4031	63	6313	8.95	529	8.4	2.9	14.2	0.09	2.6	198	< 4.0	304	3.6	274	0.06	3.8		
16	Wed	0.00	9.16	14.0	6.23						0.000	0.00	80	6125	56	4287	113	8651	7.14	547	7.6	< 3.7	11.6	<0.02	< 4.8	352	< 4.0	306	1.8	138	< 0.02	1.5		
17	Thu	0.00	8.87	13.5	9.28						0.000	0.00	74	5474	51	3773	83	8140	8.83	505	8.3	< 3.7	13.5	<0.02	< 4.8	340	< 4.0	296	3.0	222	< 0.02	1.5		
18	Fri	0.00	8.66	15.0	9.38						0.000	0.00			52	3756	96	6934	7.34	530		< 3.7	12.6	<0.02			< 4.0	269	2.5	181	< 0.02	1.4		
19	Sat	0.00	10.01	15.9	10.48						0.000	0.00																						
20	Sun	0.00	9.45	16.2	9.96						0.000	0.00	84	6620	76	5990	74	5832	8.72	530					< 4.6	363	< 4.0	315	2.6	205	0.02	1.6		
21	Mon	0.00	10.91	25.3	12.07						0.000	0.00	99	9006	81	5550	169	17197	10.70	974	9.4	< 3.7	12.2	0.03	< 4.3	391	< 3.7	337	4.0	364	< 0.02	1.8		
22	Tue	0.00	10.15	16.0	12.03						0.000	0.00	114	9650	54	4571	130	11006	7.06	598	8.3	< 3.7	13.2	0.03	< 4.8	389	< 4.0	339	3.2	271	0.01	0.8		
23	Wed	0.00	9.96	15.3	11.55						0.000	0.00	153	12709	66	5482	230	19105	8.94	576	6.4	< 3.7	13.8	0.07	< 4.8	382	< 4.0	332	3.6	299	< 0.02	1.7		
24	Thu	0.40	13.77	40.0	14.75						0.000	0.00	164	18834	74	8496	507	58225	4.98	572	7.0	3.3	18.2	0.10	< 3.7	425	< 3.3	379	3.2	367	0.07	8.0		
25	Fri	0.00	10.26	16.0	11.96						0.000	0.00			51	4364	197	16857	8.55	560		< 3.5	16.8	0.08			< 3.5	299	2.4	205	0.04	3.4		
26	Sat	0.34	13.51	27.5	15.51						0.000	0.00																						
27	Sun	0.00	10.39	14.8	12.11						0.000	0.00	52	4506	44	3813	80	6932	6.38	466					< 4.6	399	< 4.0	347	2.8	243	0.11	9.5		
28	Mon	0.00	10.94	16.0	12.59						0.000	0.00	132	12044	56	5109	169	17244	6.33	578	8.4	< 3.7	10.0	0.17	< 4.3	392	< 3.7	338	2.0	182	0.07	6.4		
29	Tue	0.00	11.38	16.5	13.67						0.000	0.00	119	11294	49	4651	154	14816	7.22	685	7.0	< 3.5	13.2	0.07	< 4.0	380	< 3.5	332	2.7	256	0.04	3.8		
Total		0.74	283.47		306.24	0.00	0.00	0.00	0.00		0.00	0.00																						
Mean			9.77		10.63						0.00	0.00	102	8483	60	4847	169	14410	7.37	593	8.2	3.7	13.8	0.08	4.4	356	3.7	297	3.0	241	0.04	3.6		
Maximum		0.40	13.77	40.0	15.51	0.00	0.00	0.00	0.00		0.00	0.00	189	18834	103	8496	1071	87892	10.70	974	12.0	5.3	18.2	0.22	5.6	425	4.0	379	8.0	546	0.17	12.8		
Minimum			8.18		8.23	0.00	0.00	0.00	0.00		0.00	0.00	52	4506	44	3547	63	4434	4.98	466	4.0	2.9	9.8	0.01	2.6	198	2.1	155	1.0	74	0.01	0.7		
# of Data		29	29	29	29	0	0	0	0	0	29	29	21	21	25	25	25	25	25	25	17	21	21	18	21	21	25	25	25	25	25	25		
# of Data<MDL																					1	14			14		23				6			
Wk1: 01/30-02/05/00			9.10		9.22								112	8622	65	5009	265	21099	7.85	601					52.0	401	3.7	284	4.9	367	0.02	1.8		
Wk2: 02/06-02/12/00			9.06		9.69								79	6130	59	4549	87	6701	7.67	568					43.0	347	3.8	295	2.1	174	0.05	3.9		
Wk3: 02/13-02/19/00			9.11		9.69								85	6429	53	3975	95	7076	7.17	539					44.0	350	3.5	276	3.1	249	0.05	4.5		
Wk4: 02/20-02/26/00			11.14		12.55								123	11364	64	5743	221	21370	7.18	575					44.0	435	3.8	374	3.2	320	0.03	3.2		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MARCH 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Wed	0.04	10.51	19.3	12.20					54.000	0.000	0.00	109	9554	56	4909	145	12710	8.04	529	9.1	3.2	13.2	0.10	5.0	438	< 3.5	307	2.8	245	0.06	5.3		
2	Thu	0.01	10.05	15.0	11.26					54.000	0.000	0.00	85	7124	56	4861	103	8633	8.41	537	9.0	3.6	14.8	0.09	3.8	319	< 4.0	335	3.6	302	0.04	3.4		
3	Fri	0.00	10.78	15.5	12.62						0.000	0.00			60	5394	150	13486	6.75	607		< 4.0	10.4	0.06			< 4.0	360	1.4	126	0.03	2.7		
4	Sat	0.00	10.98	16.0	12.73						0.000	0.00																					
5	Sun	0.00	10.65	15.2	12.49						0.000	0.00	104	9237	44	3908	187	16610	8.27	557				0.06	4.4	391	< 3.2	284	1.8	142	0.04	3.8		
6	Mon	0.00	10.75	16.8	12.57						0.000	0.00	89	7979	73	6545	150	13448	8.40	753	3.9	2.8	9.0		< 3.7	332	< 3.3	296	0.6	54	0.04	3.6		
7	Tue	0.00	10.83	16.2	12.72						0.000	0.00	116	10477	62	5600	124	11200	7.44	672	7.3	< 3.6	11.4	0.07	< 4.0	361	< 3.5	318	1.0	90	0.05	4.5		
8	Wed	0.00	10.58	15.2	12.27						0.000	0.00	96	8471	52	4588	132	11647	6.94	612	8.7	3.4	12.0	0.09	3.9	344	< 4.0	353	2.8	247	0.06	5.3		
9	Thu	0.00	10.12	20.8	11.41					8.000	0.000	0.00	84	7090	55	4642	87	7343	8.06	680	9.7	2.6	11.6	0.09	3.4	287	< 3.7	312	2.8	236	0.05	4.2		
10	Fri	0.00	10.36	19.2	11.76						0.000	0.00			50	4320	126	11060	8.54	738		< 3.7	12.4	0.08			< 3.7	320	2.2	190	0.05	4.3		
11	Sat	0.00	9.73	15.0	11.20						0.000	0.00																					
12	Sun	0.00	9.98	14.9	11.40						0.000	0.00	76	6326	47	3912	72	5993	8.55	545					3.8	316	< 3.5	291	2.8	233	0.06	5.0		
13	Mon	0.00	9.91	15.8	11.74						0.000	0.00	68	5620	44	3637	100	8265	7.73	639	8.1	< 4.0	6.8	0.04	< 4.6	380	< 4.0	331	1.0	83	0.08	6.8		
14	Tue	0.15	10.24	16.9	11.65						0.000	0.00	105	8967	56	4782	151	12896	8.12	693	7.4	3.2	10.8	0.06	< 4.2	359	< 3.7	316	1.4	120	< 0.02	1.7		
15	Wed	0.03	10.65	17.0	12.29						0.000	0.00	119	10570	57	5063	141	12624	9.24	821	8.7	< 3.8	11.4	0.34	< 4.3	382	< 3.8	338	1.0	89	0.15	13.3		
16	Thu	0.00	9.68	15.2	11.29						0.000	0.00	112	9229	66	5438	123	10135	10.30	849	9.8	< 4.0	11.4	0.32	5.1	420	< 4.0	330	4.8	396	0.16	13.2		
17	Fri	0.08	9.71	15.8	11.14						0.000	0.00			64	5183			7.98	646		< 4.0	13.0	0.31			< 4.0	324			0.14	11.3		
18	Sat	0.00	9.55	15.2	10.85						0.000	0.00																					
19	Sun	0.38	11.33	29.8	12.66			18.000	0.630		0.000	0.00	166	15875	59	5576	320	30236	6.48	612					6.8	624	< 3.5	331	6.4	605	0.05	4.7		
20	Mon	0.19	11.63	20.7	13.84					6.000	0.000	0.00	104	10087	50	4850	153	14840	6.72	652	9.2	2.8	12.8	0.10	3.3	320	< 3.6	339	3.8	369	0.06	5.6		
21	Tue	0.00	9.93	15.9	10.97						0.000	0.00	97	8033	52	4306	123	10186	9.41	779	6.9	< 3.7	13.2	0.11	< 4.3	356	< 3.7	306	5.8	464	0.05	4.1		
22	Wed	0.00	9.50	15.0	10.67						0.000	0.00	95	7527	52	4120	115	9111	8.23	652	7.4	< 3.7	11.4	0.10	< 4.3	341	< 3.7	293	5.2	412	0.04	3.2		
23	Thu	0.00	9.63	16.0	10.60						0.000	0.00	80	6425	50	4018	102	8192	7.00	562	7.8	< 3.7	11.4	0.06	4.7	377	< 3.7	297	5.6	450	0.04	3.2		
24	Fri	0.04	10.06	19.2	10.99						0.000	0.00			41	3440	91	7635	7.16	601		< 3.1	12.8	0.06			< 3.7	310	4.1	344	0.03	2.5		
25	Sat	0.00	9.81	15.2	10.19						0.000	0.00																					
26	Sun	0.12	10.13	24.0	10.26						0.000	0.00	91	7688	45	3802	120	10136	8.31	533					5.6	473	< 3.7	313	6.2	524	0.04	3.4		
27	Mon	0.12	10.24	22.1	11.19						0.000	0.00	138	11785	57	4868	174	14860	7.37	629	10.8	3.3	9.2	0.07	4.4	376	< 3.7	316	4.0	342	0.03	2.6		
28	Tue	0.06	10.55	21.5	11.26						0.000	0.00	135	11878	63	5543	149	13110	8.28	729	7.8	< 3.7	12.1	0.06	< 4.3	378	< 3.7	326	3.6	334	0.03	2.6		
29	Wed	0.00	9.50	11.8	9.46						0.000	0.00	99	7844	60	4754	179	14182	10.10	800	4.8	< 3.5	12.0	0.06	< 4.0	317	< 3.5	277	3.0	238	0.04	3.2		
30	Thu	0.00	9.57	15.0	9.45						0.000	0.00	84	8704	43	3432	83	6625	7.62	608	5.9	< 3.5	11.2	0.06	< 4.0	319	< 3.5	279	2.8	223	0.04	3.2		
31	Fri	0.00	9.66	15.5	9.41						0.000	0.00			52	4189	75	6042	6.84	535		< 3.5	9.0	0.06			< 3.5	282	3.4	274	0.03	2.4		
Total		1.21	316.60		354.58	0.00	0.00	18.00	0.63	120.00	0.00	0.00																					
Mean			10.22		11.44			18.00	0.63	30.00	0.00	0.00	102	8541	54	4655	134	11581	7.63	651	7.9	3.5	11.4	0.11	4.4	373	3.7	314	3.2	274	0.06	4.8		
Maximum		0.38	11.63	29.8	13.84	0.00	0.00	18.00	0.63	54.00	0.00	0.00	166	15875	73	8545	320	30238	10.30	849	10.8	4.0	14.8	0.34	8.6	824	4.0	360	6.4	605	0.16	13.3		
Minimum			9.50		9.41	0.00	0.00	18.00	0.63	6.00	0.00	0.00	68	5620	41	3432	72	5993	6.04	529	3.9	2.6	6.6	0.04	3.3	287	3.2	277	0.6	54	0.02	1.7		
# of Data		31	31	31	31	0	0	1	1	4	31	31	22	22	27	27	28	26	27	27	16	23	23	23	22	22	27	27	26	26	27	27		
# of Data<MDL																					0	14			10		27				1			
Wk1: 02/27-03/04/00			10.72		12.46								99	8904	54	4789	137	12270	6.36	567					4.3	448	3.8	391	2.6	262	0.06	8.0		
Wk2: 03/05-03/11/00			10.43		12.06								98	8651	56	5139	135	11885	7.61	669					3.9	399	3.6	362	1.6	184	0.05	4.9		
Wk3: 03/12-03/18/00			9.99		11.48								96	8142	56	4669	117	9962	8.32	699					4.4	428	3.8	370	2.2	211	0.10	9.6		
Wk4: 03/19-03/25/00			10.27		11.42								108	9589	51	4384	151	13367	7.50	643					4.6	454	3.6	351	5.1	494	0.05	4.4		
Wk5: 03/26-04/01/00			9.87		10.00								109	7650	53	3798	130	9280	7.72	548					4.5	321	3.5	262	3.9	282	0.04	2.5		

Total Est. Bypass Flow (MG): 0.63 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR APRIL 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	9.45	15.0	8.96						0.000	0.00		0		0		0		0						0		0		0		0.0		
2	Sun	0.05	9.09	13.6	8.90						0.000	0.00	63	6292	56	4245	131	9931	5.77	437					<	3.5	265	<	3.2	243	5.0	379	0.01	0.8		
3	Mon	0.00	9.93	16.5	9.72						0.000	0.00	78	6480	64	5300	109	9027	6.16	510	7.9	< 3.5	12.2	0.02	<	4.0	331	<	3.5	290	4.2	348	0.05	4.1	35	30
4	Tue	0.00	9.53	14.9	8.89						0.000	0.00	77	6120	53	4212	110	8743	9.71	772	7.8	2.7	12.8	0.05	<	3.7	294	<	3.3	262	4.2	334	0.05	4.0	60	9
5	Wed	0.00	9.78	14.9	8.64						0.000	0.00	91	7422	60	4894	101	8238	11.30	922	9.0	< 3.5	13.3	0.44	<	4.0	326	<	3.5	285	2.8	228	0.33	26.9	59	49
6	Thu	0.00	9.64	14.0	8.47						0.000	0.00	87	5367	48	3859	82	6593	7.39	594	8.9	< 3.7	12.0	0.09	<	4.3	346	<	3.7	297	4.6	370	0.06	4.8	52	37
7	Fri	0.87	13.30	38.0	14.11	84.000	1.880	92.000	0.310		0.000	0.00		0	70	7765	258	29618	5.38	597		3.6	13.4	0.10			0	<	3.7	410	5.6	643	0.06	8.7	26	25
8	Sat	0.12	11.44	27.0	13.61						0.000	0.00		0		0		0		0						0		0		0		0.0	10400	9700
9	Sun	0.00	9.33	12.7	9.81						0.000	0.00	83	6458	53	4124	129	10038	5.77	449				0.03	<	4.3	335	<	3.7	288	6.0	467	0.05	3.9		
10	Mon	0.16	10.24	19.0	11.03			96.000	0.330		0.000	0.00	68	5607	42	3587	134	11444	6.22	531	6.3	< 3.5	11.8	0.02	<	4.0	342	<	3.5	299	4.0	342	0.05	4.3	47	36
11	Tue	0.04	10.25	19.5	11.44						0.010	0.00	65	5557	40	3419	98	8378	6.89	589	7.5	< 3.7	14.4	0.04	<	4.3	368	<	3.7	316	4.4	378	0.04	3.4	25	16
12	Wed	0.00	9.47	27.9	9.60						0.010	0.00	78	6160	60	4739	146	11531	8.34	659	6.4	6.0	13.4	0.22	<	4.0	316	<	3.5	276	6.0	474	0.09	7.1	33	21
13	Thu	0.00	10.17	15.7	11.45						0.000	0.00	70	5937	44	3732	124	10517	9.52	807	5.9	3.5	10.0	0.06	<	4.0	339	<	3.5	297	3.4	288	0.02	1.7	64	42
14	Fri	0.00	10.02	14.8	10.67						0.000	0.00		0	49	4095	131	10947	8.83	571		< 3.7	11.4	0.18			0	<	3.7	309	1.8	150	0.09	7.5	42	30
15	Sat	0.00	9.82	15.0	9.70						0.000	0.00		0		0		0		0						0		0		0		0.0	12	7
16	Sun	1.13	12.22	38.3	12.53	66.000	1.100	90.000	0.630		2.470	0.00	124	12637	92	9378	94	9580	5.99	610					<	4.3	438	<	3.7	377	5.0	510	0.15	16.3		
17	Mon	0.03	11.36	33.4	13.04	12.000	0.070	60.000	0.080		0.000	0.00	94	8906	67	6348	270	25580	4.31	408	9.0	< 4.0	13.9	0.07	<	4.6	436	<	4.0	379	2.1	199	0.08	7.6	7	12
18	Tue	0.00	10.40	15.0	11.12						0.000	0.00	79	6852	48	4163	115	9975	7.50	651	9.2	3.2	18.6	0.04	<	4.2	364	<	3.6	312	3.0	260	0.04	3.5	1	6
19	Wed	0.40	13.61	33.0	14.67	114.000	0.710	48.000	0.220		0.760	0.00	114	12940	58	6583	262	29739	5.94	674	10.4	3.4	17.2	0.28	<	4.0	454	<	3.5	397	3.6	409	0.17	19.3	10	15
20	Thu	0.99	17.96	37.0	20.04	162.000	3.380	144.000	5.000		1.950	0.52	86	9898	41	6141	165	24715	2.74	410	9.2	< 3.7	15.8	0.11	<	4.3	644	<	3.7	554	2.8	369	0.04	6.0	10	10
21	Fri	0.54	18.39	35.5	18.86			96.000	0.330		0.000	1.56		0	34	4848	112	15310	2.30	314		< 3.5	22.3	0.06			0	<	3.5	478	4.5	615	0.02	2.7	1	1
22	Sat	0.00	12.73	18.0	15.28						0.000	0.59		0		0		0		0						0		0		0		0.0	6	10
23	Sun	0.15	14.10	31.0	15.96						0.000	0.23	49	5762	29	3410	106	12465	8.06	948					<	4.0	470	<	3.5	412	4.4	517	0.02	2.4		
24	Mon	0.00	13.16	18.0	14.72						0.000	0.06	53	5626	36	3957	91	10003	5.21	573	6.3	< 3.7	17.6	0.02	<	4.2	462	<	3.7	407	2.0	220	0.02	2.2	3	11
25	Tue	0.00	13.12	18.0	14.30						0.000	0.00	70	7659	38	4158	116	12693	5.71	625	9.6	< 3.7	18.0	0.09	<	4.2	460	<	3.7	405	7.0	766	0.11	12.0	44	25
26	Wed	0.00	12.99	17.5	13.96						0.000	0.00	63	6825	40	4333	134	14517	7.28	789	8.6	3.2	14.0	0.06	<	3.7	401	<	3.3	358	4.0	433	0.02	2.2	25	19
27	Thu	0.00	12.77	19.0	13.68						0.000	0.00	68	7242	41	4367	137	14591	5.38	573	11.0	< 4.0	14.0	0.21	<	4.6	490	<	4.0	426	5.0	533	0.16	17.0	25	21
28	Fri	0.00	12.34	16.9	13.16						0.000	0.00	47	4837	48	4940	64	8645	6.40	659	< 4.2	3.9	19.0	0.07		4.6	473		3.5	360	5.0	515	0.04	4.1	35	26
29	Sat	0.00	11.94	16.9	12.71						0.000	0.00		0		0		0		0						0		0		0		0.0	26	24
30	Sun	0.00	11.59	16.9	12.36						0.000	0.00	62	5993	40	3866	68	6573	5.94	574						3.3	319		2.8	271	4.4	425	0.09	8.7		
Total		4.48	348.18		371.61	408.00	7.14	626.00	6.90		5.20	2.98																						
Mean			11.51		12.39	81.60	1.43	89.43	0.99		0.17	0.10	75	5232	50	4009	132	10946	6.48	508	8.1	3.7	14.7	0.11	4.1	289	3.6	290	4.2	340	0.07	5.9	460.33	424.21
Maximum		1.13	17.96	38.3	20.04	162.00	3.38	144.00	5.00		2.47	1.56	124	12940	92	9378	270	29739	11.30	948	11.0	6.0	22.3	0.44	4.6	644	4.0	554	7.0	766	0.33		10400.00	9700.00
Minimum			9.09		8.47	12.00	0.07	48.00	0.08		0.00	0.00	47	0	29	0	68	0	2.30	0	4.2	2.7	10.0	0.02	3.3	0	2.8	0	1.8	0	0.01	0.0	1.00	1.00
# of Data		30	30	30	30	5	5	7	7		30	30	22	22	25	25	25	25	25	25	17	20	20	21	22	22	25	25	25	25	25	25	24	24
# of Data<MDL																					1	12			20		23				3		0	0
Wk1: 04/02-04/08/00			10.39		10.38								79	6336	59	5046	132	11858	7.62	6.39					3.9	291	3.5	287	4.4	373	0.09	7.4	110	70
Wk2: 04/09-04/15/00			9.90		10.53								73	5964	48	3949	127	10476	7.26	6.01					4.1	366	3.6	320	4.3	374	0.06	4.9	33	22
Wk3: 04/16-04/22/00			13.52		15.08								95	10244	57	6210	170	19150	4.80	5.11					4.3	509	3.7	459	3.5	435	0.08	9.8	4	7
Wk4: 04/23-04/29/00			12.92		14.07								58	6359	39	4194	111	12152	6.34	694					4.2	502	3.6	431	4.6	542	0.05	7.2	21	20

Total Est. Bypass Flow (MG): 19.21 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MAY 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																							
Design Criteria			15 Avg 27 Max	38 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	5.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Mon	0.32	13.75	37.0	14.85						0.000	0.00	122	13990	53	6078	251	28783	4.93	565	9.0	< 3.5	18.2	0.09	4.0	459	3.1	355	5.8	665	0.19	21.8	41	36
2	Tue	0.00	11.72	16.8	13.33						0.000	0.00	55	5376	32	3128	62	6015	5.60	547	8.0	< 3.5	15.6	0.07	< 4.0	391	< 3.5	342	3.8	371	0.03	2.9	170	190
3	Wed	0.00	12.16	17.6	14.25						0.002	0.00	66	6693	38	3854	181	16328	5.43	551	7.5	< 4.5	19.0	0.07	< 4.0	406	< 3.5	356	5.8	568	0.06	8.1	58	44
4	Thu	0.00	12.99	17.6	13.39						0.000	0.00	87	9425	46	4983	101	10942	10.40	1127	12.0	< 3.5	18.6	0.91	< 4.0	433	< 3.5	379	4.4	477	0.39	42.3	87	58
5	Fri	0.00	11.93	17.4	13.12						0.000	0.00		0	45	4477	105	10447	8.84	661		< 3.5	12.0	0.23		0	< 3.5	348	1.8	179	0.17	16.9	140	110
6	Sat	0.00	11.94	16.3	12.92						0.000	0.00		0		0		0		0						0		0		0		0.0	47	51
7	Sun	0.00	12.42	15.8	12.10						0.000	0.00	60	6215	39	4040	88	9115	5.99	620					< 4.3	445	< 3.7	383	4.4	458	0.09	9.3		
8	Mon	0.00	11.87	29.4	13.01	0.100	0.201	0.400	0.180	0.400	2.994	0.00	94	9306	45	4455	168	16631	7.59	751	8.0	< 3.5	19.4	0.05	< 4.0	396	< 3.5	346	5.8	554	0.03	3.0	39	44
9	Tue	1.09	18.99	40.0	20.33	2.100	2.361	1.700	0.453	1.700	0.469	0.14	142	22489	66	10453	374	59233	4.45	705	11.0	< 3.6	21.4	0.06	5.1	808	< 3.5	554	12.6	1996	0.07	11.1	67	51
10	Wed	0.00	12.09	18.8	13.05						0.047	0.37	56	5647	36	3630	74	7481	5.89	695	8.6	< 3.5	14.8	0.02	< 4.0	403	< 3.5	353	5.2	524	0.02	2.0	59	52
11	Thu	0.23	14.02	38.1	15.20	0.100	0.093	0.300	0.194	0.100	0.105	0.22	91	10640	52	6080	104	12160	7.62	891	9.7	< 3.6	13.2	0.41	< 4.0	468	< 3.5	409	5.5	643	0.16	21.0	57	42
12	Fri	0.00	12.79	28.0	13.28						0.000	0.16		0	38	4053	67	7147	5.94	634		< 3.5	9.0	0.11		0	< 3.5	373	3.3	352	0.06	8.5	370	180
13	Sat	0.00	11.57	16.2	12.17						0.000	0.05		0		0		0		0						0		0		0		0.0	120	45
14	Sun	0.00	11.23	18.0	11.54						0.000	0.00	84	5994	35	3278	62	5807	6.34	594					< 3.3	309	< 3.0	281	5.2	487	0.12	11.2		
15	Mon	0.00	11.52	19.5	11.41						0.000	0.00	78	7494	38	3459	116	11145	7.57	737	4.7	< 3.2	11.5	0.03	< 3.5	336	< 3.2	307	1.8	154	0.03	2.9	61	52
16	Tue	0.14	12.36	22.1	12.41						0.000	0.00	127	13061	54	5562	127	13061	6.08	830	8.2	< 3.3	13.0	0.18	< 3.7	381	< 3.3	340	4.8	474	0.11	11.3	62	54
17	Wed	0.00	11.65	17.0	12.70						0.000	0.00	89	8647	44	4275	98	9522	5.80	564	6.1	< 3.5	11.2	0.07	< 4.0	389	< 3.5	340	1.4	136	0.03	2.9	380	420
18	Thu	0.36	13.45	40.0	14.39	1.600	3.310	1.900	0.682	1.600	1.581	0.36	112	12563	49	5496	161	18060	5.66	635	7.2	< 3.3	11.8	0.13	< 3.9	437	< 3.3	370	3.6	404	0.07	7.9	62	51
19	Fri	0.02	12.00	21.7	12.57						0.000	1.37		0	31	3102	105	10508	5.68	568		< 3.3	12.0	0.06		0	< 3.3	330	1.6	160	0.04	4.0	610	110
20	Sat	0.00	11.33	16.0	11.40						0.000	1.02		0		0		0		0						0		0		0		0.0	55	64
21	Sun	0.00	11.18	16.3	11.19						0.000	0.85	85	7926	35	3263	88	8019	5.74	535					< 4.2	392	< 3.7	345	3.8	336	0.07	6.5		
22	Mon	0.14	12.09	22.8	12.54						0.000	0.71	71	7159	51	5142	120	12100	6.04	609	4.4	< 4.0	14.2	0.06	< 4.8	464	< 4.0	403	3.0	302	0.05	5.0	5	12
23	Tue	0.00	11.76	17.5	12.20						0.000	0.36	91	8925	34	3335	85	8337	5.60	549	7.6	< 3.3	16.0	0.10	< 3.7	363	< 3.3	324	2.0	196	0.07	6.9	10	24
24	Wed	0.00	11.80	17.0	11.71						0.000	0.13	88	8366	44	4330	92	9054	6.18	606	7.2	< 3.2	14.4	0.06	< 3.5	344	< 3.2	315	1.8	177	0.05	4.9	28	36
25	Thu	0.00	11.53	18.6	11.23						0.000	0.03	102	9808	38	3654	113	10866	7.53	724	7.6	< 3.3	12.4	0.18	< 3.7	356	< 3.3	317	3.2	308	0.09	8.7	11	26
26	Fri	0.05	11.32	16.2	11.02						0.000	0.00		0	46	4343	149	14067	8.68	819		< 3.1	10.0	0.13		0	< 3.1	293	3.6	340	0.04	3.8	47	30
27	Sat	0.48	12.29	40.0	12.00		0.301		0.659		1.200	0.00		0		0		0		0						0		0		0		0.0	41	37
28	Sun	0.53	13.39	38.5	14.49		0.804		1.267		0.000	1.04	176	19654	63	7035	271	30263	5.32	594					< 3.7	413	< 3.3	369	3.8	402	0.04	4.5		
29	Mon	0.00	10.71	17.0	10.68						0.000	0.40	56	5002	34	3037	64	5717	6.02	538	5.2	< 3.3	10.8	0.09	< 3.7	330	< 3.3	295	3.0	268	0.05	4.5	47	30
30	Tue	0.02	11.56	17.6	11.64						0.000	0.17	69	6652	43	4146	82	7906	9.56	922	6.3	< 3.5	10.0	0.03	< 3.5	337	< 3.2	309	3.4	326	0.02	1.9	24	37
31	Wed	0.77	14.55	29.9	15.54	1.900	1.202	3.000	0.814	1.500	1.615	0.66	98	11892	44	5339	169	20508	8.63	829	7.7	< 3.3	11.9	0.18	< 3.7	449	< 3.3		3.8	461	0.16	19.4	53	41
Total		4.12	383.95		401.84	5.80	8.07	7.30	4.47	5.00	8.03	8.24																						
Mean			12.39		12.96	1.16	1.15	1.46	0.84	1.00	0.26	0.27	90	7192	43	4001	129	12297	6.81	594	7.7	3.5	13.9	0.15	3.9	307	3.4	305	4.0	376	0.09	8.1	101.19	71.37
Maximum		1.09	18.99	40.0	20.33	2.10	3.31	3.00	1.29	2.00	2.99	1.37	176	22489	66	10453	374	59233	10.40	1127	12.0	4.5	21.4	0.91	5.1	808	4.0	554	12.6	1996	0.39	42.3	810.00	420.00
Minimum			10.71		10.66	0.10	0.09	0.30	0.18	0.00	0.00	0.00	55	0	31	0	62	0	4.45	0	4.4	3.1	9.0	0.02	3.3	0	3.0	0	1.4	0	0.02	0.0	5.00	12.00
# of Data		31	31	31	31	5	7	5	7	5	31	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27	27	27
# of Data<MDL																					0	21			21		26				1		0	0
Wk1: 04/30-05/06/00			12.06		13.23								68	6872	40	3958	103	10341	6.80	692					3.8	427	3.4	374	4.0	446	0.15	18.4	85	77
Wk2: 05/07-05/13/00			13.39		14.18								89	10859	48	5452	146	19918	6.41	716					4.3	535	3.5	426	6.1	803	0.08	9.7	85	58
Wk3: 05/14-05/20/00			11.93		12.35								94	9556	42	4195	112	10135	6.57	658					3.7	385	3.3	341	3.0	313	0.07	6.9	56	64
Wk4: 05/21-05/27/00			11.97		12.48								94	9556	42	4195	112	10135	6.57	658					3.7	385	3.3	341	3.0	313	0.07	6.9	50	47
Wk5: 05/28-06/03/00			12.40		13.37								98	7200	41	3788	128	12402	6.95	622					3.6	267	3.3	303	3.1	313	0.07	5.3	31	35

Total Est. Bypass Flow (MG): 21.13 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JUNE 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data						Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																										
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mL)	Effluent E. coli (col/100 mL)
Design Criteria			15 Avg 27 Max	38 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Thu	0.00	13.00	18.4	14.63							1.29	83	8999	30	3253	84	9107	8.55	710	7.3	< 3.2	12.2	0.13	< 3.5	379	< 3.2	347	1.8	195	0.05	5.4	27	38
2	Fri	0.01	12.26	18.5	13.64							0.64			31	3170	98	10020	7.44	761		< 3.3	14.8	0.07			< 3.3	337	3.0	307	0.04	4.1	20	20
3	Sat	0.00	11.33	17.5	12.59							0.44																					47	61
4	Sun	0.00	11.85	16.8	12.30							0.31	68	6720	32	3163	67	6622	7.17	709					< 4.3	425	< 3.7	366	4.0	395				
5	Mon	1.05	17.04	34.0	19.25	180.000	2.883	4.100	1.551	138.000	2.194	< 2.02	84	11938	33	4690	155	22028	3.75	533	5.4	< 3.7	12.4	0.04	< 4.3	811	< 3.7	526	2.2	313	< 0.02	2.8	150	300
6	Tue	0.00	13.64	20.5	14.86							< 2.33	56	6370	33	3754	80	9101	5.88	669	7.1	< 3.7	13.2	0.07	< 4.3	489	< 3.7	421	5.0	569	< 0.06	6.8	48	180
7	Wed	0.00	13.96	21.0	14.94							0.88	83	9663	30	3493	107	12458	5.48	638	7.7	< 3.5	11.8	0.03	< 4.3	501	< 3.5	407	5.0	562	0.03	3.5	32	240
8	Thu	0.00	13.70	18.5	14.84							0.43	77	8798	30	3428	92	10512	5.77	859	8.2	< 3.7	11.8	0.04	< 4.3	491	< 3.7	423	4.0	457	0.04	4.6	29	150
9	Fri	0.00	13.15	23.2	13.72							0.31			38	4167	126	13819	5.96	654		< 3.7		0.04			< 3.7	406	1.7	186	0.02	2.2	35	180
10	Sat	0.00	12.34	17.3	12.73							0.19																					54	54
11	Sun	0.07	12.47	17.8	12.87							0.07	74	7696	33	3432	110	11440	4.62	501					< 3.7	385	< 3.1	322	3.0	312	0.09	9.4		
12	Mon	0.91	17.48	40.0	19.32					139.800	2.457	< 1.61	78	11371	43	6269	82	11954	8.15	751	8.2	< 4.0	12.8	0.04	< 4.6	871	< 4.0	583	5.9	773	< 0.02	2.9	110	180
13	Tue	0.66	15.73	35.5	16.58	114.000	3.958	192.000	1.096	144.000	2.355	< 4.61	72	9446	34	4460	137	17973	3.58	470	6.8	< 3.7	15.0	0.02	< 4.3	564	< 3.7	485	3.4	446	< 0.02	2.6	310	320
14	Wed	0.38	18.23	34.0	18.49	57.400	1.993	49.800	0.255	71.400	0.042	< 3.22	84	12771	40	6082	171	26999	4.88	742	7.8	< 3.5	10.2	0.05	< 4.3	654	< 3.7	563	3.2	487	0.05	7.6	80	310
15	Thu	0.00	15.67	21.0	15.91							1.55	99	13103	37	4897	127	16809	5.20	688	8.4	< 3.7	8.8	0.02	< 4.3	589	< 3.7	490	1.6	212	0.02	2.8	140	260
16	Fri	0.05	15.63	20.9	15.75							0.55			45	5886	231	30112	5.10	665		< 3.5	13.0	0.05			< 3.5	456	1.4	182	0.03	3.9	50	190
17	Sat	0.00	14.12	19.0	15.00							0.24																					52	67
18	Sun	0.00	13.35	18.0	14.20							0.13	79	8796	34	3786	88	9798	6.61	736					< 4.3	479	< 3.7	412	3.8	423	0.08	6.9		
19	Mon	0.00	14.14	20.0	14.97							0.05	84	9906	32	3774	126	14859	8.79	1037	8.1	< 3.7	11.0	0.24	< 4.3	507	< 3.7	436	2.2	259	0.14	16.5	160	390
20	Tue	1.52	17.69	33.0	17.92	165.000	5.729	220.000	1.225	197.000	7.486	< 0.74	120	17704	46	6787	107	15786	4.20	620	7.4	< 3.7	11.4	0.02	< 4.3	634	< 3.7	546	2.0	295	0.02	3.0	220	150
21	Wed	0.01	17.58	29.3	17.51	5.400	0.188	99.600	0.530	12.600	0.479	< 3.79	102	14955	44	6451	138	19793	5.10	748	7.4	< 3.7	10.2	0.13	< 4.2	616	< 3.7	542	2.2	323	0.05	7.3	74	36
22	Thu	0.00	16.04	20.0	16.98							1.25	92	12307	42	5616	133	17792	6.02	805	7.6	< 3.7	15.2	0.05	< 4.3	575	< 3.7	495	3.2	428	0.03	4.0	89	75
23	Fri	0.05	15.97	28.0	16.15							0.45			39	5194	445	59269	6.63	883		< 3.7	16.2	0.07			< 3.7	493	2.6	333	0.03	4.0	230	140
24	Sat	1.82	17.05	30.0	16.87	297.000	10.313	357.000	1.623	279.600	10.625	< 1.24																					92	78
25	Sun	0.00	17.02	21.0	17.73			207.000	1.136	23.400	0.689	< 4.05	47	6671	22	3123	70	9936	3.30	468					< 4.2	596	< 3.7	525	2.0	284	0.04	5.7		
26	Mon	0.00	20.17	29.5	19.81			14.400	0.060			1.45	95	15961	35	5888	157	26410	4.59	772	8.2	< 3.7	12.0	0.04	< 4.3	723	< 3.7	622	4.4	740	0.05	8.4	280	
27	Tue	0.00	16.65	30.5	16.59							0.61	79	12420	35	5502	123	19337	5.10	802	7.3	< 3.7	10.6	0.06	< 4.3	676	< 3.7	582	4.4	692	0.03	4.7	320	340
28	Wed	0.04	16.63	30.0	16.95							0.34	80	11229	29	4071	116	16262	4.65	653	7.9	< 3.7	11.2	0.02	< 4.3	604	< 3.7	519	2.5	361	< 0.02	2.8	33	41
29	Thu	0.05	18.48	30.0	18.24	72.000	2.500					0.47	76	11713	36	5548	95	14642	7.00	1079	8.1	< 3.7	12.8	0.01	< 4.3	663	< 3.7	570	1.8	277	< 0.02	3.1	62	71
30	Fri	0.00	16.49	28.4	16.54							0.20			36	4951	109	14990	5.85	805			3.7	12.8	0.04			< 3.7	509	2.4	330	0.01	1.4	20	12
Total		6.64	461.46		482.06	890.80	27.56	1143.90	7.48		26.53	35.85																						
Mean			15.38		16.07	127.26	3.94	142.99	0.93		3.32	1.19	82	10684	35	4647	130	17186	5.56	714	7.4	3.6	12.3	0.06	4.2	582	3.6	476	3.0	390	0.04	5.1	106.31	158.96
Maximum		1.82	20.17	40.0	19.81	297.00	10.31	357.00	1.62		10.63	4.81	120	17704	46	6787	445	59269	8.79	1079	8.2	4.0	16.2	0.24	4.6	723	4.0	622	5.3	773	0.14	16.5	320.00	390.00
Minimum			11.33		12.30	5.40	0.19	4.10	0.06		0.04	0.05	47	6370	22	3123	67	6622	3.30	468	5.4	3.2	8.8	0.01	3.5	379	3.1	322	1.4	182	0.01	1.4	20.00	12.00
# of Data		30	30	30	30	7	7	6	6	6	8	30	21	21	26	26	26	26	26	26	17	22	21	22	21	21	26	26	26	26	25	25	26	26
# of Data<MDL																					0	20			21		25				6		0	0
Wk1: 06/04-06/10/00			13.67		14.66								74	8698	33	3782	104	12413	5.67	644					4.3	546	3.7	458	3.7	449	0.03	3.6	48	163
Wk2: 06/11-06/17/00			15.65		16.27								81	10677	39	5168	143	19048	4.79	636					4.2	593	3.6	502	3.0	423	0.04	5.0	104	180
Wk3: 06/18-06/24/00			15.97		16.66								95	12734	40	5268	172	22883	6.23	605					4.3	562	3.7	503	2.7	356	0.06	7.6	130	110
Wk4: 06/25-07/01/00			17.50		17.62								78	9669	32	4155	112	14514	5.08	654					4.3	543	3.7	475	2.9	380	0.03	3.7	70	78

Total Est. Bypass Flow (MG): 70.69 Total Bypass Occurances (days/month): 10

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JULY 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																									
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	14.67	19.0	15.47							0.01		0		0		0		0						0		0		0		0.0	33	78
2	Sun	0.00	14.27	19.0	15.42							0.01	41	4879	26	3094	67	7974	4.42	526					3.5	417	< 3.2	381	2.0	238	0.02	2.4		
3	Mon	0.92	20.95	32.0	21.22	218.400	5.308	255.000	1.594	182.400	3.167	> 2.72	110	19220	49	8561	231	40361	5.71	998	4.8	< 3.5	9.8	0.05	4.0	699	< 3.5	612	2.6	454	0.03	5.2	60	75
4	Tue	0.00	16.13	27.8	16.57							1.77	35	4708	21	2825	40	5381	4.14	557	7.8	< 4.0	13.0	0.07	4.6	619	< 4.0	538	2.8	377	< 0.02	2.7	60	120
5	Wed	0.00	16.24	30.0	16.25							1.23	40	5418	16	2187	57	7720	4.37	592	7.7	< 3.7	14.2	0.07	4.3	582	< 3.7	501	4.2	569	0.02	2.7	28	150
6	Thu	0.00	15.83	28.3	16.09							0.97	134	17691	61	8053	184	21652	4.54	599	9.5	< 3.2	12.0	0.14	3.3	436	2.6	343	3.0	396	0.05	6.8	190	170
7	Fri	0.00	15.96	20.0	15.73							0.70		0	54	7188	123	16372	4.48	596		< 3.7	10.6	0.11		0	< 3.7	492	2.5	333	0.06	8.0	60	92
8	Sat	0.00	15.02	19.5	15.60							0.45		0		0		0		0						0		0		0		0.0	250	200
9	Sun	0.00	14.81	20.3	15.44							0.15	119	14500	82	7555	110	13403	4.97	606					4.0	487	< 3.5	426	4.2	512	0.05	6.1		
10	Mon	0.81	17.71	32.4	16.50	99.000	2.406	166.200	0.997	106.200	1.844	> 1.64	70	10339	47	6942	132	19497	5.16	761	7.9	< 4.0	11.4	0.09	4.6	679	< 4.0	591	5.4	798	0.05	7.4	27	16
11	Tue	0.00	16.01	28.5	15.60							0.96	85	11349	30	4006	126	16824	5.15	688	4.8	< 4.0	10.6	0.05	4.6	614	< 4.0	534	2.8	374	0.02	2.7	210	
12	Wed	0.00	15.35	23.0	15.06							0.30	59	7553	34	4353	126	16130	5.38	669	6.2	< 4.0	12.2	0.02	3.3	422	3.0	384	2.8	358	< 0.02	2.6	220	
13	Thu	0.00	15.04	20.0	15.11							0.06	81	10160	43	5394	143	17937	6.05	759	< 4.6	< 4.0	13.2	0.27	4.8	577	< 4.0	502	3.6	452	0.06	7.5	350	180
14	Fri	0.01	14.57	19.8	15.19							0.00		0	36	4374	106	12880	6.04	734		< 4.0	7.0	0.35		0	< 4.0	488	2.0	243	0.12	14.6	1500	300
15	Sat	0.00	13.25	19.3	14.44							0.00		0		0		0		0						0		0		0		0.0	73	180
16	Sun	0.00	13.03	18.0	14.45							0.00	69	7498	40	4347	88	9563	4.93	536					4.0	435	3.3	359	2.8	304	0.01	1.1		
17	Mon	0.00	13.32	19.0	14.25							0.00	60	6665	51	5666	108	11998	7.66	851	< 4.8	< 4.0	13.8	0.06	4.6	511	< 4.0	444	3.6	400	< 0.02	2.2	49	200
18	Tue	0.01	13.37	19.8	14.07							0.00	76	8363	51	5687	92	10259	8.72	749	6.1	3.7	17.7	0.18	3.8	424	3.3	368	2.8	312	0.04	4.6	34	37
19	Wed	0.00	14.10	20.8	14.03							0.00	64	7526	53	6232	112	13171	8.55	770	2.4	< 3.4	18.0	0.09	2.5	294	1.8	212	2.8	306	0.04	4.7	44	110
20	Thu	0.00	13.45	19.4	13.40							0.00	69	7740	54	6057	125	14022	8.38	716	4.0	< 4.0	20.2	0.16	4.8	518	< 4.0	449	3.2	359	0.04	4.5	43	180
21	Fri	0.00	13.15	19.2	12.65							0.00		0	47	5155	144	15793	4.45	488		< 3.7	15.8	0.15		0	< 3.7	406	3.1	340	0.11	12.1	250	80
22	Sat	0.00	12.80	17.3	12.48							0.00		0		0		0		0						0		0		0		0.0	30	70
23	Sun	0.00	12.10	16.9	11.60							0.00	52	5246	42	4238	88	8880	6.16	622					3.6	353	3.1	313	1.0	101	0.04	4.0		
24	Mon	0.00	13.02	18.0	11.96							0.00	81	8824	54	5864	91	9881	7.75	842	< 4.8	< 4.0	13.4	0.34	4.8	499	< 4.0	434	0.4	43	0.11	11.9	65	34
25	Tue	0.00	12.99	19.1	12.18							0.00	73	7909	54	5850	95	10292	7.09	768	3.1	< 4.0	13.2	0.22	3.1	336	< 4.3	466	8.8	737	0.06	8.5	29	100
26	Wed	0.00	13.18	19.1	12.73							0.00	85	9343	73	8024	56	6156	6.72	739	8.8	2.9	12.9	0.19	4.0	440	< 3.5	385	1.2	132	0.06	8.6	65	38
27	Thu	0.00	13.04	23.0	12.72							0.00	81	8634	42	4566	122	13268	5.48	597	< 4.3	< 3.7	15.2	0.15	4.3	468	< 3.7	402	1.6	174	0.02	2.2	310	150
28	Fri	0.42	15.56	40.0	14.97	28.200	0.648	36.000	0.120	66.000	0.499	0.00		0	60	7786	214	27771	6.54	719		< 3.7	14.0	0.11		0	< 3.7	480	2.7	350	0.07	9.1	750	650
29	Sat	0.04	12.88	20.8	13.15							0.00		0		0		0		0						0		0		0		0.0	670	530
30	Sun	0.21	12.79	21.3	12.64							0.00	38	4053	25	2667	61	6507	4.37	466					4.0	427	< 3.5	373	3.6	405	0.06	6.5		
31	Mon	0.13	14.45	31.2	13.11							0.00	67	6869	37	4459	103	12413	7.56	911	7.3	< 3.7	14.2	0.09	4.3	518	< 3.7	446	8.8	819	0.05	8.0	110	210
Total		2.55	448.64		452.26	345.60	8.36	457.20	2.71		5.51	10.97																						
Mean			14.48		14.59	115.20	2.79	152.40	0.90		1.84	0.35	70	6138	45	4552	112	11810	5.68	577	5.9	3.8	13.4	0.14	4.0	347	3.6	365	3.1	319	0.05	4.9	208.08	180.38
Maximum		0.92	20.95	40.0	21.22	218.40	5.31	255.00	1.59		3.17	2.72	134	19220	73	6561	231	40361	7.75	998	9.5	4.0	20.2	0.35	4.8	699	4.3	812	6.8	819	0.12	14.8	1500.00	650.00
Minimum			12.10		11.60	28.20	0.65	36.00	0.12		0.50	0.00	35	0	16	0	40	0	4.14	0	2.4	2.9	7.0	0.02	2.5	0	1.8	0	0.4	0	0.01	0.0	27.00	18.00
# of Data		31	31	31	31	3	3	3	3		3	31	22	22	26	25	26	26	28	26	17	21	21	21	22	22	26	26	26	26	26	26	28	26
# of Data<MDL																					4	19			15		20				3		0	0
Wk1: 07/02-07/08/00			16.34		16.70								72	10383	36	5315	114	16577	4.61	601					3.9	584	3.5	487	2.9	401	0.03	4.7	81	127
Wk2: 07/09-07/15/00			15.22		15.62								83	10780	42	5437	124	15112	5.48	666					4.2	563	3.8	498	3.5	466	0.05	7.0	191	167
Wk3: 07/16-07/22/00			13.32		13.64								67	7558	49	5524	111	12458	8.12	539					3.9	456	3.4	386	3.0	348	0.04	4.9	54	90
Wk4: 07/23-07/29/00			13.25		12.78								66	7151	54	6055	111	12706	8.48	575					3.9	399	3.7	394	2.3	244	0.06	6.4	159	137

Total Est. Bypass Flow (MG): 16.58 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF DPERATIONS SUMMARY FOR AUGUST 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML 235 DML <MDL
1	Tue	0.00	12.49	18.1	11.59							0.00	44	4583	24	2500	54	5625	5.79	707	7.3	< 3.5	12.8	0.12	4.0	417	< 3.5	365	2.0	208	0.07	7.3	180	170
2	Wed	0.02	12.61	19.5	12.02							0.00	56	5983	38	3846	96	10256	7.07	755	6.8	< 3.3	14.2	0.07	3.7	395	< 3.3	353	4.8	513	0.04	4.3	140	128
3	Thu	0.00	12.09	17.4	12.25							0.00	46	4638	31	3126	62	6251	7.17	723	8.0	< 3.7	11.5	0.17	3.6	363	< 3.7	373	2.6	262	0.03	3.0	190	200
4	Fri	0.00	12.06	17.4	10.51							0.00			43	4325	80	8046	8.94	898		< 3.7	12.0	0.09			< 3.7	372	2.7	272	0.06	8.0	62	81
5	Sat	0.30	13.45	34.8	13.38	25.800	1.174	37.800	0.184	35.400	1.356	0.00																				250	200
6	Sun	0.75	14.42	39.6	15.15	177.600	8.081	115.200	0.615	184.400	3.152	0.54	123	14792	53	6374	271	32591	5.21	627					3.7	445	< 3.3	397	3.8	433				
7	Mon	0.00	13.72	19.8	13.37							1.16	41	4691	39	4463	75	8582	5.94	680	6.1	< 4.0	12.6	0.20	4.8	526	< 4.0	458	2.1	240	0.10	11.4	190	
8	Tue	0.00	13.69	20.1	14.16							0.45	69	7678	41	4681	65	7421	8.34	952	9.1	< 3.7	12.2	0.11	4.3	491	< 3.7	422	2.4	274	0.04	4.8	390	
9	Wed	0.00	13.48	19.2	13.76							0.24	83	9331	53	5958	125	14053	7.52	857	7.5	3.1	14.0	0.22	4.0	450	< 3.5	393	7.0	787	0.07	7.9	540	
10	Thu	0.00	11.80	19.4	12.00							0.13	54	5314	35	3444	98	9644	5.60	551	5.9	< 3.3	12.8	0.14	3.7	364	< 3.3	325	2.8	276	0.02	2.0	220	
11	Fri	0.00	12.95	19.0	13.18							0.07			76	8206	141	15226	7.11	768			8.7	11.7	0.41			< 3.5	378	5.0	540	0.23	24.8	1200	
12	Sat	0.00	11.98	19.8	12.20							0.00																				2400	
13	Sun	0.00	11.92	17.0	11.61							0.00	48	4772	43	4275	81	8052	8.78	874					4.8	457	< 4.0	398	3.8	378	0.06	5.0		
14	Mon	0.00	12.67	18.5	12.84							0.00	33	3487	30	3170	110	11623	8.96	947	< 4.6	< 4.0	9.4	0.18	4.6	486	< 4.0	423	3.4	359	0.06	8.3	360	
15	Tue	0.00	12.94	19.2	12.38							0.01	72	7770	59	6367	109	11763	8.55	707	8.5	< 4.0	10.6	0.14	4.6	496	< 4.0	432	2.4	259	0.04	4.3	500	
16	Wed	0.00	12.36	19.4	11.58							0.03	102	10514	80	8247	94	9690	7.44	767	7.0	< 3.5	9.8	0.18	4.0	412	< 3.5	361	2.8	266	0.05	5.2	270	
17	Thu	1.21	15.69	40.0	16.06	178.400	8.026	156.600	0.698	180.000	3.148	> 1.78	99	13120	62	8216	276	36576	5.74	761	5.9	< 3.7	8.0	0.06	4.3	570	< 3.7	490	0.8	106	0.04	5.3	3400	4600
18	Fri	0.02	12.82	18.5	12.86	178.400	8.026					1.04			26	2994	100	10682	4.91	525		< 3.5	8.2	0.09			< 3.5	374	0.4	43	0.04	4.3	51	40
19	Sat	0.00	12.00	16.2	12.00							0.41																				58	
20	Sun	0.00	12.24	18.3	12.48							0.16	45	4594	33	3369	67	6839	6.32	645					4.0	408	< 3.5	357	2.8	285	0.06	6.1		
21	Mon	0.00	12.53	18.5	12.67							0.07	48	5016	30	3135	94	9823	8.96	936	6.0	< 4.0	18.0	0.16	4.8	481	< 4.0	418	2.0	209	0.06	6.3	290	
22	Tue	0.00	12.52	20.9	12.61							0.04	66	7100	38	3968	95	9920	7.78	812	5.8	< 3.5	9.8	0.16	4.0	416	< 3.5	385	3.2	334	0.06	6.3	460	
23	Wed	0.26	15.22	40.0	16.21	25.800	0.587	55.200	0.329	63.000	0.847	0.50	69	11297	63	7997	171	21706	5.99	760	6.6	< 3.2	8.6	0.17	3.6	444	< 3.2	406	1.5	190	0.04	5.1	640	700
24	Thu	0.00	12.55	22.2	13.73							0.27	36	3768	27	2826	60	6280	6.27	656	3.7	< 3.0	11.0	0.11	3.3	345	< 3.0	314	0.5	63	0.04	4.2	110	
25	Fri	0.00	12.30	18.5	13.34							0.18			34	3488	82	8412	7.81	801		< 3.7	11.8	0.33			< 3.7	380	2.0	205	0.08	8.2	230	
26	Sat	0.00	12.22	18.1	13.24							0.09																				150	
27	Sun	0.00	11.74	17.0	12.99							0.04	47	4602	32	3133	65	6364	5.32	521					3.7	362	< 3.3	323	5.2	509	0.11	10.8		
28	Mon	0.00	12.41	19.0	13.53							0.00	87	9004	56	5796	122	12627	9.18	950	7.6	< 3.3	11.0	0.12	3.7	383	< 3.3	342	3.0	310	0.04	4.1	150	210
29	Tue	0.00	12.15	17.1	13.36							0.02	103	10437	62	6309	109	11045	8.64	896	7.4	< 3.3	13.0	0.15	3.7	375	< 3.3	334	3.8	385	0.04	4.1	22	13
30	Wed	0.00	12.18	18.4	13.02							0.03	87	8838	63	6400	100	10158	8.48	859	9.2	4.7	13.2	0.14	3.3	335	2.9	295	4.2	427	0.04	4.1	25	27
31	Thu	0.00	12.20	21.0	12.87							0.03	113	11498	79	8038	116	11803	9.07	923	6.5	< 4.0	12.0	0.13	4.8	468	< 4.0	407	3.8	387	0.06	5.1	8	24
Total		2.58	395.80		403.13	582.00	25.89	364.80	2.01		8.50	7.24																					
Mean			12.77		13.00	116.40	5.18	91.20	0.50		2.13	0.23	69	7523	47	5081	106	11892	7.12	758	6.6	3.8	11.6	0.18	4.0	430	3.6	380	3.0	315	0.06	6.4	402.44	477.89
Maximum		1.21	15.69	40.0	16.21	177.60	8.08	156.60	0.90		3.15	1.78	123	14792	62	8309	276	36576	9.18	952	9.2	8.7	18.0	0.41	4.8	570	4.0	490	7.0	787	0.23	24.8	3400.00	4600.00
Minimum			11.74		10.51	25.80	0.59	37.80	0.18		0.85	0.00	33	3487	24	2500	54	5625	4.91	521	3.7	3.0	8.0	0.07	3.3	335	2.9	295	0.4	43	0.02	2.0	8.00	13.00
# of Data		31	31	31	31	5	5	4	4		4	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	26	26	27	27
# of Data<MDL																					1	20			21		28				1		0	0
Wk1: 07/30-08-05			12.88		12.21								48	5225	33	3487	76	8183	8.55	710					3.9	403	3.8	357	3.8	387	0.06	5.5	149	148
Wk2: 08/06-08-12			13.15		13.40								74	8401	50	5521	129	14587	6.64	739					4.1	464	3.8	403	3.8	434	0.09	10.2	542	556
Wk3: 08/13-08-19			12.94		12.79								71	7933	50	5545	128	14733	6.73	730					4.4	477	3.8	407	2.2	231	0.05	5.0	281	352
Wk4: 08/20-08-26			12.80		13.47								57	6355	38	4131	95	10497	7.19	769					3.9	435	3.5	390	2.0	219	0.06	6.3	262	313
Wk5: 08/27-09-02			12.04		12.73								87	6340	62	5393	104	10535	8.21	714					3.8	347	3.4	307	3.5	411	0.06	5.3	33	32

Total Est. Bypass Flow (MG): 955.30 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR SEPTEMBER 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MG)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mLs)	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	8.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML 235 DML <MDL
1	Fri	0.00	12.14	18.8	12.36							0.00			60	6075	142	14377	8.40	850		< 3.7	10.4	0.11			< 3.7	375	1.6	162	0.06	6.1	15	15
2	Sat	0.00	11.48	17.0	10.95							0.03																				12	11
3	Sun	0.00	11.59	16.5	10.45							0.03	73	7056	48	4640	77	7443	8.62	833					4.0	387	< 3.5	336	3.0	290	0.07	6.8		
4	Mon	0.00	8.37	16.0	9.49							0.01	59	4119	36	2513	88	6143	6.55	457	< 4.0	< 3.5	11.4	0.06	4.0	279	< 3.5	244	2.8	195	0.04	2.8	13	17
5	Tue	0.00	11.26	25.0	9.91							0.00	148	13735	70	6585	241	22672	10.80	1016	8.4	< 3.5	16.8	0.57	4.0	376	< 3.5	329	3.6	357	0.20	18.8	200	250
6	Wed	0.02	11.26	22.0	9.91							0.00	96	9015	81	5728	112	10516	10.10	948	6.5	< 3.5	14.0	0.16	4.0	376	< 3.5	329	5.2	488	0.11	10.3	61	48
7	Thu	0.00	11.42	17.0	10.39							0.00	107	10191	81	7715	109	10381	8.40	800	7.6	< 3.5	14.2	0.06	4.0	381	< 3.5	333	3.6	362	0.09	8.6	25	30
8	Fri	0.00	8.20	16.0	11.13							0.02			72	4924	142	9711	6.28	586		3.7	13.0	0.14			< 3.7	253	3.0	205	0.16	10.9	50	80
9	Sat	0.00	11.25	18.5	10.03							0.01																				49	31
10	Sun	0.55	12.94	40.0	11.93	34.800	0.792	55.200	0.424	71.400	0.385	0.00	102	11008	75	8094	249	26872	5.48	589					4.6	496	< 3.7	399	4.0	432	0.13	14.0		
11	Mon	2.96	15.81	40.0	17.06	454.200	20.668	418.200	15.857	491.400	18.621	> 1.68	100	13186	57	7516	144	18987	5.22	688	13.0	6.3	11.6	0.19	6.6	1134	7.2	949	2.8	369	0.11	14.5	36	31
12	Tue	0.33	24.92	31.0	26.33	216.400	9.837	263.200	10.293	238.200	9.123	> 3.60	27	5611	15	3117	64	13301	3.14	653	6.1	< 3.7	9.3	0.09	4.3	894	< 3.7	769	2.8	582	0.06	12.5	71	54
13	Wed	0.00	22.13	32.0	20.99					11.400	0.218	1.26	35	6460	18	3322	49	9044	3.06	566	7.6	< 3.7	9.6	0.07	4.2	775	< 3.7	683	2.6	480	0.12	22.1	220	
14	Thu	0.31	21.76	33.8	20.82			20.400	0.464	43.200	0.827	0.72	23	4174	27	4900	52	9437	4.48	613	5.6	< 3.5	11.2	0.09	4.0	726	< 3.5	635	3.4	617	0.03	5.4	290	360
15	Fri	0.00	17.88	30.0	16.29							0.34			41	6114	92	13719	5.66	844		< 3.7	8.8	0.10			< 3.7	552	1.1	164	0.02	3.0	59	70
16	Sat	0.00	15.79	29.0	18.96							0.11																				31	37
17	Sun	0.00	15.55	20.6	16.27							0.04	41	5317	21	2723	54	7003	4.31	559					4.0	519	< 3.5	454	3.0	389	0.02	2.6		
18	Mon	0.00	14.99	20.1	15.69							0.00	52	6501	26	3250	75	9376	6.75	844	< 4.3	< 3.7	11.4	0.12	4.3	538	< 3.7	463	2.6	325	0.03	3.8	43	39
19	Tue	0.00	14.58	22.0	15.20							0.01	51	6201	30	3648	74	8998	5.07	616	7.9	< 3.7	10.6	0.11	4.3	523	< 3.7	450	2.6	340	0.04	4.9	51	39
20	Wed	0.58	17.41	38.3	17.71	33.600	0.784			72.000	1.379	0.04	79	11471	39	5663	162	23522	6.44	935	6.0	< 3.7	13.9	0.09	4.2	610	< 3.7	537	3.8	552	0.03	4.4	32	26
21	Thu	0.00	12.31	20.0	15.67							0.01	22	2259	13	1335	49	5031	6.16	632	4.2	< 3.5	11.4	0.06	4.0	411	< 3.5	359	7.0	719	0.06	8.2	36	31
22	Fri	0.41	16.40	38.5	16.32	35.400	0.806			40.800	0.781	0.08			24	3283	123	16823	4.67	668		< 3.7	9.4	0.06			< 3.7	506	4.2	574	0.08	10.9	15	15
23	Sat	0.00	14.86	30.0	15.22							0.28																				23	18
24	Sun	0.24	16.65	31.5	15.99							0.13	38	5277	31	4305	67	9304	3.64	505					4.0	555	< 3.5	486	4.0	555	0.16	22.2		
25	Mon	0.01	13.48	19.6	14.00							0.00	59	6633	33	3710	78	8769	5.99	673	5.2	< 3.5	11.4	0.06	4.0	450	< 3.5	393	3.2	360	0.09	10.1	34	27
26	Tue	0.00	13.62	19.0	14.26							0.00	69	7838	29	3294	66	7724	4.24	482	7.7	< 3.3	11.2	0.08	3.7	420	< 3.3	375	2.6	295	0.13	14.8	26	22
27	Wed	0.00	12.53	18.0	13.53							0.00	100	10450	44	4598	121	12645	8.13	850	7.2	< 3.7	16.2	0.09	4.3	449	< 3.7	387	3.8	397	0.14	14.6	32	26
28	Thu	0.00	11.63	17.7	12.46							0.00	75	7278	38	3668	97	9408	8.57	631	6.1	< 3.5	13.3	0.12	4.0	388	< 3.5	339	3.2	310	0.10	9.7	100	32
29	Fri	0.00	11.97	17.0	12.80							0.00			44	4393	95	9484	4.76	475		< 3.7	15.2	0.08			< 3.7	369	2.2	220	0.09	9.0	47	37
30	Sat	0.00	11.21	16.5	11.86							0.00																				35	31
Total		5.41	425.41		434.02	778.40	32.96	777.00	27.04		31.53	8.35																					
Mean			14.18		14.47	155.28	6.59	194.25	8.76		4.50	0.28	68	7689	41	4605	105	12028	6.28	706	6.6	3.8	12.1	0.12	4.3	527	3.7	448	3.3	390	0.09	10.0	81.77	62.27
Maximum		2.96	24.92	40.0	26.33	454.20	20.67	418.20	15.86		18.62	3.60	148	13735	81	6094	249	26872	10.80	1016	13.0	6.3	16.8	0.57	6.6	1134	7.2	949	7.0	719	0.20	22.2	290.00	350.00
Minimum			6.20		9.49	33.60	0.78	20.40	0.42		0.22	0.00	22	2258	13	1335	49	5031	3.06	457	4.0	3.3	8.8	0.06	3.7	279	3.3	244	1.1	162	0.02	2.6	12.00	11.00
# of Data		30	30	30	30	5	5	4	4		7	30	20	20	26	25	25	25	25	25	16	21	21	21	21	21	26	26	25	25	25	25	26	26
# of Data<MDL																					2	20			19		25				0		0	0
Wk1: 9/03-9/09/2000			10.48		10.19								96	8823	61	5351	128	11145	8.79	601					4.0	335	3.5	301	3.6	306	0.11	9.6	66	76
Wk2: 9/10-9/16/2000			18.75		18.91								57	8068	39	5511	108	15227	4.51	566					5.1	811	4.3	671	2.8	437	0.06	11.8	118	132
Wk3: 9/17-9/23/2000			15.16		16.01								49	6350	26	3317	89	11782	5.60	539					4.2	559	3.6	489	3.9	525	0.05	6.2	33	28
Wk4: 9/24-9/30/2000			15.29		16.26								49	6350	26	3317	89	11762	5.60	575					4.2	559	3.6	489	3.9	525	0.05	6.2	35	32

Total Est. Bypass Flow (MG): 91.54 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR NOVEMBER 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5	TBOD5	CBOD5	CBOD5	TSS	TSS	Ammonia-N	Ammonia-N	TBOD5	CBOD5	TSS	Ammonia-N	TBOD5	TBOD5	CBOD5	CBOD5	TSS	TSS	Ammonia-N	Ammonia-N	Effluent Fecal coliform	Effluent E. coli
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(lb/day)	(col/100	(col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0								<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Wed	0.00	10.83	15.0	10.99							0.01	112	10116	87	6052		0	10.00	903	5.3	3.6	13.0	0.06	2.3	208	3.5	318	4.6	415	0.03	2.7		
2	Thu	0.00	10.30	14.0	10.58							0.00	79	6786	59	5068	130	11167	9.63	827	6.6	5.2	14.2	0.06	5.4	464	4.7	404	4.8	395	0.02	1.7		
3	Fri	0.00	10.28	14.0	10.00							0.00		0	47	4030	112	9602	9.52	816		3.7	15.8	0.06	3.7	317		0	3.2	274	0.05	4.3		
4	Sat	0.00	9.95	15.0	9.62							0.00		0		0		0								0		0		0		0.0		
5	Sun	0.00	9.92	14.0	9.33							0.00	74	8122	71	6874	100	8273	7.92	655					4.6	381	4.0	331	7.8	645	0.04	3.3		
6	Mon	0.35	11.98	36.0	11.79	34.200	0.800	27.600	0.480	50.400	11.030	0.00	121	12089	97	9692	223	22281	6.97	696	6.0	3.2	18.8	0.07	4.2	420	3.2	320	5.2	520	0.04	4.0		
7	Tue	0.00	10.33	36.0	10.76							0.00	93	8012	84	7237	193	16627	5.94	512	5.5	3.5	12.8	0.06	4.0	345	3.6	302	5.8	482	0.04	3.4		
8	Wed	0.04	10.04	14.0	10.13							0.00	68	5526	62	5191	67	5610	8.34	686	9.2	6.3	12.2	0.05	3.4	285	2.9	243	4.0	335	0.03	2.5		
9	Thu	1.40	16.42	40.0	19.17	195.600	4.800	232.800	4.040	196.800	43.050	0.92	94	12873	48	6573	147	20131	5.49	752	8.7	4.0	13.4	0.06	4.6	630	4.0	548	2.8	383	0.02	2.7		
10	Fri	0.00	11.42	16.0	12.07							1.54		0	44	4191	83	7905	7.50	714		4.0	11.0	0.11		0	4.0	381	2.1	200	0.05	4.8		
11	Sat	0.00	11.27	16.0	12.38							1.35		0		0		0								0		0		0		0.0		
12	Sun	0.10	11.43	19.0	13.50							1.13	93	8865	49	4671	90	8579	7.28	694					4.0	381	3.5	334	3.4	324	0.07	6.7		
13	Mon	0.32	15.28	29.5	16.91	9.600	0.200			16.200	3.540	1.15	101	12871	71	9048	148	18880	6.22	793	5.8	4.2	9.8	0.07	4.0	510	3.5	446	3.0	382	0.05	6.4		
14	Tue	0.01	11.47	16.0	12.52							1.00	82	7844	63	6027	73	6983	5.89	563	9.8	6.4	9.4	0.03	6.5	622	4.8	459	3.2	306	0.03	2.9		
15	Wed	0.00	11.32	16.0	12.47	9.600	0.200					0.65	102	9830	60	5665	106	10196	8.90	840	8.8	4.3	13.2	0.05	4.3	406	3.7	349	3.4	321	0.03	2.8		
16	Thu	0.00	11.20	16.0	12.14							0.60	158	14758	75	7006	106	10068	7.62	712	9.2	6.3	11.0	0.06	6.3	588	5.4	504	3.4	318	0.06	5.6		
17	Fri	0.00	10.89	15.0	11.46							0.35		0	48	4359	104	9446	7.50	681		3.8	10.0	0.05		0	3.5	318	4.0	363	0.02	1.8		
18	Sat	0.00	10.65	15.0	11.19							0.24		0		0		0								0		0		0		0.0		
19	Sun	0.02	10.48	16.0	10.90							0.16	58	5069	40	3496	89	7779	6.95	607					4.9	428	4.0	350	3.6	306	0.06	5.2		
20	Mon	0.00	10.37	15.0	10.71							0.08	80	6919	56	4843	92	7957	7.84	678	8.3	4.0	26.6	0.05	4.6	398	4.0	346	4.2	363	0.03	2.6		
21	Tue	0.00	10.45	14.0	10.82							0.01	79	6885	54	4706	125	10894	8.82	768	6.2	4.0	16.4	0.05	4.6	401	4.0	349	7.6	662	0.05	4.4		
22	Wed	0.00	10.48	15.0	10.92							0.00	84	7342	45	3933	119	10401	8.63	754	19.0	4.0	0.0	0.06	5.0	437	4.0	350	3.6	315	0.03	2.6		
23	Thu	0.00	9.93	15.0	9.98							0.00	107	8661	68	5632	106	8944	7.34	606	8.2	3.5	14.0	0.05	4.0	331	3.5	290	4.2	348	0.01	0.8		
24	Fri	0.00	9.77	14.0	9.78							0.00		0	54	4400	88	7007	8.90	725		4.6	9.8	0.06		0	4.8	375	2.1	171	0.02	1.8		
25	Sat	0.32	12.06	27.0	12.19							0.00		0		0		0								0		0		0		0.0		
26	Sun	0.07	10.14	16.0	10.91							0.00	69	5835	52	4398	78	6596	6.18	521					4.0	338	3.5	296	3.6	304	0.02	1.7		
27	Mon	0.00	9.71	14.0	9.93							0.00	65	5264	57	4616	92	7450	6.96	726	6.1	3.8	10.2	0.03	4.3	348	3.7	300	2.8	227	0.01	0.8		
28	Tue	0.00	9.70	14.0	9.55							0.00	103	8332	71	5744	120	9708	7.76	629	5.8	3.4	10.2	0.07	4.6	372	4.0	324	3.2	259	0.05	4.0		
29	Wed	0.18	11.20	15.0	11.68							0.00	130	12143	77	7192	171	15973	8.68	829	5.0	4.0	10.8	0.10	3.9	364	3.2	299	3.0	280	0.04	3.7		
30	Thu	0.00	9.87	14.0	9.90							0.00	149	12265	83	6832	132	10866	7.66	631	7.7	3.2	9.6	0.06	3.3	272	3.1	255	2.4	198	0.03	2.5		
Total		2.81	329.14		344.30	249.00	6.00	260.40	4.52		57.62	9.39																					
Mean			10.97		11.48	62.25	1.50	130.20	2.26		19.21	0.31	95	5480	62	4682	116	8977	7.79	706	7.9	4.4	12.3	0.06	4.4	308	3.8	293	3.9	303	0.04	2.9		
Maximum		1.40	16.42	40.0	19.17	195.60	4.80	232.80	4.04		43.05	1.54	158	14758	97	9692	223	22281	10.00	903	19.0	6.4	26.6	0.11	6.5	630	5.4	548	7.8	662	0.07	6.7		
Minimum			9.70		9.33	9.60	0.20	27.60	0.48		3.54	0.00	58	0	40	0	67	0	5.49	512	5.0	3.2	0.0	0.03	2.3	0	2.9	0	2.1	0	0.01	0.0		
# of Data		30	30	30	30	4	4	2	2		3	30	22	22	26	26	25	25	26	26	18	22	22	22	23	23	25	25	26	26	26	26		
# of Data<MDL																					0	12			13		20				0			
Wk1: 10/29-11/04/00			10.43																														
Wk2: 11/05-11/11/00			11.63																														
Wk3: 11/12-11/18/00			11.75																														
Wk4: 11/19-11/25/00			10.51																														
Wk5: 11/26-12/01/00			10.46																														

Total Est. Bypass Flow (MG): 68.14 Total Bypass Occurences (days/month): 2

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR DECEMBER 2000

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML	
1	Fri	0.00	9.85	14.0	9.86	0.000	0.000	0.000	0.000	0.000	0.000	0.00			82	5093	121	9940	8.74	718		<	3.5	11.4	0.14			3.5	288	3.2	263	0.04	3.3	
2	Sat	0.00	9.83	14.0	10.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00																					
3	Sun	0.00	9.68	13.5	9.58	0.000	0.000	0.000	0.000	0.000	0.000	0.00	174	14047	79	6378	200	16148	8.61	534							3.7	299	3.3	266	1.5	129	0.05	4.0	
4	Mon	0.00	9.63	14.0	9.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	122	9798	64	5140	129	10361	8.96	720	8.9	<	3.7	11.9	0.06		4.3	345	3.7	297	3.2	257	0.09	7.2	
5	Tue	0.00	9.79	14.0	9.36	0.000	0.000	0.000	0.000	0.000	0.000	0.00	132	10778	81	6614	143	11676	8.18	668	10.5		3.7	12.0	0.07		6.2	506	3.4	278	3.7	302	0.06	4.9	
6	Wed	0.02	10.36	15.0	10.28	0.000	0.000	0.000	0.000	0.000	0.000	0.00	212	18317	98	8467	208	17972	9.80	847	10.3		3.2	11.0	0.14		5.2	449	3.6	311	3.2	276	0.05	4.3	
7	Thu	0.00	9.90	14.0	9.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	172	14201	91	7514	158	13045	10.10	834	9.6		5.3	12.0	0.06		8.2	677	5.3	436	3.8	297	0.04	3.3	
8	Fri	0.00	10.20	14.0	9.71	0.000	0.000	0.000	0.000	0.000	0.000	0.00			52	4424	157	13356	8.57	729	11.6		4.8	11.8	0.07				5.2	442	4.4	374	0.03	2.6	
9	Sat	0.00	9.78	14.0	9.09	0.000	0.000	0.000	0.000	0.000	0.000	0.00																					
10	Sun	0.00	9.78	15.0	9.55	0.000	0.000	0.000	0.000	0.000	0.000	0.00	124	10093	60	4884	103	8384	7.95	647							5.2	423	3.3	269	4.0	326	0.03	2.4	
11	Mon	0.00	9.48	14.0	9.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	136	10753	76	6009	127	10041	11.60	917	9.1		4.6	13.0	0.06		6.0	474	3.3	261	6.0	474	0.05	4.0	
12	Tue	0.00	9.95	14.5	9.12	0.000	0.000	0.000	0.000	0.000	0.000	0.00	160	13277	66	5477	166	13775	8.51	706	7.2	<	3.0	11.6	0.04		3.9	324	3.0	249	5.9	481	0.02	1.7	
13	Wed	0.00	9.82	13.0	9.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00	177	14201	65	5215	181	14522	8.40	674	6.8	<	3.2	13.6	0.06		3.9	313	3.2	257	7.0	562	0.04	3.2	
14	Thu	0.00	9.54	13.5	9.08	0.000	0.000	0.000	0.000	0.000	0.000	0.00	151	12014	125	9945	113	8991	12.60	1003	7.3		3.4	11.2	0.03		4.8	382	3.3	263	5.2	414	0.02	1.6	
15	Fri	0.00	9.83	13.5	9.77	0.000	0.000	0.000	0.000	0.000	0.000	0.00			59	4739	163	13091	10.20	819		<	4.6	9.8	0.04				4.8	369	4.9	394	0.02	1.6	
16	Sat	0.00	10.61	17.0	10.73	0.000	0.000	0.000	0.000	0.000	0.000	0.00																					
17	Sun	0.00	10.57	14.5	11.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	65	5730	53	4672	177	15603	9.74	859							8.7	591	5.0	441	6.2	547	0.10	8.8	
18	Mon	0.00	10.31	15.0	11.64	0.000	0.000	0.000	0.000	0.000	0.000	0.00	141	12124	77	6621	140	12038	9.48	813	11.0		5.0	14.0	0.24		6.8	585	3.3	284	5.4	464	0.14	12.0	
19	Tue	0.00	10.72	16.0	11.98	0.000	0.000	0.000	0.000	0.000	0.000	0.00	162	16272	76	6795	267	23871	8.34	746	9.0		4.1	10.2	0.22		6.4	572	3.2	286	5.4	483	0.18	16.1	
20	Wed	0.00	9.92	13.5	10.85	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	12078	71	5874	172	14230	7.78	644	10.6		4.6	11.0	0.06		6.6	548	4.0	331	4.2	347	0.06	5.0	
21	Thu	0.00	9.74	13.6	10.19	0.000	0.000	0.000	0.000	0.000	0.000	0.00	175	14216	87	7067	193	15678	7.84	637	10.3		4.7	11.6	0.06		6.6	536	3.2	260	5.8	471	0.04	3.2	
22	Fri	0.00	9.29	13.0	10.89	0.000	0.000	0.000	0.000	0.000	0.000	0.00			131	10150	172	13326	9.18	711			4.4	9.8	0.09				3.9	302	6.2	480	0.06	4.6	
23	Sat	0.00	8.79	12.5	10.55	0.000	0.000	0.000	0.000	0.000	0.000	0.00																					
24	Sun	0.00	8.91	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	120	8917	60	4459	137	10160	9.74	724							3.7	275	3.3	245	5.8	431	0.04	3.0	
25	Mon	0.00	8.59	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	89	6376	55	4657			12.40	888	8.3		6.2	8.0	0.05		5.1	365	4.0	287	5.2	373	0.02	1.4	
26	Tue	0.00	8.55	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	118	8414	71	5063	134	9555	8.68	619	7.9		3.1	9.4	0.07		4.4	314	3.3	235	4.6	328	0.04	2.9	
27	Wed	0.00	8.94	13.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	84	6263	64	4772	116	8648	7.28	543	8.2		3.7	9.0	0.06		5.6	418	3.2	239	4.8	356	0.04	3.0	
28	Thu	0.00	8.83	13.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	194	14287	126	9279	177	13035	10.00	736	11.0		5.1	11.0	0.10		5.8	427	3.1	228	5.4	398	0.06	4.4	
29	Fri	0.00	8.88	13.0	10.22	0.000	0.000	0.000	0.000	0.000	0.000	0.00			87	6443			8.12	601			5.3	10.0	0.08				4.4	326	4.6	341	0.07	5.2	
30	Sat	0.00	8.89	14.0	10.10	0.000	0.000	0.000	0.000	0.000	0.000	0.00																					
31	Sun	0.00	9.31	13.0	9.74	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	6833	76	5901	115	8929	8.53	662							5.0	366	3.2		5.2	404	0.07	5.4	
Total		0.02	297.85		262.25	0.00	0.00	0.00	0.00		0.00	0.00																					
Mean			9.61		10.09	0.00	0.00	0.00	0.00		0.00	0.00	141	11360	78	6217	157	12766	9.13	731	9.1	4.2	11.1	0.09	5.4	439	3.7	298	4.8	384	0.06	4.8	
Maximum		0.02	10.72	17.0	11.98	0.00	0.00	0.00	0.00		0.00	0.00	212	16317	131	10150	267	23871	12.60	1003	11.6	6.2	14.0	0.24	8.2	677	5.3	442	7.0	562	0.18	16.1	
Minimum			8.55		9.06	0.00	0.00	0.00	0.00		0.00	0.00	85	5730	52	4424	103	8384	6.61	534	6.8	3.0	8.0	0.03	3.7	275	3.0	228	1.6	129	0.02	1.4	
# of Data		31	31	31	26	31	31	31	31		31	31	21	21	26	26	24	24	26	26	17	21	21	21	21	21	26	26	26	26	26	26	
# of Data<MDL																					0	5			3		17				0		
Wk1: 12/03-12/09/00			9.91		9.65								162	13428	78	6423	166	13759	6.70	722					5.5	449	4.1	332	3.3	267	0.05	4.3	
Wk2: 12/10-12/16/00			9.80		9.55								150	12068	75	6045	142	11467	9.88	794					4.8	369	3.5	270	5.5	427	0.03	2.3	
Wk3: 12/17-12/23/00			9.91		11.10								142	12084	83	6863	187	15791	8.72	735					6.6	621	3.8	352	5.5	517	0.10	9.3	
Wk4: 12/24-12/30/00			10.17		11.13								142	12084	83	6863	187	15791	8.72	735					5.6	621	3.8	352	5.5	517	0.10	9.3	

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2001

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	38 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Mon	0.00	8.38	13.0	8.52							0.00	113	7897	56	3914	112	7828	6.72	470	6.7	3.8	10.4	0.05	3.6	252	< 3.1	217	3.8	266	0.05	3.5		
2	Tue	0.00	8.81	12.0	9.38							0.00	87	6392	53	3894	84	6172	6.06	592	10.3	3.5	9.0	0.03	5.7	419	2.7	198	4.0	294	0.02	1.5		
3	Wed	0.00	8.98	13.0	9.62							0.00	182	13631	97	7265	189	14155	10.60	794	12.0	5.5	11.4	0.34	6.1	607	4.1	307	4.0	300	0.20	15.0		
4	Thu	0.00	8.37	12.5	8.72							0.00	106	7539	69	4817	83	5794	6.44	450	10.1	4.4	11.6	0.07	6.1	426	3.0	209	3.8	265	0.04	2.8		
5	Fri	0.00	8.79	13.5	9.08							0.00			53	3885	170	12462	5.94	435		4.4	12.8	0.21			< 5.4	396	3.5	257	0.09	6.6		
6	Sat	0.00	8.50	12.0	8.86							0.00																					
7	Sun	0.00	8.79	12.5	9.01							0.00	87	6378	59	4325	82	6011	10.53	772					5.3	389	2.4	176	4.0	293	0.02	1.5		
8	Mon	0.00	8.72	14.5	9.25							0.00	188	13672	70	5091	191	13890	7.82	554	7.4	< 3.7	15.4	0.06	4.3	313	< 3.9	284	4.4	320	0.05	3.6		
9	Tue	0.00	8.78	12.0	9.50							0.00	147	10764	72	5272	134	9812	8.13	595	11.0	4.0	10.8	0.38	5.2	381	2.7	198	4.0	293	0.22	16.1		
10	Wed	0.00	10.42	17.0	10.00							0.00	187	16251	87	5822	144	12514	9.52	827	11.0	4.5	10.1	0.40	7.5	652	3.2	278	4.4	382	0.38	33.0		
11	Thu	0.00	10.94	17.0	9.66							0.00	106	9671	64	5839	96	8759	6.33	578	9.1	4.1	11.0	0.20	4.5	411	2.2	201	4.4	401	0.08	7.3		
12	Fri	0.00	10.77	16.0	9.48							0.00			73	6557	103	9252	12.40	1114		3.9	9.4	0.54			2.2	198	2.5	225	0.14	12.6		
13	Sat	0.00	10.71	19.0	9.19							0.00																					
14	Sun	0.20	13.65	20.0	12.85							0.00	69	10132	46	5237	94	10701	8.09	693					6.7	763	< 5.5	626	2.3	262	0.02	2.3		
15	Mon	0.30	12.91	16.0	13.31							0.00	70	7537	40	4307	77	8291	4.77	514	8.0	2.7	10.4	0.05	3.8	409	2.5	269	3.0	323	0.03	3.2		
16	Tue	0.00	12.22	17.0	11.71							0.00	106	10803	65	6624	79	8051	7.17	731	8.8	3.4	10.4	0.14	3.5	367	< 3.3	336	3.4	347	0.10	10.2		
17	Wed	0.00	12.25	17.0	12.01							0.00	107	10932	64	6539	90	9195	7.78	795	10.1	4.8	9.2	0.09	6.1	623	3.7	378	3.2	327	0.08	8.2		
18	Thu	0.00	12.07	17.0	11.52							0.00	103	10368	83	8342	76	7650	8.90	896	9.1	3.3	9.4	0.04	4.3	433	< 3.7	372	2.8	282	0.03	3.0		
19	Fri	0.01	12.02	17.0	11.31							0.00			58	5814	74	7418	7.95	797		2.9	10.0	0.05			< 3.0	301	2.0	200	0.03	3.0		
20	Sat	0.00	12.00	17.0	11.45							0.00																					
21	Sun	0.00	11.57	16.0	10.89							0.00	98	9456	57	5500	58	5597	7.76	749					3.8	367	< 3.3	318	0.4	39	0.03	2.9		
22	Mon	0.00	11.67	16.5	11.20							0.00	88	8712	58	5544	116	11464	9.07	898	4.9	< 3.5	9.3	0.06	4.3	426	< 3.5	346	0.5	59	0.04	4.0		
23	Tue	0.00	11.71	17.0	10.93							0.00	84	8204	68	6641	87	8497	7.06	689	6.5	< 3.5	6.8	0.04	3.0	293	< 3.5	342	1.4	137	0.03	2.9		
24	Wed	0.00	11.69	17.0	11.00							0.00	100	9818	61	6049	105	10412	6.89	683	6.9	< 3.5	9.0	0.06	3.1	307	< 3.5	347	3.2	317	0.03	3.0		
25	Thu	0.00	11.60	16.0	10.23							0.00	132	12770	79	7643	116	11222	7.00	877	7.2	3.3	9.6	0.05	3.6	348	< 4.0	387	3.0	290	0.03	2.9		
26	Fri	0.00	11.56	17.0	10.32							0.00			46	4443	102	9851	10.20	985		< 3.1	8.4	0.04			< 3.2	309	2.4	232	0.03	2.9		
27	Sat	0.00	11.59	17.5	9.79							0.00																					
28	Sun	0.00	10.87	16.5	9.53							0.00	83	7524	74	6709	72	6527	8.15	739					3.7	335	< 3.1	281	3.0	272	0.04	3.6		
29	Mon	0.57	19.33	40.0	16.90	88.800	2.160	21.600	0.375	162.600	3.560	0.00	132	21280	90	14509	232	37401	7.72	1245	22.0	8.2	55.8	0.26	16.0	2579	5.5	887	30.6	4933	0.23	37.1		
30	Tue	0.20	15.87	30.0	15.55							0.00	234	30971	106	14030	530	70149	6.38	844	14.0	6.3	15.7	0.83	6.9	913	4.4	582	4.2	556	0.41	54.3		
31	Wed	0.01	14.17	19.5	13.13							0.00	72	8509	54	6382	75	8863	6.33	748	6.9	3.5	9.4	0.02	4.1	485	< 3.5	414	0.6	71	< 0.02	2.4		
Total		1.29	350.13		334.10	88.80	2.16	21.60	0.38		3.56	0.00																					
Mean			11.29		10.78	88.80	2.16	21.60	0.38		3.56	0.00	118	11274	65	6259	125	12517	7.83	736	9.6	4.1	12.4	0.17	5.4	543	3.5	339	4.0	442	0.09	9.2		
Maximum		0.57	19.33	40.0	16.90	88.80	2.16	21.60	0.38		3.56	0.00	234	30971	106	14509	530	70149	12.40	1245	22.0	8.2	55.8	0.83	16.0	2579	5.5	887	30.6	4933	0.41	54.3		
Minimum			8.37		8.52	88.80	2.16	21.60	0.38		3.56	0.00	70	6378	40	3885	58	5597	4.77	435	4.9	2.7	6.8	0.02	3.0	252	2.2	176	0.4	39	0.02	1.5		
# of Data		31	31	31	31	1	1	1	1		1	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27		
# of Data<MDL																					0	5			4		15				1			
			8.70		9.15								142	10397	70	5109	142	10354	8.21	600					5.8	447	3.6	275	4.0	303	0.10	8.1		
			11.66		10.92								112	10679	59	5731	98	9595	7.71	743					5.2	498	3.2	302	3.3	306	0.13	10.8		
			11.93		11.33								96	9534	61	6063	84	8307	8.09	804					4.3	409	3.5	326	1.7	166	0.04	3.8		
			12.00		11.44								100	10054	61	6061	82	8232	8.11	811					4.4	424	3.4	326	2.1	200	0.05	5.0		

Total Est. Bypass Flow (MG): 6.10 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Influent Data								Clarifier Effluent Data				Final Effluent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																					
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Thu	0.00	13.43	19.0	12.66							0.00	82	9185	53	5936	61	6832	8.38	715	9.0	4.0	12.0	0.11	5.6	627	4.6	515	1.8	202	0.04	4.5		
2	Fri	0.00	13.32	19.0	12.90							0.00			49	5443	100	11109	6.16	684		4.6	10.6	0.05			4.6	511	2.7	300	0.02	2.2		
3	Sat	0.00	12.78	17.0	12.29							0.00																					
4	Sun	0.03	12.92	17.0	12.31							0.00	102	10991	66	7112	79	8512	4.03	434					5.4	582	4.1	442	1.2	129	0.02	2.2		
5	Mon	0.00	12.65	18.0	11.84							0.00	76	8018	48	5064	95	10023	4.64	490	8.4	4.6	9.8	<0.02	4.0	422	4.6	485	2.4	253	0.02	2.1		
6	Tue	0.14	14.06	22.0	12.96	0.190	0.200					0.00	69	8091	48	5628	72	8443	5.43	637	6.6	4.6	7.4	0.05	4.6	539	4.6	539	0.4	47	0.07	8.2		
7	Wed	0.02	12.57	17.0	11.73							0.00	107	11217	55	5766	101	10558	5.68	616	9.2	4.6	8.5	0.03	4.7	493	3.7	388	1.2	126	0.05	5.2		
8	Thu	0.43	15.06	40.0	13.74	1.910	1.900	12.000	1.470	109.200	23.690	0.00	64	10550	42	5275	64	10550	3.98	500	4.8	3.8	10.4	0.03	5.4	878	4.2	528	2.8	352	0.04	5.0		
9	Fri	0.66	18.48	39.5	18.37	1.200	1.200	337.800	5.860	78.600	17.190	0.00			62	9556	266	40997	3.58	552		4.3	12.1	0.11			4.3	663	1.8	247	0.04	6.2		
10	Sat	0.00	17.44	29.0	16.64							0.00																					
11	Sun	0.00	16.37	28.0	15.92							0.00	69	9420	38	4915	71	9693	4.26	582					5.0	683	4.6	626	2.2	300	0.04	5.5		
12	Mon	0.00	16.32	28.0	15.83							0.00	90	12250	47	6397	100	13811	4.03	549	7.6	4.6	8.2	0.03	5.0	681	4.6	626	1.0	136	0.02	2.7		
13	Tue	0.05	15.76	28.0	15.06							0.00	109	14327	54	7096	127	16693	3.92	515	7.1	4.6	8.6	0.03	5.4	710	4.6	605	1.5	197	0.07	9.2		
14	Wed	0.11	16.92	30.5	15.79							0.00	104	14676	70	9878	131	18486	4.59	648	7.2	4.6	8.6	0.04	4.6	649	4.6	649	1.2	169	0.01	1.4		
15	Thu	0.00	16.27	20.0	14.79							0.00	90	11462	48	6113	104	13245	4.00	509	6.5	4.0	6.0	0.03	4.6	586	4.0	509	1.4	178	0.01	1.3		
16	Fri	0.00	14.91	18.5	15.56							0.00			58	7212	193	23999	7.06	880		4.6	8.2	0.04			4.6	572	1.9	236	0.02	2.5		
17	Sat	0.00	14.07	18.5	14.69							0.00																					
18	Sun	0.00	13.72	18.0	14.09							0.00	162	18537	51	5836	124	14189	5.04	577					5.0	572	4.2	481	2.2	252	0.03	3.4		
19	Mon	0.00	13.58	18.0	13.57							0.00	131	14837	67	7588	165	18687	7.56	856	5.6	4.3	6.5	0.06	5.0	566	4.3	487	2.2	249	0.03	3.4		
20	Tue	0.00	13.37	20.0	13.19							0.00	132	14719	74	8251	207	23062	7.22	805	4.7	3.5	9.6	0.11	3.3	368	2.9	323	1.6	178	0.10	11.2		
21	Wed	0.00	13.31	18.5	13.02							0.00	135	14986	54	5994	151	16762	4.87	541	6.6	4.3	10.2	0.04	5.0	555	4.3	477	1.8	200	0.07	7.8		
22	Thu	0.00	12.92	17.0	12.27							0.00	90	9698	62	6681	172	18533	5.22	670	3.0	4.3	6.6	0.13	5.0	539	4.3	463	3.2	345	0.07	7.5		
23	Fri	0.00	12.75	17.0	11.81							0.00			57	6061	146	15525	5.91	628		3.4	5.8	0.06			3.4	362	2.0	213	0.03	3.2		
24	Sat	1.43	17.19	40.0	17.36	5.420	5.700	381.200	6.270	19.200		0.74																					
25	Sun	0.02	14.88	19.0	14.97			89.400	1.550			1.33	82	10162	45	5577	137	16979	3.06	382					5.0	620	4.3	533	2.8	347	0.04	5.0		
26	Mon	0.00	16.01	21.0	15.66							0.55	109	14554	64	8545	135	18026	3.75	501	6.6	4.6	9.4	0.11	5.2	694	4.2	561	2.2	294	0.03	4.0		
27	Tue	0.00	16.97	20.0	16.20							0.28	121	16116	46	6127	190	25306	4.26	567	5.0	4.2	9.2	0.06	5.0	666	4.2	559	1.8	240	0.06	8.0		
28	Wed	0.00	15.56	14.0	15.74							0.06	120	15592	55	7147	166	21570	4.66	604	6.5	4.2	7.8	0.04	5.0	650	4.2	546	1.4	182	0.04	5.2		
Total		2.89	411.59		400.96	8.72	9.00	813.00	16.37		41.08	2.98																					
Mean			14.70		14.32	2.18	2.25	162.60	3.07		20.54	0.11	103	12469	55	6633	132	16310	5.02	602	6.5	4.3	8.6	0.06	4.9	594	4.3	519	1.9	224	0.04	4.9		
Maximum		1.43	18.48	40.0	18.37	5.42	5.70	381.20	6.27		23.69	1.33	162	18537	74	9878	266	40997	7.56	880	9.0	4.6	12.1	0.13	5.6	710	4.6	663	3.2	352	0.10	11.2		
Minimum			12.57		11.73	0.19	0.20	12.00	0.22		17.19	0.00	69	8018	36	4915	51	6832	3.06	382	3.0	3.4	5.6	0.03	3.3	368	2.9	323	0.4	47	0.01	1.3		
# of Data		28	28	28	28	4	4	5	5		2	28	20	20	24	24	24	24	24	24	16	20	20	19	20	20	24	24	24	24	24	24		
# of Data<MDL																					0	16			13		19				4			
Wk1: 02/03-02/09/00			14.07		13.32								88	9773	54	6400	116	14643	4.59	538					4.8	505	4.3	479	1.6	181	0.04	4.5		
Wk2: 02/10-02/16/00			16.14		15.66								92	12427	52	8935	121	15954	4.65	814					4.9	635	4.5	562	1.5	198	0.03	3.6		
Wk3: 02/17-02/23/00			13.39		13.23								130	14555	61	6735	181	17796	6.14	680					4.7	514	3.9	424	2.2	234	0.06	5.9		
Wk4: 02/24-02/28/00			13.70		13.77								130	14555	81	6735	169	17796	6.33	680					4.7	514	4.1	424	2.2	242	0.05	5.9		

Total Est. Bypass Flow (MG): 65.45 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MARCH 2001

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mLs)	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	886 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Thu		15.08	19.0	14.88							0.06	96	12074	59	7420	102	12828	5.38	677	8.5	4.2	7.4	0.03	< 5.0	629	< 4.2	528	1.9	239	0.04	5.0		
2	Fri		14.73	25.0	13.90										99	12162	153	18796	7.00	860		< 4.2	8.0	0.05			< 4.2	516	0.9	111	0.02	2.5		
3	Sat		14.13		13.75							0.03																					
4	Sun		13.51		12.95							0.01	79	8901	44	4958	64	7211	5.10	575					2.7	304	< 3.6	394	1.2	135	0.03	3.4		
5	Mon		13.27	18.5	13.28								81	6751	48	5312	79	8743	8.50	719	< 4.6	< 4.0	11.8	0.03	< 4.6	509	< 4.0	443	3.0	332	0.02	2.2		
6	Tue		13.36	18.0	12.84								78	8691	60	6685	66	7354	8.38	711	7.1	< 4.0	10.0	0.04	4.0	446	< 4.0	446	1.2	134	0.02	2.2		
7	Wed		13.89	20.0	13.22								125	14480	51	5908	151	17492	5.49	636	8.0	< 4.0	13.2	0.04	3.6	417	< 4.0	463	1.0	118	0.03	3.5		
8	Thu		13.35	18.0	12.50								138	15365	48	5344	245	27278	8.44	717	6.6	< 4.2	13.0	0.21	< 5.0	557	< 4.2	468	2.6	289	0.08	8.9		
9	Fri		12.90	18.0	12.28										85	9145	242	26036	9.44	1016		< 4.2	10.2	0.04			< 4.2	452	1.0	108	0.03	3.2		
10	Sat		12.65	17.5	12.01																												
11	Sun	0.12	13.59	22.0	13.15								146	16548	55	6234	242	27428	5.99	679					3.2	363	< 3.0	340	2.2	249	0.03	3.4		
12	Mon	0.10	13.48	23.5	12.99								145	16301	58	6521	206	23159	5.04	567	6.9	2.2	13.4	0.04	2.7	304	1.6	180	3.0	337	0.03	3.4		
13	Tue		12.39	19.0	12.14								106	10953	74	7647	96	9920	6.78	701	10.4	3.4	13.2	0.03	4.3	444	< 4.2	434	2.4	248	0.02	2.1		
14	Wed	0.07	12.84	19.0	12.39								139	14885	61	6532	163	17458	6.83	731	7.7	4.0	13.6	0.05	< 4.8	493	< 4.0	428	2.8	276	0.04	4.3		
15	Thu	0.33	14.94	32.0	14.95								110	13705	59	7351	188	20933	6.36	795	13.2	3.9	15.6	0.06	4.9	611	< 4.2	523	2.7	336	0.04	5.0		
16	Fri	0.13	14.68	22.0	15.44										45	5584	67	8315	5.21	647		< 4.2	12.8	0.06			< 4.2	521	1.8	223	0.02	2.5		
17	Sat	0.09	14.73	28.0	14.23																												
18	Sun		13.45	21.0	14.52								76	8749	43	4823	87	9759	4.96	556					4.4	494	< 4.0	449	2.4	269	0.04	4.5		
19	Mon		12.92	19.0	13.39								117	12607	53	5711	136	14670	7.39	796	11.0	5.0	2.8	0.05	6.0	647	4.0	431	2.2	237	0.02	2.2		
20	Tue		13.23	19.0	13.47								151	16661	64	7062	221	24385	7.73	853	8.9	< 4.8	16.8	0.05	< 5.5	607	< 4.6	508	2.4	265	0.04	4.4		
21	Wed		13.43	19.0	13.38								114	12769	60	6720	114	12769	7.56	847	11.7	10.2	18.4	0.03	< 5.4	605	< 4.8	515	3.0	336	0.02	2.2		
22	Thu		13.12	19.0	12.68								136	14861	62	6784	188	20571	8.01	876	10.8	< 4.6	17.8	0.04	< 5.4	591	< 4.6	503	2.6	284	0.03	3.3		
23	Fri		13.20	17.0	12.59										54	5945	166	18275	7.64	863		< 4.2	18.8	0.10			< 4.2	462	2.8	306	0.07	7.7		
24	Sat		12.72	17.5	11.74																												
25	Sun		12.61	17.0	11.95								130	13889	58	6196	233	24893	5.63	601					< 3.3	353	< 3.0	321	3.0	321	0.03	3.2		
26	Mon		12.68	18.0	11.91								85	9131	49	5264	115	12353	5.03	540	9.4	3.3	19.4	0.06	< 4.3	462	< 3.7	397	1.6	172	0.02	2.1		
27	Tue		12.67	18.0	11.37								121	12786	46	4861	138	14582	7.84	828	5.0	< 4.2	19.3	0.04	< 5.0	528	< 4.2	444	2.6	275	0.02	2.1		
28	Wed		12.51	17.0	11.26								136	14189	62	6469	232	24205	7.45	777	10.0	3.8	20.6	0.04	4.4	459	2.8	292	2.2	230	0.03	3.1		
29	Thu	0.01	12.25	17.0	10.89								131	13384	61	6232	233	23804	8.62	881	8.0	< 3.7	20.2	0.06	< 4.3	439	< 3.7	378	3.0	306	0.07	7.2		
30	Fri		12.01	19.0	10.70										77	7713	225	22537	8.23	824		< 5.0	17.2	0.07			< 5.0	501	1.3	130	0.02	2.0		
31	Sat	0.05	11.74	17.0	10.36																												
Total		0.90	412.86		397.11	0.00	0.00	0.00	0.00		0.00	0.12																					
Mean			13.31		12.81							0.04	115	12748	59	6561	159	17537	6.70	741	8.8	4.3	14.2	0.06	4.4	489	3.9	436	2.2	241	0.03	3.7		
Maximum		0.33	15.08	32.0	15.44	0.00	0.00	0.00	0.00		0.00	0.06	151	16661	99	12162	245	27428	9.44	1016	13.2	10.2	20.6	0.21	6.0	647	5.0	528	3.0	337	0.08	8.9		
Minimum			11.74		10.36	0.00	0.00	0.00	0.00		0.00	0.01	81	6751	43	4823	64	7211	4.96	540	4.6	2.2	2.8	0.03	2.7	304	1.6	180	0.9	108	0.02	2.0		
# of Data		6	31	29	31	0	0	0	0		0	3	21	21	26	28	26	26	28	28	17	22	22	22	21	21	28	26	26	28	26	26		
# of Data<MDL																					1	14			11		23				0			
Wk1: 10/03-10/09/01			13.49		12.97								96	10838	58	8152	141	15886	6.56	729					4.0	430	4.0	426	1.7	179	0.04	3.7		
Wk2: 10/10-10/16/01			13.54		13.30								129	14479	59	6660	157	17868	6.04	687					3.9	433	3.5	401	2.5	274	0.03	3.4		
Wk3: 10/17-10/23/01			13.44		13.46								119	13134	56	6174	152	16771	7.25	799					5.3	599	4.3	481	2.6	285	0.04	4.1		
Wk4: 10/24-10/30/01			13.58		13.67								119	13134	55	6149	136	15111	6.61	763					5.3	599	4.3	496	2.4	274	0.03	3.3		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MAY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0
1	Tue	0.00	11.10	11.0	10.34							0.00
2	Wed	0.00	10.40	17.0	11.26							0.01
3	Thu	0.00	11.02	17.0	9.90							0.01
4	Fri	0.00	11.07	16.5	9.66							0.00
5	Sat	0.19	11.76	32.5	11.41							0.00
6	Sun	0.14	11.49	29.0	11.18							0.00
7	Mon	0.00	11.00	18.0	10.52							0.00
8	Tue	0.00	10.81	18.0	10.06							0.00
9	Wed	0.00	10.71	18.0	9.74							0.00
10	Thu	0.11	11.75	22.0	11.34							0.00
11	Fri	0.17	11.50	22.5	11.47							0.01
12	Sat	0.00	9.90	15.0	8.81							0.00
13	Sun	0.00	10.48	15.0	8.47							0.00
14	Mon	0.38	12.51	40.0	11.01							0.00
15	Tue	0.00	11.04	17.0	9.22							0.00
16	Wed	0.47	13.37	40.0	12.48	46.200	1.100	79.200	1.400	84.000	1.810	0.09
17	Thu	0.00	11.45	19.0	10.75							0.00
18	Fri	0.03	11.12	17.0	10.74							0.00
19	Sat	0.00	11.55	16.0	9.46							0.00
20	Sun	0.00	10.62	18.0	9.58							0.00
21	Mon	0.73	15.66	40.0	16.03			27.000	0.500	67.200	1.500	0.13
22	Tue	0.00	10.45	45.0	9.79							0.11
23	Wed	0.14	11.14	19.0	10.61							0.04
24	Thu	0.13	11.19	27.0	10.77							0.00
25	Fri	0.29	11.54	21.0	11.16							0.00
26	Sat	0.89	13.75	24.6	14.49	121.200	2.900	202.800	3.500	130.800	2.900	0.29
27	Sun	0.37	14.10	26.0	16.16	61.200	1.500	153.000	2.700	57.000	1.200	1.01
28	Mon	0.00	11.48	22.5	12.33							0.51
29	Tue	0.00	11.81	16.5	12.59							0.31
30	Wed	0.00	11.93	16.5	12.55							0.13
31	Thu	0.42	13.56	40.0	14.46	50.400	1.200	55.800	1.000	52.800	1.200	0.18
Total		4.46	361.25		348.51	279.00	6.70	517.80	9.10		8.61	2.83
Mean			11.65		11.24	69.75	1.68	103.56	1.82		1.72	0.09
Maximum		0.89	15.66	48.0	16.16	121.20	2.90	202.80	3.50		2.90	1.01
Minimum			9.90		8.47	46.20	1.10	27.00	0.50		1.20	0.00
# of Data		31	31	31	31	4	4	5	5		5	31
# of Data<MDL												
Wk1:			11.12		10.35							
Wk2:			11.51		10.40							
Wk3:			11.71		11.02							
Wk4:			12.03		11.26							

Total Est. Bypass Flow (MG): 24.41 Total Bypass Occurances (days/month): 5

Date	Influent Data								Clarifier Effluent Data				Final Effluent Data									
	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 8 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	184	15182	72	6665	212	19626	11.00	1018	7.7	2.7	12.0	0.19	< 3.3	305	< 3.0	278	4.4	407	0.10	9.3	17	10
2	124	10755	71	6158	205	17781	9.01	781	8.2	< 3.5	10.8	0.29	< 4.0	347	< 3.5	304	2.2	191	0.12	10.4		
3	136	12499	61	5606	186	17095	7.34	675	8.5	3.4	12.0	0.48	< 3.5	322	< 3.2	294	2.0	184	0.21	19.3	19	14
4			71	6555	220	20311	11.20	1034		< 4.0	13.8	0.25			< 4.0	369	1.6	148	0.17	15.7	4	3
5																					37	28
6	86	8241	78	7474	68	6325	10.60	1016						5.2	498	3.0	287	5.8	556	0.04	3.6		
7	62	5688	57	5229	96	8807	10.20	936	5.7	< 3.0	13.6	0.17	< 3.3	303	< 3.0	275	5.4	495	0.10	9.2	3	7
8	171	15417	68	6131	230	20736	10.20	920	8.0	2.9	12.6	0.34	2.8	252	< 3.2	288	3.0	270	0.21	16.9	22	15
9	159	14202	60	5359	194	17328	6.33	565	6.0	2.6	10.4	0.12	< 3.3	295	< 3.0	268	3.0	268	0.11	9.8	4	13
10	125	12249	48	4704	196	19207	8.23	806	7.7	< 3.5	9.4	0.11	< 4.0	392	< 3.5	343	2.3	225	0.11	10.8	5	4
11			49	4700	83	7961	7.64	752		< 5.0	11.0	0.27			< 5.0	480	2.0	192	0.13	12.5	1	< 1
12																					3	6
13	103	9003	56	4895	144	12586	6.69	585					< 3.5	306	< 3.1	271	2.0	175	0.07	8.1		
14	100	10433	67	6990	324	33804	9.55	996	4.2	< 3.5	13.9	0.40	< 4.0	417	< 3.5	365	3.2	334	0.23	24.0	3	1
15	68	6261	59	5432	108	9944	7.87	706	8.3	2.6	12.8	0.59	< 3.3	304	< 3.0	276	3.2	295	0.38	35.0	7	12
16	95	10593	50	5576	186	20963	8.85	987	9.6	3.6	16.8	0.36	< 3.7	413	< 3.3	368	4.4	491	0.35	39.0	16	12
17	153	14610	65	6207	203	19385	11.80	1127	7.2	< 3.0	9.2	0.34	< 3.3	315	< 3.0	286	1.0	95	0.18	17.2	4	9
18			68	6306	233	21609	8.96	831		< 4.0	10.0	0.29			< 4.0	371	2.5	232	0.14	13.0	4	20
19																					6	8
20	88	7794	70	6200	89	7883							< 4.6	407	< 4.0	354	1.8	159	0.07	6.2		
21	110	14367	64	8353	195	25452	7.82	1021	7.3	< 3.0	17.4	0.17	< 3.3	431	< 3.0	392	3.2	418	0.06	8.5	24	21
22	72	6275	50	4358	58	4881	10.30	898	8.8	2.8	10.9	0.11	< 4.0	349	< 3.5	305	1.8	157	0.11	9.6	7	10
23	76	7061	69	6411	122	11335	8.34	775	9.3	3.0	12.0	0.75	< 3.3	307	< 3.0	279	2.2	204	0.54	50.2	11	8
24	104	9706	75	6999	117	10919	9.52	888	5.2	2.6	10.8	0.33	2.7	252	2.2	205	2.2	205	0.23	21.5	4	3
25			60	5775	55	5293	9.30	695		< 5.0	9.4	0.46			< 5.0	481	1.0	96	0.30	28.9	3	8
26																					8	2
27	72	8487	51	5997	50	5880	9.07	1067					< 5.0	588	< 4.2	494	0.8	94	0.11	12.9		
28	57	5457	45	4306	64	6128	7.32	701	3.1	< 3.0	13.0	0.06	< 3.3	316	< 3.0	287	1.6	153	0.06	7.7	26	21
29	70	6695	46	4531	69	6796	9.14	900	7.9	< 4.0	11.0	0.26	< 5.0	492	< 4.0	394	4.6	453	0.09	8.9	2	7
30	98	8751	66	8587	135	13432	6.50	847	3.2	< 3.0	12.6	0.30	< 3.3	328	< 3.0	296	4.6	478	0.22	21.9	6	14
31	178	20130	79	8934	311	35171	7.84	887	9.1	7.7	17.2	0.37	2.8	317	2.7		3.0	339	0.26	29.4	9	10
Total																						
Mean	107	10479	62	6016	154	15061	8.87	862	7.1	3.5	12.3	0.31	3.7	359	3.4	331	2.8	271	0.17	16.9	9.81	10.27
Maximum	178	20130	79	8934	324	35171	11.80	1127	9.8	7.7	17.4	0.75	5.2	588	5.0	494	5.9	556	0.54	50.2	37.00	28.00
Minimum	57	5457	45	4306	50	4881	6.33	565	3.1	2.8	9.2	0.06	2.7	252	2.2	205	0.8	94	0.04	3.8	1.00	1.00
# of Data	23	23	27	27	27	27	26	26	19	23	23	23	23	23	27	27	27	27	27	27	26	26
# of Data<MDL									0	13			19		24				0		0	1
Wk1:	123	11209	66	6059	165	15100	9.31	858					3.6	313	3.2	274	3.5	301	0.14	11.7	15	13
Wk2:	98	8090	55	5383	174	17411	8.14	805					3.7	326	3.6	321	2.9	258	0.21	19.1	6	6
Wk3:	100	10020	64	6306	150	15083	9.44	664					3.7	346	3.4	317	2.1	205	0.18	18.4	9	13
Wk4:	104	10726	61	5187	181	16688	9.55	695					3.8	363	3.5	329	2.5	248	0.15	14.4	10	13

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JUNE 2001

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AML <MDL	826 AML 939 AML	6.0 AML	751 AML 1127 AML	1.5 AML 2.3 AML <MDL	188 AML 282 AML	200 AML 400 AML <MDL	125 AML <MDL
1	Fri	0.06	13.66	26.0	14.96							0.35			56	6380	122	13899	7.84	893			3.8	12.8	0.21			< 4.3	490	1.8	205	0.13	14.8	9	10
2	Sat	0.08	11.87	18.0	12.69							0.20																					4	2
3	Sun	0.00	11.41	18.0	11.82							0.12	50	4758	40	3806	35	3331	8.18	586					< 5.5	523	< 4.6	438	0.6	57	0.04	3.8		
4	Mon	0.00	11.96	17.0	12.45							0.08	143	14264	54	6384	219	21844	6.72	670	12.0	3.3	12.2	0.20	< 5.0	499	< 4.3	429	4.6	459	0.12	12.0	4	7
5	Tue	0.95	16.48	37.0	16.92	170.400	4.100	252.000	4.400	169.800	3.750	0.95	83	11415	62	8527	138	18979	4.76	655	12.0	< 4.3	22.6	0.27	< 5.0	688	< 4.3	591	3.6	495	0.27	37.1	56	48
6	Wed	0.06	13.97	20.0	14.43							0.91	83	7340	50	5825	70	8156	4.40	513	9.1	< 4.3	13.8	0.42	< 5.0	583	< 4.3	501	2.6	326	0.30	35.0	6	8
7	Thu	0.00	15.06	19.0	13.22							0.39	104	13080	38	4779	125	15721	5.04	634	8.7	< 4.3	8.7	0.19	< 5.0	629	< 4.3	541	0.6	75	0.16	20.1	12	8
8	Fri	0.00	13.33	20.0	13.16							0.17			56	6226	226	25347	6.10	678		< 4.3	12.4	0.21			< 4.3	478	0.8	89	0.12	13.3	7	12
9	Sat	0.00	12.63	19.0	12.06							0.60																					13	21
10	Sun	0.00	12.63	18.0	11.58							0.40	125	13167	38	4003	127	13377	7.84	826					< 4.6	485	< 4.0	421	2.2	232	0.11	11.6		
11	Mon	0.00	12.98	19.0	12.11							0.12	97	10501	35	3789	146	15806	6.78	734	7.0	< 4.3	11.2	0.89	< 5.0	541	< 4.3	465	2.4	260	0.65	70.4	24	15
12	Tue	1.40	20.50	40.0	20.15	193.200	4.720	161.200	3.200	237.600	6.460	3.00	107	18294	38	6497	158	27013	5.77	986	13.0	< 4.3	20.0	0.53	< 5.0	855	< 4.3	735	3.2	547	0.42	71.8	340	280
13	Wed	0.00	16.00	27.5	16.89							1.10	42	5604	24	3203	57	7606	5.68	758	7.8	< 4.3	6.6	0.65	< 5.0	667	< 4.3	574	1.4	187	0.26	34.7	260	
14	Thu	0.15	15.98	33.5	16.54							0.44	96	12794	35	4668	141	18792	4.54	605	7.4	< 4.3	6.0	0.11	< 5.0	668	< 4.3	573	1.8	240	0.09	12.0	30	32
15	Fri	0.00	14.95	27.5	15.84							0.02			32	3990			4.70	586		< 4.3	10.3	0.34			< 4.3	536	2.0	249	0.06	7.5	270	100
16	Sat	0.00	13.78	19.5	14.32							0.01																					210	240
17	Sun	0.06	13.09	18.0	13.08							0.00	45	4913	35	3821	50	5459	5.49	599					< 5.0	546	< 4.3	469	5.6	633	0.05	6.5		
18	Mon	0.00	13.69	19.0	13.73							0.00	56	6394	46	5252	86	9819	6.61	755	7.4	< 4.3	6.0	0.26	< 5.0	571	4.5	514	0.8	91	0.14	16.0	75	39
19	Tue	0.00	13.83	19.0	13.98							0.00	55	6344	33	3806	65	7497	5.15	594	7.6	< 4.3	9.8	0.10	< 5.0	577	< 4.3	496	1.0	115	0.05	5.8	98	85
20	Wed	0.00	13.26	18.5	13.73							0.00	62	6856	44	4866	74	8164	7.50	829	8.4	< 4.3	9.4	0.22	< 5.0	553	< 4.3	476	2.0	221	0.08	6.8	74	70
21	Thu	0.93	15.70	36.0	15.52	121.200	2.950	148.200	3.200	114.600	2.510	0.66	40	5238	34	4452	60	7858	5.32	697	9.6	< 4.3	11.4	0.20	< 5.0	655	< 4.3	563	0.4	52	0.08	10.5	76	69
22	Fri	0.00	13.55	23.0	13.69							0.56			42	4746	90	10171	7.96	900		< 4.3	10.0	0.19			< 4.3	488	1.6	181	0.07	7.9	56	35
23	Sat	0.00	12.94		13.28							0.27																					17	23
24	Sun	0.00	12.75	17.0	12.98							0.12	51	5423	38	4041	47	4998	8.06	857					< 5.4	574	< 4.6	489			0.07	7.4		
25	Mon	0.00	13.18	19.0	14.14							0.00	80	8794	33	3627	112	12311	10.14	1115	7.2	< 4.0	15.4	0.20	< 4.6	506	< 4.0	440	0.8	88	0.11	12.1	17	16
26	Tue	0.00	13.15	18.0	13.96							0.00	98	10748	39	4277	106	11625	11.62	1296	6.6	< 4.3	10.8	0.32	< 5.0	548	< 4.3	472	0.4	44	0.19	20.8	12	7
27	Wed	0.00	13.56	18.0	13.77							0.00	167	18886	52	5881	129	14589	5.66	640	16.0	6.2	12.2	0.81	8.2	927	6.2	701	1.6	181	0.42	47.5	26	30
28	Thu	0.00	13.00	19.0	13.03							0.00	130	14095	55	5963	83	8999	6.44	698	16.0	7.8	9.8	0.33	10.4	1128	7.8	846	1.2	130	0.19	20.6	52	25
29	Fri	0.00	13.09	18.0	13.14							0.00			42	4585	97	10590	6.98	762		< 4.3	14.4	0.26			< 4.3	469	1.8	175	0.09	9.8	30	18
30	Sat	0.00	12.64	17.0	12.64							0.00																					48	33
Total		3.68	414.85		419.61	484.80	11.77	581.40	10.80		12.72	10.67																						
Mean			13.83		13.99	161.60	3.92	193.80	3.60		4.24	0.36	85	9945	42	4936	107	12562	6.54	755	9.9	4.5	11.7	0.32	5.4	636	4.6	528	1.9	222	0.17	20.7	70.23	58.31
Maximum		1.40	20.50	40.0	20.15	193.20	4.72	252.00	4.40		6.46	3.00	167	18886	84	8527	228	27013	11.62	1296	16.0	7.8	22.6	0.89	10.4	1128	7.8	846	5.8	633	0.65	71.8	340.00	280.00
Minimum			11.41		11.58	121.20	2.95	148.20	3.20		2.51	0.00	40	4758	24	3203	35	3331	4.40	513	6.6	3.3	6.0	0.10	4.6	485	4.0	421	0.4	44	0.04	3.8	4.00	2.00
# of Data		30	30	29	30	3	3	3	3		3	30	20	20	25	25	24	24	25	25	16	21	21	21	20	20	25	25	24	24	25	25	26	26
# of Data<MDL																					0	16			16		22				0		0	0
Wk1: 06/03-06/09/2001			13.58		13.44								89	10171	52	5925	136	15563	5.53	623					5.1	584	4.4	500	2.2	256	0.17	20.2	16	17
Wk2: 06/10-06/16/2001			15.26		15.32								93	12072	34	4358	126	16519	5.89	749					4.9	637	4.3	550	2.2	283	0.27	34.0	189	158
Wk3: 06/17-06/23/2001			13.72		13.86								52	5949	39	4491	71	8164	6.34	729					5.0	584	4.3	504	1.9	217	0.08	7.8	66	54
Wk4: 06/24-06/30/2001			13.84		14.01								52	5949	39	4491	71	8164	6.34	729					5.0	584	4.3	504	1.9	217	0.08	7.8	98	90

Total Est. Bypass Flow (MG): 35.29 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JULY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges (1)						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mLs)	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	628 AML 939 AWL	8.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sun	0.00	12.12	16.0	11.17							0.02	96	9704	38	3841	134	13545	7.39	747					< 5.0	505	< 4.3	435	3.8	364	0.07	7.1		
2	Mon	0.00	12.24	17.0	10.97								119	12148	46	4696	179	18273	8.72	686	8.3	< 4.0	14.2	0.11	< 4.8	470	< 4.0	408	1.0	102	0.03	3.1	32	24
3	Tue	0.42	14.26	40.0	13.80	64.800	1.600	80.400	1.400	67.200	1.470		63	7492	44	5233	104	12369	8.40	999	6.4	< 4.0	12.4	0.19	< 4.8	547	< 4.0	476	5.2	618	0.11	13.1	400	300
4	Wed	0.00	12.05	16.5	11.77								39	3919	38	3818	35	3517	8.22	825	8.2	< 4.0	13.4	0.10	< 4.8	482	< 4.0	402	2.4	241	0.02	2.0	250	110
5	Thu	0.00	11.79	16.0	11.69								35	3442	29	2852	47	4621	7.64	771	8.7	< 4.0	13.0	0.65	< 4.8	452	< 4.0	393	1.8	177	0.29	26.5	23	20
6	Fri	0.00	12.28	17.0	9.81									0	39	3994	128	13109	9.18	940		< 4.0	12.0	0.22			< 4.0	410	1.6	164	0.04	4.1	360	75
7	Sat	0.15	13.38	29.5	14.29																												33	32
8	Sun	0.00	11.73	16.0	11.31								64	6261	42	4109	101	9881	7.64	787					< 3.3	323	< 3.0	293	2.0	196	0.07	6.8		
9	Mon	0.00	12.60	18.0	12.51								106	11349	44	4824	189	19861	8.94	729	7.2	< 4.0	9.2	0.12	< 4.6	483	< 4.0	420	2.2	231	0.06	6.3	44	36
10	Tue	0.00	12.28	17.5	11.59								77	7886	37	3789	112	11471	8.72	688	7.7	< 4.0	13.8	0.08	< 4.8	471	< 4.0	410	5.8	594	0.04	4.1	300	130
11	Wed	0.00	12.41	17.0	12.28								117	12109	40	4140	164	16974	8.44	667	8.4	< 4.0	8.0	0.24	< 4.6	478	< 4.0	414	0.7	72	0.13	13.5	250	130
12	Thu	0.00	12.32	17.0	11.21								78	8014	25	2589	71	7295	7.64	806	5.5	< 3.5	7.4	0.71	< 4.0	411	< 3.5	360	1.5	154	0.32	32.9	26	18
13	Fri	0.00	12.45	17.0	10.59									0	38	3736	272	28243	10.10	1049		< 4.0	8.4	0.24			< 4.0	415	2.0	206	0.29	30.1	40	33
14	Sat	0.00	12.01	16.0	10.88																									0			11	5
15	Sun	0.00	11.98	16.0	10.82								64	6394	29	2897	81	8093	6.77	678					< 4.3	430	< 3.7	370	1.5	150	0.03	3.0		
16	Mon	0.00	12.41	17.0	11.74								101	10453	34	3519	131	13558	8.46	876	6.7	< 4.0	10.2	0.28	3.7	383	3.3	342	3.4	352	0.12	12.4	19	40
17	Tue	0.69	14.02	34.0	13.22					40.200	0.900		102	11927	61	7133	180	18706	7.28	851	7.7	3.4	10.2	0.15	< 4.3	503	< 3.7	433	2.2	257	0.07	8.2	59	55
18	Wed	0.02	12.72	17.0	13.03								82	9760	81	8471	70	7426	8.51	903	6.9	< 3.5	9.4	0.14	< 4.0	424	< 3.5	371	2.4	255	0.08	8.5	230	100
19	Thu	0.00	12.47	17.0	12.29								141	14664	57	5928	130	13520	7.06	734	6.4	< 4.0	8.8	0.09	< 4.8	478	< 4.0	418	2.8	270	0.03	3.1	130	140
20	Fri	0.00	12.54	17.0	12.26									0	50	5229	165	18348	10.00	1048		< 4.0	8.6	0.23			< 4.0	416	2.0	209	0.11	11.5	47	48
21	Sat	0.95	14.27	29.0	13.36	51.000	1.200	61.600	1.400	112.800	2.450	0.15					135	16067															6	12
22	Sun	0.62	15.06	31.0	14.77	14.400	0.400	327.600	5.700	99.600	2.150	1.03	54	6791	36	4779			6.15	648					< 5.0	829	< 3.7	465	3.2	402	0.06	10.1		
23	Mon	1.56	17.50	35.5	16.84	284.800	5.400	249.000	4.300	271.600	7.960	2.68	31	4524	21	3065	78	11092	4.17	609	< 4.6	< 4.0	8.6	0.48	< 4.8	671	< 4.0	584	3.6	525	0.24	35.0	26	27
24	Tue	0.00	17.86	30.0	15.86			19.800	0.300			4.83	47	7001	32	4766	64	9533	2.63	392	3.9	< 3.5	7.2	0.08	< 4.0	596	< 3.5	521	3.3	492	0.03	4.5	48	6
25	Wed	0.30	18.25	30.5	16.68	103.200	2.500			64.800	1.400	4.63	38	5764	31	4718	63	9589	1.87	285	< 4.8	< 4.0	9.8	0.05	< 4.8	700	< 4.0	609	2.2	335	0.02	3.0	290	210
26	Thu	0.00	16.83	28.0	14.86							3.89	47	8597	39	5474	85	9124	7.62	1070	4.9	< 3.7	6.6	0.17	< 4.3	604	< 3.7	519	4.4	818	0.03	4.2	220	150
27	Fri	0.00	16.30	20.0	14.04							2.63			41	5574	102	13886	5.60	781		< 4.3	11.2	0.09			< 4.3	585	5.8	781	0.03	4.1	170	100
28	Sat	0.00	14.66	16.0	13.58							2.19																					510	
29	Sun	0.00	14.53	16.0	13.77							2.03	56	6786	50	6059	55	6665	6.44	780					< 3.7	448	< 3.3	400	3.4	412	0.03	3.8		
30	Mon	0.00	14.59	29.0	13.94							1.52	63	7666	48	5841	82	9978	5.80	681	8.2	< 3.0	9.8	5.88	< 3.3	402	< 3.0	365	7.2	878	0.50	80.8	220	170
31	Tue	0.00	14.45	19.0	13.93							0.79	68	7954	30	3815	101	12172	4.58	552	5.7	< 3.0	8.8	0.14	< 3.3	398	< 3.0	362	3.8	434	0.06	9.6	270	210
Total		4.71	424.38		396.84	518.20	11.10	758.40	13.10		16.33	26.39																						
Mean			13.69		12.87	103.64	2.22	151.68	2.62		2.72	2.20	74	7255	40	4529	112	12515	6.87	781	6.4	3.8	10.1	0.47	4.3	490	3.8	429	3.0	336	0.11	12.3	154.38	105.50
Maximum		1.56	18.25	40.0	16.84	284.80	5.40	327.60	5.70		7.96	4.83	141	14664	61	7133	272	28243	10.10	1070	8.7	4.3	14.2	5.88	5.0	700	4.3	609	7.2	878	0.50	80.8	510.00	560.00
Minimum			11.73		9.81	14.40	0.40	19.80	0.30		0.90	0.00	31	0	21	2569	35	3517	1.87	285	3.9	3.0	6.6	0.05	3.3	323	3.0	293	0.7	0	0.02	2.0	6.00	5.00
# of Data		31	31	31	31	5	5	5	5		6	12	23	23	27	27	27	27	27	27	18	22	22	22	23	23	27	27	27	27	27	27	28	26
# of Data<MDL																					2	21			22		28				0		0	0
Wk1: 07/1-07/7/01			12.56		12.17								82	5411	39	4071	101	10560	7.74	877					4.3	370	3.8	378	2.5	260	0.10	9.8	185	98
Wk2: 07/8-07/14/01			12.27		11.30								67	7478	34	3442	139	12923	8.06	827					4.2	340	3.8	358	2.5	238	0.18	14.5	106	59
Wk3: 07/15-07/21/01			14.09		13.68								64	7944	48	5434	128	11682	7.03	798					4.5	440	3.8	437	2.7	312	0.10	12.4	83	64
Wk4: 07/22-07/28/01			13.36		12.95								98	8933	50	5510	135	12093	7.74	843					4.3	393	3.7	398	2.8	284	0.08	8.7	82	66

Total Est. Bypass Flow (MG): 40.33 Total Bypass Occurences (days/month): 7

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR AUGUST 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		CBOD5 (mg/L)	CBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	CBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	CBOD5 (mg/L)	CBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	166 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Wed	0.00	14.12	16.0	13.77							0.00	71	8361	52	6124	75	8832	8.66	1020	6.2	< 3.5	8.0	0.28	< 4.0	471	< 3.5	412	8.6	1013	0.11	13.0	26	34
2	Thu	0.44	15.41	32.0	13.87	18.600	0.500	70.600	1.200	60.400	1.800	0.04	51	8554	44	5865	48	8169	5.60	720	4.8	< 3.5	9.0	0.13	< 4.0	514	< 3.5	450	4.2	540	0.05	8.4	160	210
3	Fri	0.02	14.13	19.0	14.20							0.00			43	5067	117	13788	7.59	894		< 4.3	6.8	0.31			< 4.3	507	3.7	436	0.06	7.1	80	230
4	Sat	0.00	13.33	16.0	12.30							0.00																					47	41
5	Sun	0.00	13.46	17.0	12.01							0.00	64	7164	36	4041	74	8307	5.10	573					3.2	359	3.0	337	1.8	202	0.04	4.5		
6	Mon	0.00	13.68	19.0	12.01							0.00	116	13235	77	8785	154	17570	19.00	2168	4.7	< 3.3	7.6	0.80	< 3.7	422	< 3.3	377	2.6	297	0.38	43.4	340	260
7	Tue	0.00	13.58	18.0	12.39							0.00	61	9174	54	8116	107	12119	15.00	1699	5.2	< 3.2	9.2	0.22	< 3.5	396	< 3.2	362	3.4	385	0.20	22.7	47	38
8	Wed	0.00	13.59	18.0	12.73							0.00	69	7821	57	6460	85	9634	8.29	940	4.5	< 3.0	8.4	0.11	< 3.3	374	< 3.0	340	5.2	589	0.06	6.8	160	120
9	Thu	0.28	14.96	39.5	14.78	38.400	0.900	27.000	0.500	43.800	1.010	0.00	81	10106	64	8737	139	17343	8.31	1037	< 4.0	< 3.5	8.0	0.18	< 4.0	499	< 3.5	437	3.0	374	0.05	8.2	26	17
10	Fri	0.00	13.33	26.0	12.63							0.00			43	4780	137	15231	5.60	623		< 3.5	6.0	0.08			< 3.5	389	1.2	133	0.02	2.2	44	45
11	Sat	0.00	12.32	16.0	12.37							0.00																					9	8
12	Sun	0.00	12.42	16.0	11.19							0.00	38	3936	25	2590	122	12637	8.78	702					< 3.5	363	< 3.1	321	3.0	311	0.02	2.1		
13	Mon	0.00	12.43	16.5	10.71							0.00	38	3939	26	2695	82	8501	12.00	1244	4.9	< 3.0	18.6	0.14	< 3.3	342	< 3.0	311	2.6	270	0.10	10.4	190	240
14	Tue	0.00	12.42	17.5	11.97							0.00	66	6836	42	4350	112	11601	11.10	1150	6.5	< 3.2	13.4	0.28	< 3.5	363	< 3.2	331	2.2	226	0.12	12.4	22	17
15	Wed	0.00	12.14	16.5	9.22							0.00	54	5467	39	3949	70	7087	10.20	1033	6.9	< 3.5	10.2	0.14	< 4.0	405	< 3.5	354	2.2	223	0.07	7.1	68	51
16	Thu	0.39	15.63	37.0	14.81			20.400	0.400	20.400	0.450	0.00	84	8343	40	5214	282	36760	7.87	1026	4.4	< 4.0	10.4	0.06	< 4.6	600	< 4.0	521	2.6	339	0.02	2.6	82	54
17	Fri	0.00	12.30	17.5	11.09							0.00			50	5129	53	5437	8.34	856		< 4.0	11.2	0.43			< 4.0	410	2.4	246	0.13	13.3	6	14
18	Sat	0.51	15.25	38.0	13.96	51.600	2.500	85.800	4.170	56.800	1.290	0.00																					19	60
19	Sun	0.32	13.62	33.0	13.08	23.400	1.100	33.600	1.630	40.200	0.880	0.03	47	5417	39	4495	57	6570	5.38	620					< 5.0	576	< 4.2	484	4.0	461	0.06	5.6		
20	Mon	0.00	12.09	17.0	11.12							0.00	55	5546	45	4537	59	5949	7.67	773	5.7	< 3.0	8.6	0.34	< 3.0	302	< 3.0	302	2.4	242	0.07	7.1	18	12
21	Tue	0.12	13.52	34.5	12.30	24.000	1.200	24.000	1.170	25.200	0.550	0.00	53	5976	47	5300	51	5751	7.39	833	6.0	< 3.3	9.6	0.06	4.4	496	< 3.3	372	3.0	338	0.01	1.1	77	64
22	Wed	0.00	12.94	21.0	12.38							0.00	99	10684	71	7662	163	17591	5.88	635	< 3.5	< 3.2	9.4	0.13	< 3.5	378	< 3.2	345	2.7	291	0.02	2.2	57	41
23	Thu	0.00	12.44	17.0	11.51							0.00	53	5499	39	4046	115	11931	7.06	732	3.5	< 3.0	13.4	0.06	< 3.3	342	< 3.0	311	3.6	373	0.05	5.2	68	41
24	Fri	0.14	12.42	29.0	13.62							0.00			78	8079	125	12948	9.77	1012		< 4.3	9.4	0.06			< 4.3	445	3.0	311	0.03	3.1	14	12
25	Sat	0.27	14.57	33.0	13.12	12.000	0.300	13.800	0.200	33.000	0.720	0.00																					690	510
26	Sun	0.02	12.47	16.0	10.57							0.00	41	4264	28	2912	65	6780	7.61	791					< 3.3	343	< 3.0	312	3.0	312	0.06	6.2		
27	Mon	0.00	12.77	16.0	11.56							0.00	76	8307	52	5536	91	9692	11.20	1193	4.3	2.9	6.8	0.84	3.5	373	3.2	341	1.2	128	0.39	41.5	30	21
28	Tue	0.00	12.33	17.5	10.47							0.00	59	6067	48	4730	94	9666	7.18	738	< 4.0	< 3.5	4.4	0.20	< 4.0	411	< 3.5	360	2.8	288	0.11	11.3	90	110
29	Wed	0.00	13.07	17.5	10.86							0.00	72	7848	45	4905	142	15479	12.70	1384	< 4.6	< 4.0	6.0	0.04	< 4.6	501	< 4.0	436	3.0	327	0.02	2.2	23	6
30	Thu	0.30	14.38	37.0	12.41					28.200	0.620	0.00	92	11033	66	7915	174	20688	14.70	1763	4.9	2.8	7.0	0.59	< 3.3	396	< 3.0	360	3.5	420	0.31	37.2	32	210
31	Fri	0.18	14.06	27.0	14.26			29.400	0.500	12.000	0.260	0.00			69	6928	127	14913	13.38	1571		< 4.2	7.4	0.73			< 4.2	493	1.7	200	0.58	68.1	37	5
Total		2.99	415.40		383.37	168.00	6.50	304.80	9.77		7.56	0.07																						
Mean			13.40		12.37	28.00	1.08	38.10	1.22		0.84	0.00	66	7345	48	5361	108	12190	9.23	1027	4.9	3.5	9.1	0.27	3.8	419	3.5	386	3.1	344	0.12	13.0	91.26	91.59
Maximum		0.51	15.63	39.5	14.81	51.60	2.50	85.80	4.17		1.80	0.04	116	13235	78	8785	282	36760	19.00	2168	6.9	4.3	18.6	0.84	5.0	600	4.3	521	6.6	1013	0.58	68.1	690.00	510.00
Minimum			12.09		9.22	12.00	0.30	13.80	0.20		0.26	0.00	38	3936	25	2590	48	5437	5.10	573	3.5	2.8	4.4	0.04	3.0	302	3.0	302	1.2	126	0.01	1.1	8.00	5.00
# of Data		31	31	31	31	6	6	6	6		9	31	22	22	27	27	27	27	27	27	16	23	23	23	22	22	27	27	27	27	27	27	27	27
# of Data<MDL																					4	21			19		25				0		0	1
Wk1: 07/29-08/04/2001			13.82		12.92								82	9504	54	6201	113	13127	10.55	1218					3.5	379	3.4	370	3.3	359	0.13	13.7	120	118
Wk2: 08/05-08/11/2001			12.98		11.63								52	6704	36	3930	134	15303	8.93	963					3.6	369	3.4	334	2.3	225	0.06	5.5	66	69
Wk3: 08/12-08/18/2001			13.19		12.21								61	6624	49	5195	63	6871	6.95	742					3.6	282	3.5	344	3.0	302	0.06	3.3	41	39
Wk4: 08/19-08/25/2001			13.65		12.88								84	7193	49	5390	111	13009	7.09	790					4.1	332	3.6	378	2.9	296	0.05	2.9	40	41

Total Est. Bypass Flow (MG): 23.85 Total Bypass Occurances (days/month): 9

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR SEPTEMBER 2001

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mLs)	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	11.68	16.0	10.00							0.00																					
2	Sun	0.00	11.31	17.0	9.36							0.00	48	4528	40	3773	62	5848	7.71	727					3.3	311	< 3.0	283	1.6	151	0.22	20.8		
3	Mon	0.00	11.86	18.0	9.67							0.00	49	4847	41	4055	64	6330	8.74	864	6.2	< 4.0	8.6	0.06	4.5	455	< 4.0	396	1.1	109	0.04	4.0	10	6
4	Tue	0.00	12.09	17.0	9.91							0.00	75	7562	52	5243	80	8066	19.50	1966	6.6	< 4.0	11.0	0.70	4.6	464	< 4.0	403	1.2	121	0.33	33.3	32	28
5	Wed	0.00	12.41	19.0	9.95							0.00	72	7452	48	4968	99	10246	11.00	1138	7.3	< 4.0	10.6	0.13	4.6	476	< 4.0	414	2.4	248	0.02	2.1	28	23
6	Thu	0.61	13.46	38.5	11.74	91.200	2.200	105.000	1.800	95.400	2.430	0.00	81	9066	55	6170	116	13012	5.80	826	7.8	< 4.0	12.2	0.12	4.8	515	< 4.0	449	2.2	247	0.09	10.1	140	90
7	Fri	0.08	14.01	23.5	13.65	15.000	0.400	37.800	0.700	15.000	0.330	0.06			89	10399	167	19513	12.50	1461		< 2.9	10.0	0.27			< 3.7	432	1.2	140	0.04	4.7	32	28
8	Sat	0.00	12.39	16.0	10.20							0.84																					360	
9	Sun	0.59	15.06	32.0	14.14	25.200	0.600	53.400	0.900	83.600	1.390	0.21	49	6154	40	5024	74	9294	4.90	615					4.3	540	< 3.7	465	1.2	151	0.01	1.3		
10	Mon	0.00	12.36	17.5	9.84							0.79	68	7010	49	5051	80	8247	10.70	1103	6.0	< 4.0	10.6	0.04	4.8	474	< 4.0	412	2.0	206	< 0.02	2.1	41	40
11	Tue	0.00	12.02	17.0	9.45							1.02	74	7418	49	4912	101	10125	17.50	1754	9.2	3.9	10.7	0.76	4.3	431	3.9	391	1.8	180	0.30	30.1	56	48
12	Wed	0.00	12.32	17.0	9.82							0.41	85	8734	52	5343	95	9781	14.80	1521	8.3	< 4.0	9.8	0.52	4.8	473	< 4.0	411	2.2	226	0.36	37.0	83	75
13	Thu	0.01	12.39	18.0	9.88							0.11	74	7847	48	4980	62	6407	11.10	1147	6.2	< 4.0	12.4	0.14	4.6	475	< 4.0	413	2.8	289	0.13	13.4	53	88
14	Fri	0.00	11.91	17.0	9.16							0.04			44	4370	72	7152	8.00	795		< 3.5	10.8	0.11			< 3.5	348	2.2	219	0.06	7.9	76	61
15	Sat	0.00	11.53	15.5	8.63							0.00																					34	39
16	Sun	0.00	11.63	15.0	8.96							0.00	94	9117	57	5529	89	8632	8.29	804					4.0	388	< 3.5	339	2.4	233	0.04	3.9		
17	Mon	0.45	13.73	33.0	11.42	29.400	0.700	53.600	1.100	46.800	1.020	0.00	101	11565	65	7443	127	14543	12.00	1374	5.6	< 4.6	9.4	0.24	6.4	618	< 4.6	527	2.0	229	0.07	8.0	92	85
18	Tue	0.28	11.09	21.0	10.68	94.200	2.300	82.800	1.400	91.800	2.010	0.00	64	7789	81	5842	115	10636	6.46	597	5.5	< 4.0	9.8	0.15	4.6	425	< 4.0	370	2.0	185	0.06	7.4	72	81
19	Wed	0.35	12.65	32.0	14.01							1.01	93	9836	46	4866	102	10787	6.78	717	8.1	< 4.0	10.0	0.06	4.6	486	< 4.0	423	2.0	212	0.06	6.3	33	26
20	Thu	0.02	9.74	13.0	9.77							0.50	93	7555	66	5361	62	5036	7.45	605	4.2	< 3.7	8.2	0.06	4.2	341	< 3.7	301	1.8	148	< 0.02	1.6	33	23
21	Fri	0.04	9.94	14.5	10.33							0.28			47	3896	87	7212	7.26	604		< 3.1	8.2	0.07			< 3.1	257	1.4	119	0.01	0.8	26	53
22	Sat	0.00	9.33	14.0	9.16							0.12																					51	43
23	Sun	0.72	13.57	34.0	14.35	85.200	2.100	53.400	0.900	82.800	1.810	83.00	62	7017	48	5432	68	7696	7.22	817					4.0	453	3.7	419	2.9	328	0.03	3.4		
24	Mon	0.63	15.12	29.5	16.29							1.41	70	8827	43	5422	78	9836	9.24	1165	6.8	< 4.0	9.6	0.95	4.6	580	< 4.0	504	3.0	378	0.65	82.0	68	41
25	Tue	0.21	13.51	28.5	15.48	14.400	0.300	20.400	0.400	16.200	0.350	1.40	52	5659	27	3042	87	7549	8.87	828	7.4	< 3.7	9.8	<0.02	4.3	484	< 3.7	417	1.4	158	< 0.02	2.3	41	33
26	Wed	0.00	10.82	16.5	12.30							0.99	54	4873	39	3519	56	5053	8.42	579	6.4	< 3.7	9.2	<0.02	4.3	388	< 3.7	334	1.0	90	0.03	2.7	42	59
27	Thu	0.00	11.02	14.0	11.46							0.07	66	6250	50	4595	86	8088	10.10	928	5.5	< 3.5	10.4	0.04	4.0	368	< 3.5	322	1.4	129	0.06	5.5	24	31
28	Fri	0.00	10.83	15.0	9.94							0.50			58	5239	74	6684	9.69	875		< 5.0	8.2	0.06			< 5.0	452	0.5	45	0.02	1.8	34	29
29	Sat	0.00	10.34	14.5	10.21							0.34																						
30	Sun	0.00	10.29	15.0	10.24							0.23	39	3347	30	2575	45	3862	8.94	596					5.4	463	< 4.8	395	1.0	86	0.09	7.7	1800	1900
Total		4.19	360.44		330.02	354.60	8.60	416.40	7.20		9.34	93.15																						
Mean			12.01		11.00	50.66	1.23	59.49	1.03		1.33	3.11	71	7260	50	5073	85	8785	9.42	960	6.8	3.9	9.9	0.25	4.5	458	3.9	395	1.8	165	0.11	12.0	131.92	128.84
Maximum		0.61	15.12	38.5	16.29	94.20	2.30	105.00	1.80		2.43	83.00	101	11565	89	10399	167	19513	19.50	1966	9.2	5.0	12.4	0.95	5.4	618	5.0	527	3.0	378	0.65	82.0	1800.00	1900.00
Minimum			9.33		8.63	14.40	0.30	20.40	0.40		0.33	0.00	39	3347	27	2575	45	3862	4.90	579	4.2	2.9	6.2	0.04	3.3	311	3.0	257	0.5	45	0.01	0.8	10.00	6.00
# of Data		30	30	30	30	6	7	7	7		7	30	21	21	25	25	25	25	25	28	16	20	20	18	21	21	25	25	25	25	25	25	25	25
# of Data<MDL																					1	16			20		23				3		0	0
Wk1: 09/02-09/08/2001			13.04		11.32								65	7020	54	5977	100	11077	10.37	1112					4.5	418	3.9	372	1.6	147	0.09	7.8	100	71
Wk2: 09/09-09/15/2001			12.02		9.39								79	7985	50	5028	83	8387	11.73	1187					4.4	354	3.8	304	2.2	177	0.16	12.4	57	55
Wk3: 09/16-09/22/2001			11.44		11.39								87	8748	58	5440	94	9318	7.87	786					4.6	456	3.9	379	2.0	203	0.05	4.5	51	52
Wk4: 09/23-09/29/2001			11.16		10.62								93	9168	57	5456	97	9474	8.04	764					4.6	421	3.8	349	1.9	175	0.05	4.4	51	52

Total Est. Bypass Flow (MG): 24.64 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR OCTOBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Mon	0.00	10.52	17.0	10.42							0.15	48	4211	41	3597	87	5878	8.74	787	7.4	< 4.6	9.4	0.56	< 5.5	483	< 4.6	404	0.9	79	0.28	24.6	160	140
2	Tue	0.00	10.56	17.0	11.04							0.13	36	3171	27	2378	74	6517	6.10	537	7.7	< 4.6	8.6	0.20	< 5.5	484	< 4.6	405	2.2	194	0.19	18.7	200	160
3	Wed	0.00	10.45	15.0	13.03							0.10	94	8192	48	4009	103	8977	8.54	744	9.2	< 4.6	12.2	0.17	< 5.5	479	< 4.6	401	1.8	139	0.08	7.0	80	26
4	Thu	1.18	12.83	32.0	13.91	133.200	3.200	294.800	5.100	133.200	2.910	0.38	94	10056	53	5671	133	14231	7.37	789	10.5	< 4.6	13.8	0.26	< 5.4	578	< 4.6	492	0.8	86	0.11	11.8	30	21
5	Fri	0.92	14.13	20.0	18.25	111.600	2.700	328.800	5.700	108.600	2.380	2.80			24	2828	99	11667	4.20	495		< 4.3	13.0	0.13			< 4.3	507	1.2	141	0.03	3.5	37	25
6	Sat	0.00	12.63	17.0	14.75							1.04																					150	70
7	Sun	0.00	12.22	15.0	14.39							0.40	83	8459	37	3771	77	7847	5.86	599					< 5.5	561	< 4.6	469	1.7	173	0.07	7.1		
8	Mon	0.00	12.03	17.0	14.20							0.19	104	10434	39	3913	125	12541	7.78	781	9.7	< 4.6	13.4	0.03	< 5.5	552	< 4.6	462	1.4	140	0.02	2.0	29	20
9	Tue	0.00	11.89	16.0	13.82							0.14	104	10313	44	4383	90	8925	10.64	1055	11.0	< 4.6	14.0	0.72	< 5.5	545	< 4.6	458	2.0	198	0.43	42.8	40	34
10	Wed	0.05	11.69	16.0	13.34							0.03	78	7606	34	3316	98	9554	7.34	716	10.0	< 4.6	17.6	0.21	< 5.5	536	< 4.6	448	1.8	175	0.19	18.5	35	25
11	Thu	0.15	11.12	16.5	11.92							0.06	81	7512	36	3339	83	7697	7.70	714	8.9	< 4.3	16.8	0.11	< 5.0	464	< 4.3	399	1.2	111	0.05	4.8	36	28
12	Fri	1.04	16.03	32.5	19.81	237.600	5.600	269.400	4.700	186.000	4.070	1.97			72	9626	118	15775	5.49	734		< 4.6	16.0	0.11			< 4.6	615	2.2	294	0.07	9.4	47	36
13	Sat	1.49	16.71	31.0	20.20	284.400	6.900	268.200	4.700	264.000	5.770	2.24																					17	25
14	Sun	0.23	19.94	27.0	22.66	25.800	0.600	26.400	0.500	12.600	0.280	3.52	34	5654	19	3160	74	12308	3.19	530					< 5.5	915	< 4.6	765	2.2	366	0.04	6.7		
15	Mon	0.04	17.24	25.0	19.90							1.23	32	4601	20	2676	81	11646	4.03	579	12.0	6.0	15.4	0.05	< 5.5	791	< 4.6	661	1.8	259	0.03	4.3	210	38
16	Tue	0.20	16.45	26.0	20.93							0.70	76	11694	31	4770	121	18619	3.14	483	9.3	< 4.6	11.4	0.79	< 5.5	846	< 4.6	706	2.2	339	0.71	109.2	250	160
17	Wed	0.00	15.66	24.0	16.50							0.36	63	8228	31	4049	81	10579	6.94	906	11.0	< 4.6	15.0	0.02	< 5.5	718	< 4.6	601	1.8	235	0.02	2.6	150	58
18	Thu	0.00	15.95	24.5	16.03							0.26	64	8513	35	4656	57	7582	8.23	1095	12.0	< 4.6	12.8	0.22	< 5.5	732	< 4.6	612	1.0	133	0.10	13.3	28	22
19	Fri	0.00	14.07	24.5	18.81							0.14			37	4342	87	10209	6.56	770		< 3.2	12.0	0.09			< 3.2	376	1.2	141	0.03	3.5	59	42
20	Sat	0.00	13.15	17.0	15.99							0.13																					18	16
21	Sun	0.00	10.21	16.0	15.87							0.01	66	7323	41	3491	80	6812	8.74	744					< 5.5	468	< 4.6	392	3.2	272	0.03	2.8		
22	Mon	0.03	12.37	17.0	15.39							0.11	135	13927	48	4952	174	17951	12.99	1340	12.0	< 4.6	18.0	0.32	< 5.5	567	< 4.6	475	1.4	144	0.20	20.6	54	43
23	Tue	0.85	16.29	39.0	19.04	120.000	2.900	123.000	2.100	127.800	3.340	2.13	79	10733	32	4347	114	15488	5.38	731	10.0	< 4.0	15.6	0.09	< 5.5	747	< 4.6	625	1.2	163	0.14	19.0	67	50
24	Wed	0.63	14.28	29.0	16.99	111.600	2.700	163.200	2.800	146.400	4.060	2.50	77	9170	43	5121	64	10004	5.15	613	12.0	< 4.6	12.6	0.31	< 5.5	656	< 4.6	548	3.8	429	0.25	29.8	27	20
25	Thu	0.00	15.52	25.0	17.50							2.19	59	7637	37	4789	66	8543	8.56	848	10.0	< 4.6	16.8	0.03	< 5.5	712	< 4.6	595	1.4	181	0.03	3.9	51	44
26	Fri	0.00	14.46	18.0	16.66							0.68			29	3497	123	14833	5.24	632		< 4.6	11.6	0.18			< 4.6	555	1.0	121	0.12	14.5	100	140
27	Sat	0.00	13.90	17.0	16.12							0.26																					32	16
28	Sun	0.00	14.04	17.0	16.33							0.17	85	9953	32	3747	90	10536	5.65	662					< 5.4	832	< 4.6	539	8.0	703	< 0.02	2.3		
29	Mon	0.00	13.06	17.0	14.81							0.00	82	8931	39	4246	124	13506	8.85	964	8.0	< 4.6	18.0	0.26	< 5.5	599	< 4.6	501	1.2	131	< 0.17	18.5	17	14
30	Tue	0.03	12.86	18.0	14.83							0.00	121	12978	39	4163	125	13407	10.64	1141	11.1	< 4.6	18.4	0.09	< 5.5	590	< 4.6	493	3.2	343	0.16	17.2	14	7
31	Wed	0.00	12.57	17.0	14.26							0.06	101	10588	33	3460	87	9121	10.14	1063	11.2	< 4.8	15.4	0.10	< 5.5	577	< 4.8	482	1.8	168	0.10	10.5	12	6
Total		6.84	426.63		499.72	1024.20	24.80	1473.60	25.60		22.81	24.12																						
Mean			13.77		16.12	146.31	3.54	210.51	3.66		3.26	0.78	79	8691	37	4187	98	11139	7.06	779	10.2	4.5	14.1	0.22	5.5	619	4.5	518	1.9	217	0.14	15.8	72.22	47.63
Maximum		1.49	19.94	39.0	22.66	284.40	6.90	328.80	5.70		5.77	3.52	135	13927	72	9626	174	18619	12.99	1340	12.0	6.0	18.4	0.79	5.5	915	4.6	765	8.0	703	0.71	109.2	250.00	160.00
Minimum			10.21		10.42	25.80	0.60	26.40	0.50		0.28	0.00	32	3171	19	2378	57	5878	3.14	483	7.4	3.2	8.6	0.02	5.0	464	3.2	376	0.8	79	0.02	2.0	12.00	6.00
# of Data		31	31	31	31	7	7	7	7		7	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27	27	27
# of Data<MDL																					0	22			23		27				2		0	0
Wk1: 9/30-10/06/01			12.31		14.48								96	7909	41	4093	105	10698	7.40	744					5.5	625	4.6	546	1.5	173	0.12	14.3	81	33
Wk2: 10/07-10/13/01			15.88		18.39								60	6176	35	4514	96	12600	5.15	626					5.4	804	4.8	589	1.9	297	0.18	29.0	99	52
Wk3: 10/14-10/20/01			13.96		17.06								85	8121	37	4306	99	11437	6.14	931					5.5	797	4.4	629	1.6	225	0.09	12.4	63	39
Wk4: 10/21-10/27/01			14.27		17.33								85	8261	37	4377	100	11959	7.77	890					5.5	814	4.4	641	1.8	264	0.18	29.3	93	57

Total Est. Bypass Flow (MG): 73.21 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR NOVEMBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0
1	Thu	0.06	12.12	16.5	13.31							0.09
2	Fri	0.36	14.42	37.0	16.04			37.800	0.700	21.600	0.470	0.02
3	Sat	0.00	11.42	15.0	12.42							0.00
4	Sun	0.00	11.12	15.5	12.01							0.00
5	Mon	0.00	11.52	16.0	12.64							0.00
6	Tue	0.00	11.37	16.0	12.68							0.00
7	Wed	0.00	11.28	16.0	12.68							0.00
8	Thu	0.10	11.11	15.0	12.50							0.00
9	Fri	0.00	10.74	15.0	12.35							0.00
10	Sat	0.00	10.26	14.0	11.78							0.00
11	Sun	0.00	10.18	13.0	12.11							0.00
12	Mon	0.00	10.11	14.0	11.41							0.00
13	Tue	0.00	10.16	15.0	10.96							0.00
14	Wed	0.15	11.04	26.5	11.94							0.00
15	Thu	0.00	9.89	12.5	10.13							0.00
16	Fri	0.00	9.73	17.0	10.06							0.00
17	Sat	0.00	9.32	12.0	9.35							0.00
18	Sun	0.08	9.66	14.0	9.48							0.00
19	Mon	0.23	11.71	31.0	12.36							0.00
20	Tue	0.00	9.45	13.5	9.81							0.00
21	Wed	0.00	9.75	15.0	10.36							0.00
22	Thu	0.00	9.40	14.0	10.41							0.00
23	Fri	0.00	9.45	13.0	10.13							0.00
24	Sat	0.58	10.78	31.0	12.30	54.000	1.300	85.200	1.500	76.800	2.100	0.24
25	Sun	0.11	10.24	18.0	11.90							0.23
26	Mon	0.07	10.01	17.0	11.47							0.14
27	Tue	0.00	9.86	13.5	10.89							0.12
28	Wed	0.06	9.86	14.5	10.76							0.09
29	Thu	0.45	12.28	26.0	13.82							0.10
30	Fri	0.34	12.17	27.0	15.91	103.200	5.000	45.600	2.220	67.000	1.900	0.88
Total		2.61	320.20		354.16	157.20	6.30	168.60	4.42	165.40	4.47	1.91
Mean			10.67		11.81	78.60	3.15	56.20	1.47	61.80	1.49	0.06
Maximum		0.58	14.42	37.0	16.04	103.20	5.00	85.20	2.22	87.00	2.10	0.88
Minimum			9.32		9.35	54.00	1.30	37.80	0.70	21.60	0.47	0.00
# of Data		30	30	30	30	2	2	3	3		3	30
# of Data<MDL												
Wk1: 10/28-11/03/2001			11.22		12.50							
Wk2: 11/04-11/10/2001			10.17		11.20							
Wk3: 11/11-11/17/2001			9.82		10.27							
Wk4: 11/18-11/24/2001			9.86		10.26							

Date	Influent Data								Clarifier Effluent Data					Final Effluent Data									
	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria									<MDL	<MDL	10	1.5		Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	101	10209	39	3942	138	13949	8.12	821	11.8	< 4.6	16.4	0.08	<	5.5	556	< 4.8	485	0.6	61	0.12	12.1		
2			45	5412	77	9260	7.22	868		< 4.6	13.8	0.06				< 4.8	553	2.4	289	0.03	3.6		
3																							
4	66	7976	74	8863	90	8347	9.24	857					<	3.3	306	< 3.0	278	2.6	241	0.03	2.8		
5	90	8647	67	6437	105	10088	8.77	939	6.6	< 3.0	12.0	0.09		3.5	336	< 3.0	288	2.0	192	0.02	1.9		
6	76	7207	54	5121	83	7871	10.40	986	8.5	< 3.5	15.0	0.10		4.2	398	< 3.5	332	1.8	171	0.07	6.6		
7	60	5645	37	3481	76	7150	9.40	884	6.4	< 4.0	13.8	0.07	<	4.6	433	< 4.0	376	1.8	169	0.04	3.8		
8	96	8695	51	4726			10.70	991	7.4	< 3.0	14.2	0.10		4.8	445	< 3.0	278	3.4	315	0.03	2.8		
9			42	3762	143	12809	11.67	1063		< 4.0	12.0	0.33				< 4.0	358	2.4	215	0.19	17.0		
10																							
11	90	7641	38	3226	88	7471	8.40	713					<	4.6	391	< 4.0	340	1.4	119	0.04	3.4		
12	49	4132	26	2192	53	4469	8.18	522	10.4	< 4.6	13.4	0.07	<	5.5	464	< 4.6	388	2.8	236	0.02	1.7		
13	106	8982	52	4406	106	8982	8.69	736	7.6	< 5.0	12.2	0.03	<	5.0	424	< 4.3	364	2.0	169	0.01	0.8		
14	69	8195	42	3867	98	9023	6.83	629	11.1	< 4.6	13.4	0.04	<	5.5	506	< 4.6	424	4.2	387	0.04	3.7		
15	64	5172	39	3152	88	5495	6.72	543	10.4	< 4.6	14.0	0.01	<	5.5	444	< 4.6	372	3.0	242	0.05	4.0		
16			50	4057	81	6573	4.98	404		< 4.3	15.8	0.05				< 4.3	349	3.6	292	0.07	5.7		
17																							
18	100	8056	85	6848	88	7090	8.74	704					<	3.3	266	< 3.0	242	3.6	290	0.04	3.2		
19	66	6641	48	4688	64	6204	5.88	574	6.3	< 4.0	14.4	0.03		4.4	430	< 4.0	391	2.6	254	0.06	7.8		
20	86	6778	65	5123	74	5832	8.69	527	7.2	< 3.0	14.8	0.02		5.5	512	< 3.0	236	1.2	95	0.04	3.2		
21	131	10652	89	7237	106	6782	15.40	1252	9.9	< 3.3	17.4	0.39		4.0	325	< 3.3	268	3.2	260	0.19	15.4		
22	125	9800	88	5331	78	6115	7.67	601	12.1	< 4.6	16.8	0.18	<	5.5	431	< 4.6	361	3.0	235	0.16	12.5		
23			61	4808	120	9458	8.51	671		< 4.3	21.8	0.10				< 4.3	339	1.8	142	0.06	4.7		
24																							
25	80	6832	37	3160	94	8026	7.73	660					<	3.5	299	< 3.1	265	2.6	222	0.06	5.1		
26	65	5426	43	3590	64	5343	11.09	926	6.2	< 4.0	15.8	0.03	<	4.6	384	< 4.0	334	2.3	192	0.08	6.7		
27	100	8215	43	3532	159	13062	10.81	888	7.7	3.2	14.8	0.07		3.7	304	< 3.0	246	2.2	181	0.07	5.8		
28	101	8305	81	5016	98	8059	11.47	943	11.0	< 4.6	14.0	0.14	<	5.5	452	< 4.6	378	1.2	99	0.08	6.6		
29	126	13109	74	7579	127	13007	11.61	1189	7.3	< 3.0	14.6	0.13	<	3.3	338	< 3.0	307	1.0	102	0.15	15.4		
30			61	6191	240	24359	9.74	989		< 4.0	13.6	0.18				< 4.0	406	2.0	203	0.13	13.2		
Total																							
Mean	90	7929	54	4759	102	9153	9.00	803	8.9	4.0	14.7	0.10		4.6	402	3.6	344	2.3	207	0.07	6.5		
Maximum	131	13109	89	7579	240	24359	15.40	1252	12.1	5.0	21.8	0.39		6.5	556	4.6	553	4.2	387	0.19	17.0		
Minimum	49	4132	26	2192	53	4469	4.98	404	6.3	3.0	12.0	0.01		3.3	266	3.0	236	0.6	61	0.01	0.8		
# of Data	21	21	26	26	25	25	26	26	17	22	22	22		21	21	26	26	26	26	26	26		
# of Data<MDL									0	21				14		26				0			
Wk1: 10/28-11/03/2001	82	5481	54	4341	99	7711	10.23	953						4.1	428	3.4	357	2.3	243	0.06	6.6		
Wk2: 11/04-11/10/2001	80	4874	41	2986	82	7002	6.97	591						5.2	491	4.4	407	2.8	261	0.04	3.5		
Wk3: 11/11-11/17/2001	102	5990	69	4891	92	7580	8.82	722						4.7	414	3.7	324	2.6	223	0.10	8.3		
Wk4: 11/18-11/24/2001	102	5990	68	4766	86	7099	8.23	877						4.7	414	3.7	323	2.9	248	0.10	8.5		

Total Est. Bypass Flow (MG): 15.19 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR DECEMBER 2001

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100
Design Criteria			15 Avg 27 Max	38 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML	
1	Sat	0.01	10.33	12.0	12.19	0.000	0.000	0.000	0.000	0.000	0.000	0.47																				
2	Sun	0.00	10.32	13.0	12.04	0.000	0.000	0.000	0.000	0.000	0.000	0.25	104	8951	58	4820	112	9640	10.30	887					< 4.8	396	< 4.0	344	2.0	172	0.05	4.3	
3	Mon	0.00	10.24	13.0	12.15	0.000	0.000	0.000	0.000	0.000	0.000	0.15	83	7068		0	83	7068	10.52	896	6.4	< 4.8	11.2	0.06	< 5.5	470	< 4.6	393	1.0	85	0.02	1.7	
4	Tue	0.00	10.39	13.0	12.13	0.000	0.000	0.000	0.000	0.000	0.000	0.14	125	10632		0	164	14211	9.63	834	< 8.0	< 5.0	13.4	0.32	< 15.0	1300	< 7.5	650	1.4	121	0.30	26.0	
5	Wed	0.14	11.30	26.0	12.97	0.000	0.000	0.000	0.000	0.000	0.000	0.14	150	14136	92	8670	134	12628	10.20	961	< 4.3	< 3.7	15.8	0.16	< 12.0	1131	< 8.5	801	2.0	188	0.05	4.7	
6	Thu	0.00	10.04	15.0	11.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	97	8122	68	5694	160	13397	7.76	650	6.7	< 5.5	11.4	0.06	< 8.5	712	< 6.6	553	0.4	33	0.05	4.2	
7	Fri	0.00	10.04	14.0	11.23	0.000	0.000	0.000	0.000	0.000	0.000	0.00			88	7369	119	9964	13.02	1090		< 6.0	10.4	0.23			< 6.0	502	3.8	318	0.38	31.8	
8	Sat	0.00	9.60	13.0	10.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00																				
9	Sun	0.00	9.33	15.0	9.47	0.000	0.000	0.000	0.000	0.000	0.000	0.00	127	9882	90	7003	72	5602	11.40	887					< 10.0	778	< 7.5	584	2.0	156	0.06	6.2	
10	Mon	0.00	9.94	16.0	10.06	0.000	0.000	0.000	0.000	0.000	0.000	0.00	150	12435	86	7295	154	12787	12.30	1020	< 8.5	< 6.8	12.2	0.11	< 8.5	706	< 6.6	547	1.4	116	0.06	5.0	
11	Tue	0.00	9.80	16.0	9.80	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	12096	77	6293	139	11361	10.70	875	< 10.0	< 6.0	12.2	0.08	< 20.0	1635	< 12.0	981	3.2	262	0.05	4.1	
12	Wed	0.12	10.00	14.5	9.85	0.000	0.000	0.000	0.000	0.000	0.000	0.00	181	15095	98	8173	198	16513	12.00	1001	< 4.3	< 3.3	13.8	0.34	< 4.3	359	< 3.3	276	1.5	125	0.07	5.8	
13	Thu	0.00	10.43	18.0	10.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	181	15745	78	6785	150	13048	11.90	1035	< 4.3	< 3.3	12.6	0.05	< 4.3	374	< 3.3	287	1.8	157	0.05	4.3	
14	Fri	0.28	11.75	26.0	12.00	0.000	0.000	0.000	0.000	0.000	0.000	0.00			77	7546	203	19893	8.94	876		< 7.5	12.2	0.27			< 7.5	735	1.4	137	0.03	2.9	
15	Sat	0.00	9.33	13.0	9.07	0.000	0.000	0.000	0.000	0.000	0.000	0.00																				
16	Sun	0.22	10.65	18.5	11.34	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	13146	89	7905	140	12435	10.90	968					< 4.6	409	< 4.0	356	2.2	195	0.20	17.8	
17	Mon	0.14	11.38	18.0	13.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00	132	12528	102	9681	133	12623	10.25	973	6.9	< 3.5	24.8	0.05	< 4.0	380	< 3.5	332	0.8	76	0.05	4.7	
18	Tue	0.00	9.79	14.0	10.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	163	13309	107	8736	113	9226	10.64	869	7.2	< 3.6	11.4	0.05	< 4.0	327	< 3.5	286	2.2	180	0.05	4.1	
19	Wed	0.05	10.06	16.0	10.91	0.000	0.000	0.000	0.000	0.000	0.000	0.00	127	10677	77	6473	94	7902	9.80	824	10.0	< 4.0	12.8	0.45	< 4.6	387	< 4.0	336	1.0	84	0.13	10.9	
20	Thu	0.00	9.53	13.0	10.16	0.000	0.000	0.000	0.000	0.000	0.000	0.00	63	5007	54	4292	48	3815	5.04	401	< 5.0	< 3.7	14.6	0.17	< 5.0	397	< 3.7	294	2.2	175	0.16	12.7	
21	Fri	0.00	9.49	14.5	10.48	0.000	0.000	0.000	0.000	0.000	0.000	0.00			62	4907	100	7915	5.10	404		< 5.0	12.0	0.09			< 5.0	396	1.5	119	0.08	6.3	
22	Sat	0.10	9.93	16.0	11.47	0.000	0.000	0.000	0.000	0.000	0.000	0.00																				
23	Sun	0.00	9.74	13.0	10.24	0.000	0.000	0.000	0.000	0.000	0.000	0.00	106	8773	48	3899	107	8692	10.60	861					4.7	382	< 4.0	325	1.2	97	0.06	4.9	
24	Mon	0.00	9.42	11.0	9.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	113	8878	50	3928	104	8171	8.34	655	13.5	5.2	19.5	0.09	10.0	786	6.1	479	22.7	1783	0.09	7.1	
25	Tue	0.00	9.25	11.0	9.14	0.000	0.000	0.000	0.000	0.000	0.000	0.00	136	10646	62	4783	126	9720	10.50	810	12.9	< 5.4	12.8	0.10	< 6.6	509	< 5.4	417	15.8	1219	0.10	7.7	
26	Wed	0.00	9.61	11.0	9.54	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	11862	54	4328	172	13785	11.40	914	11.0	< 4.3	11.2	0.15	< 6.0	481	< 4.3	345	8.4	673	0.08	6.4	
27	Thu	0.00	9.25	13.0	9.09	0.000	0.000	0.000	0.000	0.000	0.000	0.00	92	7097	53	4089	67	5169	12.50	964	12.1	4.1	9.0	0.05	5.1	471	< 4.2	324	2.6	201	0.04	3.1	
28	Fri	0.00	9.13	12.0	9.41	0.000	0.000	0.000	0.000	0.000	0.000	0.00			46	3503	67	5102	12.30	937		< 4.2	8.8	0.13		0	< 4.2	320	3.7	282	0.10	7.6	
29	Sat	0.00	8.78	12.0	8.98	0.000	0.000	0.000	0.000	0.000	0.000	0.00																				
30	Sun	0.00	8.94	13.0	8.83	0.000	0.000	0.000	0.000	0.000	0.000	0.00	50	3728	35	2610	63	4697	8.96	668					2.6	194	< 4.0	298	2.6	209	0.06	6.0	
31	Mon	0.00	8.32	12.5	8.35	0.000	0.000	0.000	0.000	0.000	0.000	0.00	57	3955	48	3331	73	5065	19.90	1381	< 15.0	< 8.5	86.0	0.19	< 5.0	416	< 4.3	298	4.1	284	0.06	4.2	
Total		1.06	306.13		326.73	0.00	0.00	0.00	0.00		0.00	1.15																				
Mean			9.88		10.54	0.00	0.00	0.00	0.00		0.00	0.04	122	10181	71	5466	119	10017	10.57	871	8.6	4.9	16.5	0.15	7.1	565	5.3	441	3.6	286	0.10	7.9	
Maximum		0.28	11.75	26.0	13.21	0.00	0.00	0.00	0.00		0.00	0.47	181	15745	107	9681	203	19893	19.90	1381	15.0	8.5	86.0	0.45	20.0	1635	12.0	981	22.7	1783	0.38	31.8	
Minimum			8.32		8.35	0.00	0.00	0.00	0.00		0.00	0.00	50	3728	35	0	48	3815	5.04	401	4.3	3.3	8.8	0.05	2.6	0	3.3	275	0.4	33	0.02	1.7	
# of Data		31	31	31	31	31	31	31	31		31	31	22	22	24	24	26	26	28	28	17	21	21	21	22	22	26	26	26	26	26	26	
# of Data<MDL																					8	19			18		25				0		
Wk1: 12/2-12/08/2001			10.13		11.36								116	10012	85	4789	122	10482	10.42	867					10.2	994	6.8	654	1.8	169	0.15	14.1	
Wk2: 12/09-12/15/2001			10.27		10.40								162	13703	85	7333	164	14336	11.12	962					8.3	704	6.1	538	1.9	169	0.06	6.9	
Wk3: 12/16-12/22/2001			9.99		11.02								119	10059	75	6331	99	8362	8.57	722					4.5	408	4.0	359	1.5	133	0.09	7.9	
Wk4: 12/23-12/29/2001			10.12		11.18								127	10933	82	6999	105	8986	8.62	740					4.4	415	4.0	365	1.7	150	0.11	10.2	

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2002

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data					Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																									
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Tue	0.00	8.55	11.5	8.50	0.000	0.000	0.000	0.000	0.000	0.000	0.00	63	4492	46	3280	95	8774	9.91	707	7.8	< 4.3	11.9	0.07	< 5.0	357	< 4.3	307	4.2	299	0.03	2.1		
2	Wed	0.00	8.92	13.0	8.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	105	7811	53	3943	149	11085	10.40	774	7.8	< 4.0	10.8	0.03	< 4.6	342	< 4.0	298	3.6	268	0.01	0.7		
3	Thu	0.00	8.69	13.0	8.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	129	9349	89	6450	106	7682	13.30	964	7.4	< 4.2	9.2	0.09	< 4.1	297	< 4.2	304	11.8	855	0.03	2.2		
4	Fri	0.00	8.59	13.0	8.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			58	4155	153	10961	11.20	802		< 4.8	8.8	0.24			< 4.6	330	1.8	129	0.04	2.9		
5	Sat	0.00	8.61	12.0	8.08	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
6	Sun	0.00	9.03	14.5	8.54	0.000	0.000	0.000	0.000	0.000	0.000	0.00	151	11372	50	3766	193	14535	11.03	831					< 8.0	452	< 4.3	324	2.2	166	0.23	17.3		
7	Mon	0.00	8.55	12.0	8.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00	144	10268	49	3494	176	12550	10.17	725	12.0	< 4.6	13.0	0.20	< 5.4	385	< 4.6	328	2.6	185	0.06	4.3		
8	Tue	0.00	8.56	12.0	8.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	129	9199	88	6275	100	7131	9.83	701	11.1	3.8	9.4	0.24	6.3	449	< 4.0	285	2.5	185	0.08	6.4		
9	Wed	0.00	8.70	12.0	8.36	0.000	0.000	0.000	0.000	0.000	0.000	0.00	39	2830	25	1814	41	2975	5.04	366	9.7	< 4.0	9.8	0.10	5.8	421	< 4.0	290	2.6	189	0.13	9.4		
10	Thu	0.00	8.33	12.0	8.02	0.000	0.000	0.000	0.000	0.000	0.000	0.00	73	5071	26	1806	80	5558	4.65	323	11.0	< 4.2	9.4	0.03	5.5	382	< 4.2	292	3.0	208	0.03	2.1		
11	Fri	0.00	8.29	12.0	8.18	0.000	0.000	0.000	0.000	0.000	0.000	0.00			53	3664	84	4425	8.23	569		4.8	8.2	0.11			< 4.8	318	2.0	136	0.31	21.4		
12	Sat	0.00	8.16	12.0	7.63	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
13	Sun	0.00	7.86	12.0	7.72	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	5724	85	4326	44	2928	7.73	514					4.6	306	< 4.0	266	3.0	200	0.03	2.0		
14	Mon	0.05	7.99	14.0	7.50	0.000	0.000	0.000	0.000	0.000	0.000	0.00	102	6797	60	3998	79	5264	9.41	627	11.0	< 4.6	12.4	0.06	6.0	400	< 4.6	307	3.0	200	0.02	1.3		
15	Tue	0.00	7.98	12.0	7.31	0.000	0.000	0.000	0.000	0.000	0.000	0.00	86	5857	55	3660	82	5457	7.39	492	11.0	< 4.0	10.0	0.03	5.5	366	< 4.0	286	2.2	148	0.01	0.7		
16	Wed	0.00	8.56	14.0	8.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00	152	10851	96	6853	126	9138	8.04	431	10.8	< 4.0	10.4	0.03	5.5	393	< 4.0	286	3.6	257	0.02	1.4		
17	Thu	0.00	8.36	13.0	7.68	0.000	0.000	0.000	0.000	0.000	0.000	0.00	183	12759	107	7460	109	7600	5.60	390	9.7	< 4.2	12.7	0.04	< 5.0	349	< 4.2	293	3.8	265	0.04	2.8		
18	Fri	0.00	8.13	12.5	8.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			90	6102	90	8102	7.34	496		< 5.0	11.4	0.06			< 5.0	339	3.5	237	0.02	1.4		
19	Sat	0.00	7.79	12.0	7.44	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
20	Sun	0.00	7.64	11.5	6.90	0.000	0.000	0.000	0.000	0.000	0.000	0.00	49	3122	38	2294	43	2740	4.20	268					< 5.4	344	< 4.6	293	1.6	102	0.04	2.5		
21	Mon	0.09	7.98	13.0	7.92	0.000	0.000	0.000	0.000	0.000	0.000	0.00	91	6056	61	4060	65	5657	8.68	578	6.9	< 4.6	9.4	0.12	< 5.4	359	< 4.8	306	2.9	193	< 0.03	< 2.0		
22	Tue	0.02	7.75	12.0	7.38	0.000	0.000	0.000	0.000	0.000	0.000	0.00	159	10277	89	5753	94	6076	11.98	774	9.4	< 4.3	9.2	0.13	< 5.0	323	< 4.3	278	2.2	142	0.04	2.8		
23	Wed	0.03	7.56	12.0	7.28	0.000	0.000	0.000	0.000	0.000	0.000	0.00	174	10956	106	6675	126	7934	10.20	642	8.5	< 4.8	8.2	0.04	< 5.4	340	< 4.8	290	1.8	113	0.02	1.3		
24	Thu	0.00	7.79	12.0	7.26	0.000	0.000	0.000	0.000	0.000	0.000	0.00	156	10135	104	6757	118	7666	10.00	650	10.4	< 4.0	10.8	0.15	< 4.6	299	< 4.0	260	2.0	130	0.26	16.9		
25	Fri	0.00	7.61	12.0	7.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			73	4755	100	6514	8.93	582		< 4.8	14.8	0.07			< 4.8	300	2.2	143	0.06	3.9		
26	Sat	0.00	7.52	12.0	7.31	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
27	Sun	0.00	7.57	12.0	7.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00	99	6250	63	3977	106	6692	8.54	539					4.7	297	< 4.0	253	2.4	152	0.04	2.5		
28	Mon	0.00	7.43	13.0	6.92	0.000	0.000	0.000	0.000	0.000	0.000	0.00	86	5453	75	4647	104	6444	8.34	517	11.0	< 4.0	13.2	0.03	< 4.7	291	< 4.0	248	2.6	161	0.04	2.5		
29	Tue	0.08	7.92	20.0	7.99	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	5813	41	2708	122	8058	8.40	555	9.4	< 4.0	12.6	0.06	4.4	291	< 4.0	264	2.4	159	0.20	13.2		
30	Wed	0.33	10.77	26.5	11.15	0.000	0.000	0.000	0.000	0.000	0.000	0.00	89	7994	88	8108	184	16527	5.38	483	8.7	< 4.8	11.6	0.26	< 5.5	494	< 4.8	413	3.2	287	1.01	90.7		
31	Thu	0.61	10.85	18.0	12.65	0.000	0.000	0.000	0.000	0.000	0.000	0.00	76	6877	42	3801	94	8506	5.94	535	12.0	4.8	12.8	0.16	6.3	570	< 4.6	418	2.8	253	0.06	5.4		
Total		1.21	258.24		251.71	0.00	0.00	0.00	0.00		0.00	0.00																						
Mean			8.33		8.12	0.00	0.00	0.00	0.00		0.00	0.00	109	7622	65	4540	106	7518	8.44	587	9.9	4.3	10.7	0.10	5.2	370	4.3	302	3.0	213	0.11	8.2		
Maximum		0.61	10.85	26.5	12.65	0.00	0.00	0.00	0.00		0.00	0.00	183	12759	107	7460	193	16527	13.30	964	12.0	5.0	14.5	0.26	8.3	570	5.0	416	11.8	855	1.01	90.7		
Minimum			7.43		6.90	0.00	0.00	0.00	0.00		0.00	0.00	39	2830	25	1806	41	2740	4.20	268	7.4	3.8	8.2	0.03	4.1	291	4.0	248	1.8	102	0.01	0.7		
# of Data		25	31	31	31	31	31	31	31		31	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27		
# of Data<MDL																					0	21			13		27				0			
Wk1: 01/01-01/05/00			8.66		8.37								116	8604	60	4326	128	9306	10.10	731					5.5	387	4.3	301	3.9	278	0.10	8.8		
Wk2: 01/06-01/12/00			8.18		7.82								100	6860	59	4051	80	5482	7.24	493					5.4	350	4.2	276	2.8	183	0.07	4.7		
Wk3: 01/13-01/19/00			7.89		7.56								131	8634	82	5391	91	6018	8.00	525					5.2	325	4.6	289	2.6	170	0.03	2.0		
Wk4: 01/20-01/26/00			8.03		7.71								127	8613	80	5420	92	6219	7.31	490					5.3	334	4.5	288	2.9	192	0.03	2.0		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2002

						CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Fri	0.15	9.76	15.0	12.50	0.000		0.000		0.000		0.00			50	4070	83	6758	5.32	433		< 4.0	11.4	0.10			< 4.0	326	2.0	163	0.03	2.4		
2	Sat	0.00	8.49	13.0	9.72	0.000		0.000		0.000		0.00																					
3	Sun	0.00	8.73	13.0	10.23	0.000		0.000		0.000		0.00	49	3568	43	3131	34	2475	3.73	272					5.0	364	< 4.3	313	1.0	73	0.10	7.3		
4	Mon	0.00	8.36	12.0	9.40	0.000		0.000		0.000		0.00	74	5159	54	3765	81	5648	9.40	655	7.1	< 4.0	12.6	0.15	4.6	321	< 4.0	279	3.0	209	0.02	1.4		
5	Tue	0.00	8.36	12.0	9.25	0.000		0.000		0.000		0.00	86	5989	51	3552		0	7.56	526	11.0	< 4.3	11.0	0.04	5.4	376	< 4.3	299	4.0	279	0.03	2.1		
6	Wed	0.00	8.76	13.0	9.64	0.000		0.000		0.000		0.00	135	9863	95	6941	137	10009	13.40	979	7.9	< 4.0	11.4	0.15	4.6	336	< 4.0	292	2.2	161	0.13	9.5		
7	Thu	0.00	8.74	13.0	10.00	0.000		0.000		0.000		0.00	94	6852	52	3790	101	7362	11.20	818	6.6	< 4.0	10.8	0.13	4.6	335	< 4.0	292	2.4	175	0.05	3.6		
8	Fri	0.00	8.51	13.5	9.90	0.000		0.000		0.000		0.00			56	4021	103	7396	9.41	676		< 3.7	9.4	0.09			< 3.7	266	2.2	158	0.04	2.9		
9	Sat	0.00	9.10	15.5	10.33	0.000		0.000		0.000		0.00																					
10	Sun	0.02	8.69	13.5	10.12	0.000		0.000		0.000		0.00	155	11492	63	4671	234	17349	7.16	531					4.7	348	< 3.7	274	3.4	252	0.05	3.7		
11	Mon	0.00	8.76	13.0	10.61	0.000		0.000		0.000		0.00	144	10520	81	5916	150	10959	9.52	696	8.6	< 3.5	12.4	0.24	4.0	292	< 3.5	256	2.0	146	0.09	6.6		
12	Tue	0.00	8.64	13.0	10.98	0.000		0.000		0.000		0.00	130	9584	58	4129	156	11501	8.32	613	8.3	4.4	17.0	0.11	4.0	295	< 3.5	258	4.0	295	0.03	2.2		
13	Wed	0.00	8.86	12.5	11.13	0.000		0.000		0.000		0.00	222	16404	92	6798	252	18621	11.00	813	8.5	< 3.7	11.0	0.17	4.0	296	< 3.5	259	1.0	74	0.08	5.9		
14	Thu	0.00	8.91	13.0	10.17	0.000		0.000		0.000		0.00	136	10106	48	3567	235	17463	8.12	603	8.9	< 3.7	11.6	0.14	4.3	320	< 3.7	275	1.8	134	0.07	5.2		
15	Fri	0.00	8.80	12.5	10.04	0.000		0.000		0.000		0.00			49	3596	105	7706	10.30	756		< 3.5	10.0	0.15			< 3.5	257	1.7	125	0.04	2.9		
16	Sat	0.00	8.72	12.5	9.80	0.000		0.000		0.000		0.00																					
17	Sun	0.00	8.36	12.0	8.89	0.000		0.000		0.000		0.00	114	7939	67	4666	147	10237	7.22	503					3.7	258	< 3.3	230	2.3	160	0.04	2.8		
18	Mon	0.00	8.61	12.0	9.16	0.000		0.000		0.000		0.00	67	6247	36	2585	132	9479	6.06	435	6.6	6.2	9.2	0.07	4.0	287	< 3.5	251	2.5	180	0.06	4.3		
19	Tue	0.50	12.46	23.0	15.00	0.000		0.000		0.000		0.00	98	9872	66	6856	177	18393	5.66	588	9.4	< 3.6	10.8	0.26	4.0	416	< 3.5	364	2.4	249	0.16	18.7		
20	Wed	0.20	10.64	22.0	13.35	0.000		0.000		0.000		0.00	84	7454	45	3993	130	11536	5.15	457	8.4	< 3.5	10.5	0.04	4.0	356	< 3.5	311	1.9	169	0.03	2.7		
21	Thu	0.02	9.10	13.0	9.82	0.000		0.000		0.000		0.00	123	9335	48	3643	177	13433	8.40	638	6.6	< 3.5	9.8	0.05	4.0	304	< 3.5	266	2.1	159	0.04	3.0		
22	Fri	0.00	8.94	13.0	10.12	0.000		0.000		0.000		0.00			75	5592	194	14465	8.12	605		< 4.8	10.0	0.15			< 4.6	343	2.6	194	0.07	5.2		
23	Sat	0.00	8.72	13.0	9.98	0.000		0.000		0.000		0.00																					
24	Sun	0.00	8.77	13.0	9.90	0.000		0.000		0.000		0.00	57	4169	36	2779	67	4901	3.41	249					5.0	366	< 3.5	256	2.1	154	0.06	4.4		
25	Mon	0.04	9.40	15.0	11.54	0.000		0.000		0.000		0.00	89	6977	39	3057	97	7604	7.34	575	20.0	4.4	12.0	0.10	4.3	337	< 3.7	290	5.0	392	0.04	3.1		
26	Tue	0.14	10.07	17.0	10.93	0.000		0.000		0.000		0.00	83	6971	36	3023	155	13017	6.47	543	8.2	< 3.7	30.8	1.06	4.6	386	< 4.0	336	1.0	84	0.07	5.9		
27	Wed	0.00	8.94	14.0	9.85	0.000		0.000		0.000		0.00	94	7009	36	2684	127	9469	5.42	404	13.0	3.6	23.0	0.53	4.3	321	< 3.7	278	2.0	149	0.43	32.1		
28	Thu	0.00	8.63	14.0	9.09	0.000		0.000		0.000		0.00	70	5038	25	1799	117	8421	4.08	294	7.6	< 3.7	16.0	0.08	4.3	309	< 3.7	266	5.0	360	0.05	3.6		
Total		1.07	253.31		291.45	0.00	0.00	0.00	0.00		0.00	0.00																					
Mean			9.05		10.41			0.00				0.00	106	8027	54	4110	139	10175	7.57	569	9.4	4.0	13.0	0.19	4.4	331	3.8	285	2.5	187	0.06	5.9		
Maximum		0.50	12.46	23.0	15.00	0.00	0.00	0.00	0.00		0.00	0.00	222	16404	95	6941	252	18621	13.40	979	20.0	6.2	30.8	1.06	5.4	416	4.6	364	5.0	392	0.43	32.1		
Minimum			8.36		8.89	0.00	0.00	0.00	0.00		0.00	0.00	49	3568	25	1799	34	0	3.41	249	6.6	3.5	9.2	0.04	3.7	258	3.3	230	1.0	73	0.02	1.4		
# of Data		28	28	28	28	28	0	28	0		0	28	20	20	24	24	23	23	24	24	18	20	20	20	20	20	24	24	24	24	24	24		
# of Data<MDL																					0	16			16		24				0			
Wk1: 02/03-02/09/00			8.66		9.82								86	6286	59	4200	91	7604	9.12	654					4.8	391	4.1	329	2.5	159	0.06	5.1		
Wk2: 02/10-02/16/00			8.63		10.41								157	11621	65	4780	189	13933	9.07	569					4.2	371	3.8	312	2.3	203	0.06	5.3		
Wk3: 02/17-02/23/00			9.55		10.90								101	8169	56	4556	160	12924	6.77	538					3.9	371	3.7	336	2.3	211	0.07	7.1		
Wk4: 02/24-02/29/00			9.55		10.88								101	8169	56	4556	160	12924	6.77	538					3.9	371	3.7	336	2.3	211	0.07	7.1		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AML <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Sat	0.01	8.90	15.0	8.80						0.000	0.00																					
2	Sun	0.02	8.99	14.0	8.88						0.000	0.00	72	5398	41	3074	99	7423	6.72	504					3.6	270	< 3.3	247	1.6	120	0.05	3.7		
3	Mon	0.05	9.30	16.3	9.46						0.000	0.00	74	5740	48	3723	109	8454	7.28	565	< 5.5	< 4.6	11.4	0.02	< 5.5	427	< 4.6	357	2.6	202	0.04	3.1		
4	Tue	0.00	10.02	15.8	10.45						0.000	0.00	118	9861	71	5933	145	12117	6.83	571	7.0	< 3.5	10.0	0.02	4.0	334	< 4.0	334	2.7	226	< 0.02	1.7		
5	Wed	0.00	9.50	14.5	10.21						0.000	0.00	115	9111	52	4120	156	12360	6.55	519	7.2	< 3.3	13.2	0.02	3.9	309	< 3.3	261	6.2	491	< 0.02	1.6		
6	Thu	0.00	9.32	14.8	9.99						0.000	0.00	123	9561	83	6451	136	10571	9.13	710	8.0	< 3.5	10.2	0.03	4.3	334	< 3.5	272	2.0	155	< 0.02	1.6		
7	Fri	0.00	9.26	14.0	10.61						0.000	0.00			76	5869	112	8650	9.52	735		4.2	11.6	0.04			< 4.6	355	3.1	239	< 0.02	1.5		
8	Sat	0.07	8.80	14.0	9.94						0.000	0.00																					
9	Sun	0.09	9.74	15.8	10.90						0.000	0.00	81	6580	64	5199	96	7798	6.55	532					5.4	439	2.8	227	2.8	227	0.04	3.2		
10	Mon	0.15	11.04	19.2	12.49						0.000	0.00	96	8839	84	7734	164	15100	7.22	665	6.2	< 3.3	10.2	0.05	< 3.7	341	< 3.3	304	2.4	221	0.07	6.4		
11	Tue	0.00	9.73	15.0	10.64						0.000	0.00	88	7141	75	6086	81	6573	5.60	454	7.3	< 3.5	9.2	0.05	< 4.0	325	< 3.5	284	2.4	195	0.07	5.7		
12	Wed	0.00	9.21	14.3	9.63						0.000	0.00	103	7912	96	7374	88	6759	7.62	585	6.0	< 3.5	10.8	0.06	< 4.0	307	< 3.5	269	2.1	161	0.06	4.6		
13	Thu	snow	9.48	40.0	8.97						0.000	0.00	153	12097	117	9250	337	26644	8.34	659	6.3	< 3.3	10.6	0.03	< 3.7	293	< 3.3	261	4.2	332	0.02	1.6		
14	Fri	0.00	9.06	15.0	9.19						0.000	0.00			44	3325	85	6423	6.78	512		< 3.5	11.0	0.06			< 3.5	264	2.8	212	0.03	2.3		
15	Sat	0.00	8.87	15.0	8.90						0.000	0.00																					
16	Sun	0.00	8.49	13.5	8.46						0.000	0.00	64	4532	48	3399	63	4461	5.88	416					< 3.7	262	< 3.3	234	1.8	127	0.06	4.2		
17	Mon	snow	9.01	15.0	9.83						0.000	0.00	84	6312	73	5485	68	5110	7.73	581	3.7	< 3.3	11.0	0.06	< 3.7	278	< 3.3	248	2.8	210	0.03	2.3		
18	Tue	snow	9.18	16.6	10.24	6.000	0.290				0.000	0.00	101	7733	84	6431	86	6584	8.68	665	10.0	3.4	20.2	0.04	3.9	299	< 3.5	268	3.4	260	0.03	2.3		
19	Wed	0.00	9.81	22.0	11.58						0.000	0.00	76	6218	54	4418	97	7936	6.72	550	8.7	3.3	16.4	0.05	4.0	327	< 3.2	262	2.6	213	0.05	4.1		
20	Thu	0.00	10.65	17.0	12.99						0.000	0.00	79	7017	60	5329	92	8172	6.10	542	8.0	3.3	9.4	0.04	3.7	329	< 3.5	311	3.2	284	0.04	3.6		
21	Fri	0.00	8.88	13.0	10.40						0.000	0.00			64	4740	72	5332	6.52	483		3.3	12.8	0.04			2.1	156	3.6	267	0.03	2.2		
22	Sat	0.00	8.74	15.1	9.84						0.000	0.00																					
23	Sun	0.00	8.72	12.1	9.96						0.000	0.00	88	6400	69	5018	63	4582	7.03	511					4.5	327	3.5	255	3.4	247	0.07	5.1		
24	Mon	0.00	8.55	12.9	11.34						0.000	0.00	98	6988	72	5134	86	6132	7.50	535	9.4	3.8	11.7	0.07	5.6	399	3.0	214	4.4	314	0.05	3.6		
25	Tue	snow	8.76	13.8	9.54						0.000	0.00	92	6721	67	4895	119	8694	7.17	524	8.4	2.8	5.2	0.02	3.9	285	< 3.5	256	4.0	292	0.02	1.5		
26	Wed	snow	8.84	11.8	10.72						0.000	0.00	68	5013	68	5013	81	5972	7.67	565	5.0	< 3.2	10.0	0.07	< 3.5	258	< 3.2	236	2.8	206	0.05	3.7		
27	Thu	0.00	9.44	12.9	9.67						0.000	0.00	90	7086	74	5826	77	6062	8.90	701	7.4	< 3.5	9.2	0.05	< 4.0	315	< 3.5	276	3.4	268	0.01	0.8		
28	Fri	0.00	8.61	12.3	8.74						0.000	0.00			66	4739	124	8904	8.57	615		< 3.3	10.4	0.05			< 3.3	237	3.6	259	0.03	2.2		
29	Sat	0.00	8.58	12.5	8.21						0.000	0.00																					
30	Sun	snow	9.09	16.0	9.01						0.000	0.00	76	5762	52	3942	97	7354	7.20	546					< 4.0	303	< 3.5	265	4.0	303	< 0.02	1.5		
31	Mon	0.00	9.14	16.8	9.22						0.000	0.000	93	7089	54	4116	114	8690	6.55	499	9.4	3.3	10.6	0.03	7.9	602	2.9	221	8.0	610	0.02	1.5		
Total		0.39	285.71		308.81	6.00	0.29	0.00	0.00		0.00	0.00																					
Mean			9.22		9.96	6.00	0.29				0.00	0.00	92	7232	68	5255	110	8571	7.32	567	7.3	3.5	11.2	0.04	4.3	335	3.4	264	3.3	255	0.04	2.9		
Maximum		0.15	11.04	40.0	12.99	6.00	0.29	0.00	0.00		0.00	0.00	153	12097	117	9250	337	26644	9.52	735	10.0	4.6	20.2	0.07	7.9	602	4.6	357	8.0	610	0.07	6.4		
Minimum			8.49		8.21	6	0.29	0	0		0	0	64	64	41	41	63	63	5.6	5.6	3.7	2.8	5.2	0.02	3.5	3.5	2.1	2.1	1.6	1.6	0.01	0.01		
# of Data		25	31	31	31	1	1	0	0	0	31	31	22	22	26	26	26	26	26	26	17	21	21	21	22	22	26	26	26	26	26	26		
# of Data<MDL																					1	13			11		21				5			
Wk1: 01/02-01/08/00			9.31		9.93								100	7934	62	4862	126	9929	7.67	601					4.3	348	3.9	323	3.0	255	0.03	2.3		
Wk2: 01/09-01/15/00			9.59		10.10								104	8514	80	6495	142	11543	7.02	568					4.2	366	3.3	284	2.8	236	0.05	4.3		
Wk3: 01/16-01/22/00			9.25		10.48								81	6362	64	4967	80	6266	6.94	539					3.8	337	3.2	279	2.9	259	0.04	3.5		
Wk4: 01/23-01/29/00			8.79		9.74								87	6442	69	5104	92	6724	7.81	575					4.3	370	3.3	277	3.6	301	0.04	3.3		

Total Est. Bypass Flow (MG): 0.29 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data								Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)	Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)		CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																										
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10	1.5		Report Only <MDL	Report Only		7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Tue	0.00	9.84	17.0	10.32						0.000	0.00	189	15510	103	8453	1071	87892	8.46	694	9.6		3.3		12.8	0.01		4.4	361	<	3.7	304	3.2	263	0.03	2.5		
2	Wed	0.00	8.19	13.2	8.23						0.000	0.00	110	7514	65	4440	122	8333	8.29	566	12.0		5.3		18.2	0.03		5.1	348	<	4.0	273	8.0	546	0.01	0.7		
3	Thu	0.00	9.33	14.0	9.60						0.000	0.00	93	7237	56	4357	115	8948	7.39	575	8.2	<	4.0		14.8	0.02	<	4.6	358	<	4.0	311	3.6	280	0.03	2.3		
4	Fri	0.00	9.48	14.1	9.19						0.000	0.00			60	4744	68	5376	9.18	726			<	4.0	13.0	0.09				<	4.0	316	2.3	182	0.03	2.4		
5	Sat	0.00	8.62	13.0	9.00						0.000	0.00																										
6	Sun	0.00	8.18	12.0	8.29						0.000	0.00	74	5048	57	3889	65	4434	7.56	516								4.6	314	<	3.5	239	1.6	109	0.01	0.7		
7	Mon	0.00	9.07	14.0	9.35						0.000	0.00	60	4539	47	3555	63	4766	7.73	585	< 4.0	<	3.5		9.8	0.01	<	4.0	303	<	3.5	265	2.6	197	0.03	2.3		
8	Tue	0.00	9.19	13.8	9.52						0.000	0.00	74	5672	72	5518	77	5902	6.94	532	6.3		3.5		12.4	0.08	<	4.0	307	<	3.5	268	3.2	245	0.03	2.3		
9	Wed	0.00	10.22	16.5	11.28						0.000	0.00	118	10058	78	6648	141	12018	9.02	769	9.9		3.5		14.2	0.20		4.2	358	<	3.7	315	2.0	170	0.13	11.1		
10	Thu	0.00	9.14	13.4	10.19						0.000	0.00	70	5336	51	3888	72	5488	7.90	602	8.6	<	4.0		12.0	0.13	<	4.6	351	<	4.0	305	2.4	183	< 0.02	1.5		
11	Fri	0.00	8.93	13.5	9.86						0.000	0.00			51	3798	102	7597	6.88	512			<	3.5	12.8	0.08				<	3.5	261	1.0	74	0.05	3.7		
12	Sat	0.00	8.81	13.0	9.37						0.000	0.00																										
13	Sun	0.00	8.86	12.8	9.27						0.000	0.00	67	4951	48	3547	73	5394	7.22	534								4.6	340		2.1	155	3.7	273	0.04	3.0		
14	Mon	0.00	9.05	14.0	10.42						0.000	0.00	125	9435	59	4453	120	9057	7.56	571	10.5		3.8		16.4	0.22		5.6	423		2.7	204	3.8	287	0.17	12.8		
15	Tue	0.00	9.12	14.0	10.78						0.000	0.00	81	6161	53	4031	83	6313	6.95	529	8.4		2.9		14.2	0.09		2.6	198	<	4.0	304	3.6	274	0.05	3.8		
16	Wed	0.00	9.18	14.0	8.23						0.000	0.00	80	6125	56	4287	113	8651	7.14	547	7.6	<	3.7		11.6	<0.02	<	4.6	352	<	4.0	306	1.8	138	< 0.02	1.5		
17	Thu	0.00	8.87	13.5	9.28						0.000	0.00	74	5474	51	3773	83	6140	6.83	505	8.3	<	3.7		13.5	<0.02	<	4.6	340	<	4.0	296	3.0	222	< 0.02	1.5		
18	Fri	0.00	8.66	15.0	9.38						0.000	0.00			52	3756	96	6934	7.34	530			<	3.7	12.6	<0.02				<	4.0	289	2.5	181	< 0.02	1.4		
19	Sat	0.00	10.01	15.9	10.48						0.000	0.00																										
20	Sun	0.00	9.45	16.2	9.96						0.000	0.00	84	6620	76	5990	74	5832	6.72	530							<	4.6	363	<	4.0	315	2.6	205	0.02	1.6		
21	Mon	0.00	10.91	25.3	12.07						0.000	0.00	99	9008	61	5550	189	17197	10.70	974	9.4	<	3.7		12.2	0.03	<	4.3	391	<	3.7	337	4.0	364	< 0.02	1.8		
22	Tue	0.00	10.15	16.0	12.03						0.000	0.00	114	9650	54	4571	130	11005	7.06	598	8.3	<	3.7		13.2	0.03	<	4.6	389	<	4.0	339	3.2	271	0.01	0.8		
23	Wed	0.00	9.96	15.3	11.55						0.000	0.00	153	12709	66	5482	230	19105	6.94	576	6.4	<	3.7		13.8	0.07	<	4.6	382	<	4.0	332	3.6	299	< 0.02	1.7		
24	Thu	0.40	13.77	40.0	14.75						0.000	0.00	164	18834	74	8498	507	58225	4.98	572	7.0		3.3		18.2	0.10	<	3.7	425	<	3.3	379	3.2	367	0.07	8.0		
25	Fri	0.00	10.26	16.0	11.96						0.000	0.00			51	4364	197	16857	6.55	560			<	3.5	16.8	0.08				<	3.5	299	2.4	205	0.04	3.4		
26	Sat	0.34	13.51	27.5	15.51						0.000	0.00																										
27	Sun	0.00	10.39	14.8	12.11						0.000	0.00	52	4506	44	3813	80	6932	5.38	466							<	4.6	399	<	4.0	347	2.8	243	0.11	9.5		
28	Mon	0.00	10.94	16.0	12.59						0.000	0.00	132	12044	56	5109	189	17244	6.33	578	8.4	<	3.7		10.0	0.17	<	4.3	392	<	3.7	338	2.0	182	0.07	6.4		
29	Tue	0.00	11.38	16.5	13.67						0.000	0.00	119	11294	49	4651	154	14616	7.22	685	7.0	<	3.5		13.2	0.07	<	4.0	380	<	3.5	332	2.7	256	0.04	3.8		
Total		0.74	283.47		308.24	0.00	0.00	0.00	0.00		0.00	0.00																										
Mean			9.77		10.63						0.00	0.00	102	8463	60	4847	169	14410	7.37	593	8.2		3.7		13.6	0.08		4.4	356		3.7	297	3.0	241	0.04	3.6		
Maximum		0.40	13.77	40.0	15.51	0.00	0.00	0.00	0.00		0.00	0.00	189	18834	103	8498	1071	87892	10.70	974	12.0		5.3		18.2	0.22		5.6	425		4.0	379	8.0	546	0.17	12.8		
Minimum			8.18		8.23	0.00	0.00	0.00	0.00		0.00	0.00	52	4506	44	3547	63	4434	4.98	466	4.0		2.9		9.8	0.01		2.6	198		2.1	155	1.0	74	0.01	0.7		
# of Data		29	29	29	29	0	0	0	0	0	29	29	21	21	25	25	25	25	25	25	17		21		21	18		21	21		25	25	25	25	25	25		
# of Data<MDL																					1		14					14			23				6			
Wk1: 01/30-02/05/00			9.10		9.22								112	8622	65	5009	265	21099	7.85	601								52.0	401		3.7	284	4.9	367	0.02	1.8		
Wk2: 02/06-02/12/00			9.08		9.69								79	6130	59	4549	87	6701	7.67	568								43.0	347		3.6	295	2.1	174	0.05	3.9		
Wk3: 02/13-02/19/00			9.11		9.69								85	6429	53	3975	95	7076	7.17	539								44.0	350		3.5	276	3.1	249	0.05	4.5		
Wk4: 02/20-02/26/00			11.14		12.55								123	11364	64	5743	221	21370	7.16	575								44.0	435		3.8	374	3.2	320	0.03	3.2		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MARCH 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data								Final Effluent Data											
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100		Effluent E. coli (col/100 mLs)	
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																												
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10		1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL		888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML				
1	Wed	0.04	10.51	19.3	12.20					54.000	0.000	0.00	109	9554	56	4909	145	12710	6.04	529	9.1		3.2		13.2		0.10		5.0	438	<	3.5	307	2.8	245	0.06	5.3				
2	Thu	0.01	10.05	15.0	11.28					54.000	0.000	0.00	85	7124	58	4861	103	8633	6.41	537	9.0		3.5		14.8		0.09		3.8	319	<	4.0	335	3.6	302	0.04	3.4				
3	Fri	0.00	10.78	15.5	12.62						0.000	0.00			60	5394	150	13486	6.75	607		<	4.0		10.4		0.06				<	4.0	360	1.4	126	0.03	2.7				
4	Sat	0.00	10.98	16.0	12.73						0.000	0.00																												
5	Sun	0.00	10.65	15.2	12.49						0.000	0.00	104	9237	44	3908	187	16610	6.27	557							0.06		4.4	391	<	3.2	284	1.6	142	0.04	3.6				
6	Mon	0.00	10.75	16.8	12.57						0.000	0.00	89	7979	73	6545	150	13448	8.40	753	3.9		2.8		9.0			<	3.7	332	<	3.3	296	0.6	54	0.04	3.6				
7	Tue	0.00	10.83	16.2	12.72						0.000	0.00	116	10477	62	5600	124	11200	7.44	672	7.3	<	3.5		11.4		0.07	<	4.0	361	<	3.5	316	1.0	90	0.05	4.5				
8	Wed	0.00	10.58	15.2	12.27						0.000	0.00	96	8471	52	4588	132	11647	6.94	612	8.7		3.4		12.0		0.09		3.9	344	<	4.0	353	2.8	247	0.06	5.3				
9	Thu	0.00	10.12	20.8	11.41					6.000	0.000	0.00	84	7090	55	4642	87	7343	8.06	680	9.7		2.6		11.6		0.09		3.4	287	<	3.7	312	2.8	236	0.05	4.2				
10	Fri	0.00	10.36	18.2	11.76						0.000	0.00			50	4320	128	11060	8.54	738		<	3.7		12.4		0.08				<	3.7	320	2.2	190	0.05	4.3				
11	Sat	0.00	9.73	15.0	11.20						0.000	0.00																												
12	Sun	0.00	9.98	14.9	11.40						0.000	0.00	76	6326	47	3912	72	5993	6.55	545									3.8	316	<	3.5	291	2.8	233	0.06	5.0				
13	Mon	0.00	9.91	15.8	11.74						0.000	0.00	68	5620	44	3637	100	8265	7.73	639	8.1	<	4.0		6.6		0.04	<	4.6	380	<	4.0	331	1.0	83	0.08	6.6				
14	Tue	0.15	10.24	18.9	11.65						0.000	0.00	105	8967	56	4782	151	12896	8.12	693	7.4		3.2		10.8		0.08	<	4.2	359	<	3.7	316	1.4	120	<	0.02	1.7				
15	Wed	0.03	10.65	17.0	12.29						0.000	0.00	119	10570	57	5063	141	12524	9.24	821	8.7	<	3.8		11.4		0.34	<	4.3	382	<	3.8	338	1.0	89	0.15	13.3				
16	Thu	0.00	9.88	15.2	11.29						0.000	0.00	112	9229	66	5438	123	10135	10.30	849	9.8	<	4.0		11.4		0.32		5.1	420	<	4.0	330	4.8	396	0.16	13.2				
17	Fri	0.08	9.71	15.8	11.14						0.000	0.00			64	5183			7.98	646		<	4.0		13.0		0.31				<	4.0	324			0.14	11.3				
18	Sat	0.00	9.55	15.2	10.85						0.000	0.00																												
19	Sun	0.38	11.33	29.8	12.68			18.000	0.630		0.000	0.00	168	15875	59	5575	320	30238	6.48	612									6.6	624	<	3.5	331	6.4	605	0.05	4.7				
20	Mon	0.19	11.63	20.7	13.84					6.000	0.000	0.00	104	10087	50	4850	153	14840	6.72	652	9.2		2.6		12.6		0.10		3.3	320	<	3.5	339	3.8	369	0.06	5.8				
21	Tue	0.00	9.93	15.9	10.97						0.000	0.00	97	8033	52	4306	123	10186	9.41	779	6.9	<	3.7		13.2		0.11	<	4.3	356	<	3.7	306	5.6	464	0.05	4.1				
22	Wed	0.00	9.50	15.0	10.67						0.000	0.00	95	7527	52	4120	115	9111	8.23	652	7.4	<	3.7		11.4		0.10	<	4.3	341	<	3.7	293	5.2	412	0.04	3.2				
23	Thu	0.00	9.63	16.0	10.60						0.000	0.00	80	6425	50	4016	102	8192	7.00	562	7.8	<	3.7		11.4		0.06		4.7	377	<	3.7	297	5.6	450	0.04	3.2				
24	Fri	0.04	10.06	19.2	10.99						0.000	0.00			41	3440	91	7635	7.16	601			3.1		12.6		0.06				<	3.7	310	4.1	344	0.03	2.5				
25	Sat	0.00	9.81	15.2	10.19						0.000	0.00																												
26	Sun	0.12	10.13	24.0	10.26						0.000	0.00	91	7688	45	3802	120	10138	6.31	533									5.6	473	<	3.7	313	6.2	524	0.04	3.4				
27	Mon	0.12	10.24	22.1	11.19						0.000	0.00	138	11785	57	4868	174	14860	7.37	629	10.6		3.3		9.2		0.07		4.4	376	<	3.7	316	4.0	342	0.03	2.6				
28	Tue	0.05	10.55	21.5	11.26						0.000	0.00	135	11878	63	5543	149	13110	8.28	729	7.8	<	3.7		12.1		0.06	<	4.3	378	<	3.7	326	3.8	334	0.03	2.6				
29	Wed	0.00	9.50	11.8	9.46						0.000	0.00	99	7844	60	4754	179	14182	10.10	800	4.6	<	3.5		12.0		0.06	<	4.0	317	<	3.5	277	3.0	238	0.04	3.2				
30	Thu	0.00	9.57	15.0	9.45						0.000	0.00	84	6704	43	3432	83	6625	7.62	608	6.9	<	3.5		11.2		0.06	<	4.0	319	<	3.5	279	2.8	223	0.04	3.2				
31	Fri	0.00	9.66	15.5	9.41						0.000	0.00			52	4189	75	6042	6.64	535		<	3.5		9.0		0.06				<	3.5	282	3.4	274	0.03	2.4				
Total		1.21	316.80		354.58	0.00	0.00	18.00	0.63	120.00	0.00	0.00																												
Mean			10.22		11.44			18.00	0.63	30.00	0.00	0.00	102	8841	54	4655	134	11581	7.63	651	7.9		3.5		11.4		0.11		4.4	373		3.7	314	3.2	274	0.06	4.8				
Maximum		0.38	11.63	29.8	13.84	0.00	0.00	18.00	0.63	54.00	0.00	0.00	168	15875	73	6545	320	30238	10.30	849	10.6		4.0		14.8		0.34		6.6	624		4.0	360	6.4	605	0.16	13.3				
Minimum			9.50		9.41	0.00	0.00	18.00	0.63	6.00	0.00	0.00	68	5620	41	3432	72	5993	6.04	529	3.9		2.6		6.6		0.04		3.3	287		3.2	277	0.6	54	0.02	1.7				
# of Data		31	31	31	31	0	0	1	1	4	31	31	22	22	27	27	26	26	27	27	18		23		23		23		22	22		27	27	26	26	27	27				
# of Data<MDL																					0		14						10			27				1					
Wk1: 02/27-03/04/00			10.72		12.46								99	8904	54	4789	137	12270	6.36	567									4.3	448		3.8	391	2.6	262	0.06	6.0				
Wk2: 03/05-03/11/00			10.43		12.06								98	8651	56	5139	135	11885	7.61	669									3.9	399		3.6	362	1.8	184	0.05	4.9				
Wk3: 03/12-03/18/00			9.99		11.48								96	8142	56	4669	117	9962	8.32	699									4.4	428		3.8	370	2.2	211	0.10	9.8				
Wk4: 03/19-03/25/00			10.27		11.42								109	9589	51	4384	151	13367	7.50	643									4.6	454		3.6	351	5.1	494	0.05	4.4				
Wk5: 03/26-04/01/00			9.87		10.00								109	7650	53	3798	130	9280	7.72	548									4.5	321		3.6	262	3.9	282	0.04	2.5				

Total Est. Bypass Flow (MG): 0.63 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR APRIL 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data								Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)		TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																										
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10		1.5		Report Only <MDL		Report Only		5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	9.45	15.0	8.96						0.000	0.00		0		0		0		0									0			0		0		0.0		
2	Sun	0.05	9.09	13.8	8.90						0.000	0.00	83	6292	56	4245	131	9931	5.77	437									< 3.5	265	< 3.2	243	5.0	379	0.01	0.8		
3	Mon	0.00	9.93	16.5	9.72						0.000	0.00	78	6460	64	5300	109	9027	6.16	510	7.9	< 3.5	12.2	0.02					< 4.0	331	< 3.5	290	4.2	348	0.05	4.1	35	30
4	Tue	0.00	9.53	14.9	8.89						0.000	0.00	77	6120	53	4212	110	8743	9.71	772	7.8	2.7	12.8	0.05					< 3.7	294	< 3.3	262	4.2	334	0.05	4.0	60	9
5	Wed	0.00	9.78	14.9	8.84						0.000	0.00	91	7422	60	4894	101	8238	11.30	922	9.0	< 3.5	13.3	0.44					< 4.0	326	< 3.5	285	2.8	228	0.33	26.9	59	49
6	Thu	0.00	9.64	14.0	8.47						0.000	0.00	67	5387	48	3859	82	6593	7.39	594	8.9	< 3.7	12.0	0.09					< 4.3	346	< 3.7	297	4.6	370	0.06	4.8	52	37
7	Fri	0.87	13.30	38.0	14.11	54.000	1.880	92.000	0.310		0.000	0.00		0	70	7765	258	28618	5.38	597			3.6	13.4	0.10						0	< 3.7	410	5.8	643	0.06	6.7	26	25
8	Sat	0.12	11.44	27.0	13.61						0.000	0.00		0		0		0		0									0			0		0		0.0	10400	9700
9	Sun	0.00	9.33	12.7	9.81						0.000	0.00	83	6458	53	4124	129	10038	5.77	449					0.03	<	4.3	335	< 3.7	288	6.0	467	0.05	3.9		
10	Mon	0.16	10.24	19.0	11.03			96.000	0.330		0.000	0.00	68	5807	42	3587	134	11444	6.22	531	5.3	< 3.5	11.8	0.02					< 4.0	342	< 3.5	299	4.0	342	0.05	4.3	47	36
11	Tue	0.04	10.25	19.5	11.44						0.010	0.00	65	5557	40	3419	98	8378	6.89	589	7.5	< 3.7	14.4	0.04					< 4.3	368	< 3.7	316	4.4	376	0.04	3.4	25	15
12	Wed	0.00	9.47	27.9	9.60						0.010	0.00	78	6160	60	4739	146	11531	8.34	659	6.4	6.0	13.4	0.22					< 4.0	316	< 3.5	276	6.0	474	0.09	7.1	33	21
13	Thu	0.00	10.17	15.7	11.45						0.000	0.00	70	5937	44	3732	124	10517	9.52	807	5.9	3.5	10.0	0.08					< 4.0	339	< 3.5	297	3.4	288	0.02	1.7	64	42
14	Fri	0.00	10.02	14.8	10.67						0.000	0.00		0	49	4095	131	10947	6.83	571		< 3.7	11.4	0.18						0	< 3.7	309	1.8	150	0.09	7.5	42	30
15	Sat	0.00	9.82	15.0	9.70						0.000	0.00		0		0		0		0									0			0		0		0.0	12	7
16	Sun	1.13	12.22	38.3	12.53	66.000	1.100	90.000	0.630		2.470	0.00	124	12637	92	9376	94	9580	5.99	610									< 4.3	438	< 3.7	377	5.0	510	0.15	15.3		
17	Mon	0.03	11.36	33.4	13.04	12.000	0.070	60.000	0.080		0.000	0.00	94	8906	67	6348	270	25580	4.31	408	9.0	< 4.0	13.8	0.07					< 4.6	436	< 4.0	379	2.1	199	0.08	7.6	7	12
18	Tue	0.00	10.40	15.0	11.12						0.000	0.00	79	6852	48	4163	115	9975	7.50	651	9.2	3.2	16.8	0.04					< 4.2	364	< 3.6	312	3.0	260	0.04	3.5	1	6
19	Wed	0.40	13.61	33.0	14.67	114.000	0.710	48.000	0.220		0.760	0.00	114	12940	58	6583	262	29739	5.94	674	10.4	3.4	17.2	0.28					< 4.0	454	< 3.5	397	3.6	409	0.17	19.3	10	15
20	Thu	0.99	17.96	37.0	20.04	162.000	3.380	144.000	5.000		1.950	0.52	66	9886	41	6141	165	24715	2.74	410	9.2	< 3.7	15.8	0.11					< 4.3	644	< 3.7	554	2.6	389	0.04	6.0	10	10
21	Fri	0.54	16.39	35.5	18.86			96.000	0.330		0.000	1.56		0	34	4648	112	15310	2.30	314		< 3.5	22.3	0.05						0	< 3.5	478	4.5	615	0.02	2.7	1	1
22	Sat	0.00	12.73	18.0	15.28						0.000	0.59		0		0		0		0									0			0		0		0.0	6	10
23	Sun	0.15	14.10	31.0	15.96						0.000	0.23	49	5762	29	3410	106	12465	8.06	948									< 4.0	470	< 3.5	412	4.4	517	0.02	2.4		
24	Mon	0.00	13.18	18.0	14.72						0.000	0.08	53	5826	36	3957	91	10003	5.21	573	8.3	< 3.7	17.6	0.02	<	4.2	462	< 3.7	407	2.0	220	0.02	2.2	3	11
25	Tue	0.00	13.12	18.0	14.30						0.000	0.00	70	7659	38	4158	116	12693	5.71	625	9.5	< 3.7	18.0	0.09	<	4.2	460	< 3.7	405	7.0	766	0.11	12.0	44	25
26	Wed	0.00	12.99	17.5	13.96						0.000	0.00	63	6825	40	4333	134	14517	7.28	789	8.8	3.2	14.0	0.06	<	3.7	401	< 3.3	358	4.0	433	0.02	2.2	25	19
27	Thu	0.00	12.77	19.0	13.68						0.000	0.00	68	7242	41	4367	137	14591	5.38	573	11.0	< 4.0	14.0	0.21	<	4.6	490	< 4.0	426	5.0	533	0.16	17.0	25	21
28	Fri	0.00	12.34	16.9	13.18						0.000	0.00	47	4837	48	4940	84	8645	6.40	659	< 4.2	3.9	19.0	0.07		4.6	473	3.5	360	5.0	515	0.04	4.1	35	26
29	Sat	0.00	11.94	16.9	12.71						0.000	0.00		0		0		0		0									0			0		0		0.0	26	24
30	Sun	0.00	11.59	16.9	12.36						0.000	0.00	62	5993	40	3866	68	6573	5.94	574									3.3	319	2.8	271	4.4	425	0.09	8.7		
Total		4.48	348.16		371.61	408.00	7.14	626.00	6.90		5.20	2.98																										
Mean			11.61		12.39	81.60	1.43	89.43	0.99		0.17	0.10	75	5232	50	4009	132	10946	6.48	508	8.1	3.7	14.7	0.11	4.1		289	3.6	290	4.2	340	0.07	5.9	460.33	424.21
Maximum		1.13	17.96	38.3	20.04	162.00	3.38	144.00	5.00		2.47	1.56	124	12940	92	9376	270	29739	11.30	948	11.0	6.0	22.3	0.44	4.6		644	4.0	554	7.0	766	0.33		10400.00	9700.00		
Minimum			9.09		8.47	12.00	0.07	48.00	0.08		0.00	0.00	47	0	29	0	68	0	2.30	0	4.2	2.7	10.0	0.02	3.3		0	2.8	0	1.8	0	0.01	0.0	1.00	1.00		
# of Data		30	30	30	30	5	5	7	7		30	30	22	22	25	25	25	25	25	25	17	20	20	21	22		22	25	25	25	25	25	24	24		
# of Data<MDL																					1	12			20			23				3		0	0		
Wk1: 04/02-04/08/00			10.39		10.36								79	6336	59	5046	132	11858	7.62	6.39					3.9		291	3.5	287	4.4	373	0.09	7.4	110	70
Wk2: 04/09-04/15/00			9.90		10.53								73	5984	48	3949	127	10476	7.26	6.01					4.1		366	3.6	320	4.3	374	0.06	4.9	33	22
Wk3: 04/16-04/22/00			13.52		15.08								95	10244	57	6210	170	19150	4.80	5.11					4.3		509	3.7	459	3.5	435	0.08	9.8	4	7
Wk4: 04/23-04/29/00			12.92		14.07								58	6359	39	4194	111	12152	6.34	694					4.2		502	3.6	431	4.6	542	0.06	7.2	21	20

Total Est. Bypass Flow (MG): 19.21 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MAY 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Mon	0.32	13.75	37.0	14.85						0.000	0.00	122	13990	53	6078	251	28783	4.93	565	9.0	3.5	16.2	0.09	< 4.0	459	3.1	355	5.8	665	0.19	21.8	41	36
2	Tue	0.00	11.72	16.8	13.33						0.000	0.00	55	5376	32	3128	82	8015	5.60	547	8.0	3.5	15.8	0.07	< 4.0	391	< 3.5	342	3.8	371	0.03	2.9	170	190
3	Wed	0.00	12.16	17.6	14.25						0.002	0.00	66	6693	38	3854	161	16328	5.43	551	7.5	4.5	19.0	0.07	< 4.0	406	< 3.5	355	5.6	568	0.06	6.1	58	44
4	Thu	0.00	12.99	17.8	13.39						0.000	0.00	87	9425	46	4983	101	10942	10.40	1127	12.0	< 3.5	18.6	0.91	< 4.0	433	< 3.5	379	4.4	477	0.39	42.3	67	58
5	Fri	0.00	11.93	17.4	13.12						0.000	0.00		0	45	4477	105	10447	6.64	661		< 3.5	12.0	0.23		0	< 3.5	348	1.8	179	0.17	16.9	140	110
6	Sat	0.00	11.94	16.3	12.92						0.000	0.00		0		0		0		0						0		0		0		0.0	47	51
7	Sun	0.00	12.42	15.8	12.10						0.000	0.00	60	6215	39	4040	88	9115	5.99	620					< 4.3	445	< 3.7	383	4.4	456	0.09	9.3		
8	Mon	0.00	11.87	29.4	13.01	0.100	0.201	0.400	0.180	0.400	2.994	0.00	94	9306	45	4455	168	16631	7.59	751	6.0	< 3.5	19.4	0.05	< 4.0	396	< 3.5	346	5.6	554	0.03	3.0	39	44
9	Tue	1.09	18.99	40.0	20.33	2.100	2.361	1.700	0.453	1.700	0.489	0.14	142	22489	66	10453	374	59233	4.45	705	11.0	3.6	21.4	0.08	5.1	808	< 3.5	554	12.6	1996	0.07	11.1	67	51
10	Wed	0.00	12.09	18.6	13.05						0.047	0.37	56	5647	36	3630	74	7461	6.89	695	8.6	< 3.5	14.8	0.02	< 4.0	403	< 3.5	353	5.2	524	0.02	2.0	59	52
11	Thu	0.23	14.02	38.1	15.20	0.100	0.093	0.300	0.194	0.100	0.105	0.22	91	10640	52	6080	104	12160	7.62	891	9.7	< 3.5	13.2	0.41	< 4.0	468	< 3.5	409	5.5	643	0.18	21.0	57	42
12	Fri	0.00	12.79	28.0	13.28						0.000	0.16		0	38	4053	67	7147	5.94	634		< 3.5	9.0	0.11		0	< 3.5	373	3.3	352	0.08	8.5	370	180
13	Sat	0.00	11.57	16.2	12.17						0.000	0.05		0		0		0		0						0		0		0		0.0	120	45
14	Sun	0.00	11.23	16.0	11.54						0.000	0.00	64	5994	35	3278	62	5807	6.34	594					< 3.3	309	< 3.0	281	5.2	487	0.12	11.2		
15	Mon	0.00	11.52	19.5	11.41						0.000	0.00	78	7494	36	3459	116	11145	7.67	737	4.7	< 3.2	11.5	0.03	< 3.5	336	< 3.2	307	1.6	154	0.03	2.9	61	52
16	Tue	0.14	12.35	22.1	12.41						0.000	0.00	127	13081	54	5562	127	13081	8.06	830	8.2	< 3.3	13.0	0.18	< 3.7	381	< 3.3	340	4.6	474	0.11	11.3	62	54
17	Wed	0.00	11.65	17.0	12.70						0.000	0.00	89	8647	44	4275	98	9522	5.80	564	8.1	< 3.5	11.2	0.07	< 4.0	389	< 3.5	340	1.4	136	0.03	2.9	380	420
18	Thu	0.36	13.45	40.0	14.39	1.600	3.310	1.900	0.682	1.600	1.581	0.36	112	12563	49	5496	161	18060	5.66	635	7.2	< 3.3	11.8	0.13	< 3.9	437	< 3.3	370	3.6	404	0.07	7.9	62	51
19	Fri	0.02	12.00	21.7	12.57						0.000	1.37		0	31	3102	105	10508	5.88	588		< 3.3	12.0	0.06		0	< 3.3	330	1.6	160	0.04	4.0	610	110
20	Sat	0.00	11.33	16.0	11.40						0.000	1.02		0		0		0		0						0		0		0		0.0	56	64
21	Sun	0.00	11.18	16.3	11.19						0.000	0.85	85	7926	35	3263	86	8019	5.74	535					< 4.2	392	< 3.7	345	3.6	336	0.07	6.5		
22	Mon	0.14	12.09	22.9	12.54						0.000	0.71	71	7159	51	5142	120	12100	6.04	609	4.4	< 4.0	14.2	0.08	< 4.6	464	< 4.0	403	3.0	302	0.05	5.0	5	12
23	Tue	0.00	11.76	17.5	12.20						0.000	0.36	91	8925	34	3335	85	8337	5.60	549	7.6	< 3.3	16.0	0.10	< 3.7	363	< 3.3	324	2.0	196	0.07	6.9	10	24
24	Wed	0.00	11.80	17.0	11.71						0.000	0.13	85	8365	44	4330	92	9054	6.16	606	7.2	< 3.2	14.4	0.06	< 3.5	344	< 3.2	315	1.8	177	0.05	4.9	28	36
25	Thu	0.00	11.53	18.5	11.23						0.000	0.03	102	9808	38	3654	113	10866	7.53	724	7.6	< 3.3	12.4	0.18	< 3.7	356	< 3.3	317	3.2	308	0.09	8.7	11	26
26	Fri	0.05	11.32	16.2	11.02						0.000	0.00		0	46	4343	149	14067	8.68	819		< 3.1	10.0	0.13		0	< 3.1	293	3.6	340	0.04	3.8	47	30
27	Sat	0.45	12.29	40.0	12.00		0.301		0.859		1.200	0.00		0		0		0		0						0		0		0		0.0	41	37
28	Sun	0.53	13.39	38.5	14.49		0.604		1.287		0.000	1.04	176	19654	63	7035	271	30263	5.32	594					< 3.7	413	< 3.3	369	3.6	402	0.04	4.5		
29	Mon	0.00	10.71	17.0	10.66						0.000	0.40	56	5002	34	3037	64	5717	6.02	538	5.2	< 3.3	10.8	0.09	< 3.7	330	< 3.3	295	3.0	268	0.05	4.5	47	30
30	Tue	0.02	11.56	17.5	11.84						0.000	0.17	69	6652	43	4146	82	7906	9.56	922	6.3	< 3.5	10.0	0.03	< 3.5	337	< 3.2	309	3.4	328	0.02	1.9	24	37
31	Wed	0.77	14.55	29.9	15.54	1.900	1.202	3.000	0.814	1.500	1.615	0.86	98	11892	44	5339	169	20508	6.83	829	7.7	< 3.3	11.9	0.16	< 3.7	449	< 3.3		3.8	461	0.16	19.4	53	41
Total		4.12	383.95		401.84	5.80	8.07	7.30	4.47	5.00	8.03	8.24																					
Mean			12.39		12.96	1.16	1.15	1.46	0.64	1.00	0.26	0.27	90	7192	43	4001	129	12297	6.61	594	7.7	3.5	13.9	0.15	3.9	307	3.4	305	4.0	378	0.09	8.1	101.19	71.37
Maximum		1.09	18.99	40.0	20.33	2.10	3.31	3.00	1.29	2.00	2.99	1.37	176	22489	66	10453	374	59233	10.40	1127	12.0	4.5	21.4	0.91	5.1	808	4.0	554	12.6	1996	0.39	42.3	610.00	420.00
Minimum			10.71		10.66	0.10	0.09	0.30	0.18	0.00	0.00	0.00	55	0	31	0	62	0	4.45	0	4.4	3.1	9.0	0.02	3.3	0	3.0	0	1.4	0	0.02	0.0	5.00	12.00
# of Data		31	31	31	31	5	7	5	7	5	31	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27	27
# of Data<MDL																					0	21			21		26			1		0	0
Wk1: 04/30-05/06/00			12.06		13.23								68	6872	40	3958	103	10341	6.80	692					3.8	427	3.4	374	4.0	446	0.15	16.4	85	77
Wk2: 05/07-05/13/00			13.39		14.16								89	10859	46	5452	146	19918	6.41	716					4.3	535	3.5	426	6.1	803	0.08	9.7	85	58
Wk3: 05/14-05/20/00			11.93		12.35								94	9556	42	4195	112	10135	6.57	658					3.7	385	3.3	341	3.0	313	0.07	6.9	56	64
Wk4: 05/21-05/27/00			11.97		12.46								94	9556	42	4195	112	10135	6.57	658					3.7	385	3.3	341	3.0	313	0.07	6.9	50	47
Wk5: 05/28-06/03/00			12.40		13.37								96	7200	41	3788	128	12402	6.95	622					3.6	267	3.3	303	3.1	313	0.07	5.3	31	35

Total Est. Bypass Flow (MG): 21.13 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JUNE 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0
1	Thu	0.00	13.00	18.4	14.63							1.29
2	Fri	0.01	12.26	18.5	13.84							0.64
3	Sat	0.00	11.33	17.5	12.59							0.44
4	Sun	0.00	11.85	16.6	12.30							0.31
5	Mon	1.05	17.04	34.0	19.25	180.000	2.883	4.100	1.551	138.000	2.194	< 2.02
6	Tue	0.00	13.64	20.5	14.86							< 2.33
7	Wed	0.00	13.96	21.0	14.94							0.88
8	Thu	0.00	13.70	18.5	14.84							0.43
9	Fri	0.00	13.15	23.2	13.72							0.31
10	Sat	0.00	12.34	17.3	12.73							0.19
11	Sun	0.07	12.47	17.6	12.87							0.07
12	Mon	0.91	17.48	40.0	19.32					139.800	2.457	< 1.61
13	Tue	0.68	15.73	35.5	16.58	114.000	3.958	192.000	1.096	144.000	2.355	< 4.81
14	Wed	0.38	18.23	34.0	18.49	57.400	1.993	49.800	0.255	71.400	0.042	< 3.22
15	Thu	0.00	15.87	21.0	15.91							1.55
16	Fri	0.05	15.63	20.9	15.75							0.55
17	Sat	0.00	14.12	19.0	15.00							0.24
18	Sun	0.00	13.35	18.0	14.20							0.13
19	Mon	0.00	14.14	20.0	14.97							0.05
20	Tue	1.52	17.69	33.0	17.92	165.000	5.729	220.000	1.225	197.000	7.486	< 0.74
21	Wed	0.01	17.58	29.3	17.51	5.400	0.188	99.600	0.530	12.600	0.479	< 3.79
22	Thu	0.00	16.04	20.0	16.98							1.25
23	Fri	0.05	15.97	28.0	16.15							0.45
24	Sat	1.82	17.05	30.0	18.87	297.000	10.313	357.000	1.623	279.600	10.625	< 1.24
25	Sun	0.00	17.02	21.0	17.73			207.000	1.136	23.400	0.889	< 4.05
26	Mon	0.00	20.17	29.5	19.81			14.400	0.060			1.45
27	Tue	0.00	18.85	30.5	18.59							0.61
28	Wed	0.04	16.83	30.0	16.95							0.34
29	Thu	0.05	18.48	30.0	18.24	72.000	2.500					0.47
30	Fri	0.00	16.49	28.4	16.54							0.20
Total		6.64	461.46		482.08	890.80	27.56	1143.90	7.48		26.53	35.65
Mean			15.38		16.07	127.26	3.94	142.99	0.93		3.32	1.19
Maximum		1.82	20.17	40.0	19.81	297.00	10.31	357.00	1.62		10.63	4.81
Minimum			11.33		12.30	5.40	0.19	4.10	0.06		0.04	0.05
# of Data		30	30	30	30	7	7	8	8	8	8	30
# of Data<MDL												
Wk1: 06/04-06/10/00			13.67		14.66							
Wk2: 06/11-06/17/00			15.65		16.27							
Wk3: 06/18-06/24/00			15.97		16.66							
Wk4: 06/25-07/01/00			17.50		17.62							

Total Est. Bypass Flow (MG): 70.69 Total Bypass Occurances (days/month): 10

Date	Influent Data								Clarifier Effluent Data				Final Effluent Data									
	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AML	200 AML 400 AWL <MDL	125 AML <MDL
1	83	8999	30	3253	84	9107	6.55	710	7.3	< 3.2	12.2	0.13	< 3.5	379	< 3.2	347	1.8	195	0.05	5.4	27	38
2			31	3170	98	10020	7.44	761		< 3.3	14.8	0.07			< 3.3	337	3.0	307	0.04	4.1	20	20
3																					47	61
4	68	6720	32	3163	67	6622	7.17	709					< 4.3	425	< 3.7	366	4.0	395				
5	84	11938	33	4690	155	22028	3.75	533	5.4	< 3.7	12.4	0.04	< 4.3	611	< 3.7	526	2.2	313	< 0.02	2.8	150	300
6	56	6370	33	3754	80	9101	5.88	669	7.1	< 3.7	13.2	0.07	< 4.3	489	< 3.7	421	5.0	569	< 0.06	6.8	48	180
7	83	9663	30	3493	107	12458	5.48	638	7.7	< 3.5	11.6	0.03	< 4.3	501	< 3.5	407	5.0	582	0.03	3.5	32	240
8	77	8798	30	3428	92	10512	5.77	659	8.2	< 3.7	11.8	0.04	< 4.3	491	< 3.7	423	4.0	457	0.04	4.6	29	150
9			38	4167	126	13819	5.96	654		< 3.7		0.04			< 3.7	406	1.7	186	0.02	2.2	35	180
10																					54	54
11	74	7696	33	3432	110	11440	4.82	501					< 3.7	385	3.1	322	3.0	312	0.09	9.4		
12	78	11371	43	6269	82	11954	5.15	751	8.2	< 4.0	12.8	0.04	< 4.6	671	< 4.0	583	5.3	773	< 0.02	2.9	110	180
13	72	9446	34	4460	137	17973	3.58	470	5.8	< 3.7	15.0	0.02	< 4.3	564	< 3.7	485	3.4	446	< 0.02	2.6	310	320
14	84	12771	40	6082	171	25999	4.88	742	7.8	< 3.5	10.2	0.05	< 4.3	654	< 3.7	563	3.2	487	0.05	7.6	80	310
15	99	13103	37	4897	127	16809	5.20	688	6.4	< 3.7	8.8	0.02	< 4.3	569	< 3.7	490	1.6	212	0.02	2.6	140	260
16			45	5866	231	30112	5.10	665		< 3.5	13.0	0.05			< 3.5	456	1.4	182	0.03	3.9	50	190
17																					52	67
18	79	8796	34	3786	88	9798	6.61	736					< 4.3	479	< 3.7	412	3.8	423	0.08	8.9		
19	84	9906	32	3774	126	14859	8.79	1037	8.1	< 3.7	11.0	0.24	< 4.3	507	< 3.7	436	2.2	259	0.14	16.5	160	390
20	120	17704	46	6787	107	15786	4.20	620	7.4	< 3.7	11.4	0.02	< 4.3	634	< 3.7	546	2.0	295	0.02	3.0	220	150
21	102	14955	44	6451	135	19793	5.10	748	7.4	< 3.7	10.2	0.13	< 4.2	616	< 3.7	542	2.2	323	0.05	7.3	74	36
22	92	12307	42	5618	133	17792	6.02	805	7.6	< 3.7	15.2	0.05	< 4.3	575	< 3.7	495	3.2	428	0.03	4.0	89	75
23			39	5194	445	59269	6.63	883		< 3.7	16.2	0.07			< 3.7	493	2.5	333	0.03	4.0	230	140
24																					92	78
25	47	6671	22	3123	70	9936	3.30	468					< 4.2	596	< 3.7	525	2.0	284	0.04	5.7		
26	95	15981	35	5888	157	26410	4.59	772	8.2	< 3.7	12.0	0.04	< 4.3	723	< 3.7	622	4.4	740	0.05	8.4	280	
27	79	12420	35	5502	123	19337	5.10	802	7.3	< 3.7	10.6	0.06	< 4.3	676	< 3.7	582	4.4	692	0.03	4.7	320	340
28	80	11229	29	4071	116	16282	4.65	653	7.9	< 3.7	11.2	0.02	< 4.3	604	< 3.7	519	2.5	351	< 0.02	2.8	33	41
29	76	11713	36	5548	95	14642	7.00	1079	8.1	< 3.7	12.8	0.01	< 4.3	663	< 3.7	570	1.8	277	< 0.02	3.1	62	71
30			36	4951	109	14990	5.85	805		3.7	12.6	0.04			< 3.7	509	2.4	330	0.01	1.4	20	12
Total																						
Mean	82	10884	35	4647	130	17186	5.56	714	7.4	3.6	12.3	0.06	4.2	562	3.6	476	3.0	390	0.04	5.1	106.31	158.96
Maximum	120	17704	46	6787	445	59269	8.79	1079	8.2	4.0	16.2	0.24	4.6	723	4.0	622	5.3	773	0.14	16.5	320.00	390.00
Minimum	47	6370	22	3123	67	6622	3.30	468	5.4	3.2	8.8	0.01	3.5	379	3.1	322	1.4	182	0.01	1.4	20.00	12.00
# of Data	21	21	26	26	26	26	26	26	17	22	21	22	21	21	26	26	26	26	25	25	26	26
# of Data<MDL									0	20			21		25				6		0	0
Wk1: 06/04-06/10/00	74	8698	33	3782	104	12413	5.67	644					4.3	546	3.7	458	3.7	449	0.03	3.6	48	163
Wk2: 06/11-06/17/00	81	10877	39	5168	143	19048	4.79	636					4.2	593	3.6	502	3.0	423	0.04	5.0	104	180
Wk3: 06/18-06/24/00	95	12734	40	5268	172	22883	6.23	805					4.3	582	3.7	503	2.7	356	0.06	7.6	130	110
Wk4: 06/25-07/01/00	75	9669	32	4155	112	14514	5.08	654					4.3	543	3.7	475	2.9	380	0.03	3.7	70	78

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JULY 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data						Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)														Report Only		5.0 AML 7.5 AWL				1.5 AML 2.3 AWL			
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	<MDL	Report Only	<MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	<MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	14.67	19.0	15.47							0.01		0		0		0		0						0		0		0		0.0	33	78
2	Sun	0.00	14.27	19.0	15.42							0.01	41	4879	26	3094	67	7974	4.42	526					3.5	417	< 3.2	381	2.0	238	0.02	2.4		
3	Mon	0.92	20.95	32.0	21.22	218.400	5.308	255.000	1.594	182.400	3.167	> 2.72	110	19220	49	8561	231	40361	5.71	998	4.8	< 3.5	9.6	0.05	4.0	699	< 3.5	612	2.6	454	0.03	5.2	60	75
4	Tue	0.00	16.13	27.8	16.57							1.77	35	4708	21	2825	40	5381	4.14	557	7.8	< 4.0	13.0	0.07	4.6	619	< 4.0	538	2.8	377	< 0.02	2.7	60	120
5	Wed	0.00	16.24	30.0	16.25							1.23	40	5418	16	2167	57	7720	4.37	592	7.7	< 3.7	14.2	0.07	4.3	582	< 3.7	501	4.2	569	0.02	2.7	28	150
6	Thu	0.00	15.83	28.3	16.09							0.97	134	17691	61	8053	164	21652	4.54	599	9.5	< 3.2	12.0	0.14	3.3	436	2.6	343	3.0	396	0.05	6.6	190	170
7	Fri	0.00	15.96	20.0	15.73							0.70		0	54	7188	123	16372	4.48	596		< 3.7	10.6	0.11		0	< 3.7	492	2.5	333	0.06	8.0	60	92
8	Sat	0.00	15.02	19.5	15.60							0.45		0		0		0		0						0		0		0		0.0	250	200
9	Sun	0.00	14.61	20.3	15.44							0.15	119	14500	62	7555	110	13403	4.97	606					4.0	487	< 3.5	426	4.2	512	0.05	6.1		
10	Mon	0.81	17.71	32.4	18.50	99.000	2.406	166.200	0.997	106.200	1.844	> 1.64	70	10339	47	6942	132	19497	5.15	761	7.9	< 4.0	11.4	0.09	4.6	679	< 4.0	591	5.4	798	0.05	7.4	27	16
11	Tue	0.00	16.01	28.8	15.60							0.96	85	11349	30	4006	126	16824	5.15	688	4.8	< 4.0	10.6	0.05	4.6	614	< 4.0	534	2.8	374	0.02	2.7	210	
12	Wed	0.00	15.35	23.0	15.06							0.30	59	7553	34	4353	126	16130	5.38	689	6.2	< 4.0	12.2	0.02	3.3	422	3.0	384	2.8	358	< 0.02	2.6	220	
13	Thu	0.00	15.04	20.0	15.11							0.06	81	10160	43	5394	143	17937	6.05	759	< 4.6	< 4.0	13.2	0.27	4.6	577	< 4.0	502	3.6	452	0.06	7.5	350	180
14	Fri	0.01	14.57	19.8	15.19							0.00		0	36	4374	106	12880	6.04	734		< 4.0	7.0	0.35		0	< 4.0	486	2.0	243	0.12	14.6	1500	300
15	Sat	0.00	13.25	19.3	14.44							0.00		0		0		0		0						0		0		0		0.0	73	180
16	Sun	0.00	13.03	18.0	14.45							0.00	69	7498	40	4347	88	9563	4.93	536					4.0	435	3.3	359	2.8	304	0.01	1.1		
17	Mon	0.00	13.32	19.0	14.25							0.00	60	6665	51	5666	108	11998	7.66	851	< 4.6	< 4.0	13.6	0.06	4.6	511	< 4.0	444	3.6	400	< 0.02	2.2	49	200
18	Tue	0.01	13.37	19.8	14.07							0.00	75	8363	51	5687	92	10259	6.72	749	8.1	3.7	17.7	0.16	3.8	424	3.3	368	2.8	312	0.04	4.5	34	37
19	Wed	0.00	14.10	20.9	14.03							0.00	64	7526	53	6232	112	13171	6.55	770	2.4	< 3.4	18.0	0.09	2.5	294	1.8	212	2.6	306	0.04	4.7	44	110
20	Thu	0.00	13.45	19.4	13.40							0.00	69	7740	54	6057	125	14022	6.38	716	4.0	< 4.0	20.2	0.16	4.6	516	< 4.0	449	3.2	359	0.04	4.5	43	160
21	Fri	0.00	13.15	19.2	12.85							0.00		0	47	5155	144	15793	4.45	488		< 3.7	15.8	0.15		0	< 3.7	406	3.1	340	0.11	12.1	250	60
22	Sat	0.00	12.80	17.3	12.46							0.00		0		0		0		0						0		0		0		0.0	30	70
23	Sun	0.00	12.10	18.9	11.60							0.00	52	5248	42	4238	88	8880	6.16	622					3.5	353	3.1	313	1.0	101	0.04	4.0		
24	Mon	0.00	13.02	18.0	11.96							0.00	61	6624	54	5864	91	9881	7.75	842	< 4.6	< 4.0	13.4	0.34	4.6	499	< 4.0	434	0.4	43	0.11	11.9	65	34
25	Tue	0.00	12.99	19.1	12.18							0.00	73	7909	54	5850	95	10292	7.09	768	3.1	< 4.0	13.2	0.22	3.1	336	< 4.3	466	6.8	737	0.06	6.5	29	100
26	Wed	0.00	13.18	19.1	12.73							0.00	85	9343	73	8024	56	6156	6.72	739	8.6	2.9	12.9	0.19	4.0	440	< 3.5	385	1.2	132	0.06	6.6	65	38
27	Thu	0.00	13.04	23.0	12.72							0.00	61	6634	42	4568	122	13268	5.49	597	< 4.3	< 3.7	15.2	0.15	4.3	468	< 3.7	402	1.6	174	0.02	2.2	310	150
28	Fri	0.42	15.56	40.0	14.97	28.200	0.648	36.000	0.120	66.000	0.499	0.00		0	60	7786	214	27771	5.54	719		< 3.7	14.0	0.11		0	< 3.7	480	2.7	350	0.07	9.1	750	650
29	Sat	0.04	12.88	20.8	13.15							0.00		0		0		0		0						0		0		0		0.0	570	530
30	Sun	0.21	12.79	21.3	12.64							0.00	38	4053	25	2667	61	6507	4.37	466					4.0	427	< 3.5	373	3.8	405	0.08	8.5		
31	Mon	0.13	14.45	31.2	13.11							0.00	57	6869	37	4459	103	12413	7.56	911	7.3	< 3.7	14.2	0.09	4.3	518	< 3.7	446	6.8	819	0.05	6.0	110	210
Total		2.55	448.84		452.26	345.60	8.36	457.20	2.71		5.51	10.97																						
Mean			14.48		14.59	115.20	2.79	152.40	0.90		1.84	0.35	70	6138	45	4552	112	11810	5.68	577	5.9	3.8	13.4	0.14	4.0	347	3.6	365	3.1	319	0.05	4.9	208.08	180.38
Maximum		0.92	20.95	40.0	21.22	218.40	5.31	255.00	1.59		3.17	2.72	134	19220	73	8561	231	40361	7.75	998	9.5	4.0	20.2	0.35	4.6	699	4.3	612	6.8	819	0.12	14.6	1500.00	650.00
Minimum			12.10		11.60	28.20	0.65	36.00	0.12		0.50	0.00	35	0	16	0	40	0	4.14	0	2.4	2.9	7.0	0.02	2.5	0	1.8	0	0.4	0	0.01	0.0	27.00	16.00
# of Data		31	31	31	31	3	3	3	3		3	31	22	22	26	26	26	26	26	26	17	21	21	21	22	22	26	26	26	26	26	26	26	26
# of Data<MDL																					4	19			15		20				3		0	0
Wk1: 07/02-07/08/00			16.34		16.70								72	10383	38	5315	114	16577	4.61	601					3.9	564	3.5	487	2.9	401	0.03	4.7	81	127
Wk2: 07/09-07/15/00			15.22		15.62								83	10780	42	5437	124	16112	5.46	568					4.2	563	3.8	496	3.5	466	0.05	7.0	191	167
Wk3: 07/16-07/22/00			13.32		13.64								67	7558	49	5524	111	12458	6.12	539					3.9	456	3.4	386	3.0	348	0.04	4.9	54	90
Wk4: 07/23-07/29/00			13.25		12.76								66	7151	54	6055	111	12708	6.46	575					3.9	399	3.7	394	2.3	244	0.06	6.4	159	137

Total Est. Bypass Flow (MG): 16.58 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR AUGUST 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)									
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0								
1	Tue	0.00	12.49	18.1	11.59							0.00	44	4583	24	2500	54	5625	6.79	707
2	Wed	0.02	12.81	19.5	12.02							0.00	56	5983	36	3846	96	10256	7.07	755
3	Thu	0.00	12.09	17.4	12.25							0.00	46	4638	31	3126	62	6251	7.17	723
4	Fri	0.00	12.06	17.4	10.51							0.00			43	4325	80	8046	6.94	698
5	Sat	0.30	13.45	34.8	13.38	25.800	1.174	37.800	0.164	35.400	1.356	0.00								
6	Sun	0.75	14.42	39.8	15.15	177.600	8.081	115.200	0.615	164.400	3.152	0.54	123	14792	53	6374	271	32591	5.21	627
7	Mon	0.00	13.72	19.8	13.37							1.16	41	4691	39	4463	75	8582	5.94	680
8	Tue	0.00	13.69	20.1	14.16							0.45	69	7878	41	4681	65	7421	8.34	952
9	Wed	0.00	13.48	19.2	13.76							0.24	83	9331	53	5958	125	14053	7.62	857
10	Thu	0.00	11.80	19.4	12.00							0.13	54	5314	35	3444	98	9644	5.60	551
11	Fri	0.00	12.95	19.0	13.18							0.07			76	8208	141	15228	7.11	768
12	Sat	0.00	11.98	19.8	12.20							0.00								
13	Sun	0.00	11.92	17.0	11.81							0.00	48	4772	43	4275	81	8052	6.78	674
14	Mon	0.00	12.67	18.5	12.84							0.00	33	3487	30	3170	110	11623	8.96	947
15	Tue	0.00	12.94	19.2	12.36							0.01	72	7770	59	6367	109	11763	6.55	707
16	Wed	0.00	12.36	19.4	11.58							0.03	102	10514	80	8247	94	9690	7.44	767
17	Thu	1.21	15.89	40.0	16.08	176.400	8.026	156.600	0.898	180.000	3.148	> 1.78	99	13120	62	8216	276	36576	5.74	761
18	Fri	0.02	12.82	18.5	12.86	176.400	8.026					1.04			28	2994	100	10692	4.91	525
19	Sat	0.00	12.00	18.2	12.00							0.41								
20	Sun	0.00	12.24	18.3	12.46							0.16	45	4594	33	3369	67	6839	6.32	645
21	Mon	0.00	12.53	18.5	12.67							0.07	48	5016	30	3135	94	9823	8.96	936
22	Tue	0.00	12.52	20.9	12.61							0.04	68	7100	38	3968	95	9920	7.78	812
23	Wed	0.28	15.22	40.0	16.21	25.800	0.587	55.200	0.329	63.000	0.847	0.50	89	11297	63	7997	171	21706	5.99	760
24	Thu	0.00	12.55	22.2	13.73							0.27	36	3768	27	2826	60	6280	6.27	656
25	Fri	0.00	12.30	18.5	13.34							0.15			34	3488	82	8412	7.81	801
26	Sat	0.00	12.22	16.1	13.24							0.09								
27	Sun	0.00	11.74	17.0	12.99							0.04	47	4602	32	3133	65	6364	5.32	521
28	Mon	0.00	12.41	19.0	13.53							0.00	87	9004	56	5796	122	12627	9.18	950
29	Tue	0.00	12.15	17.1	13.36							0.02	103	10437	82	8309	109	11045	8.84	896
30	Wed	0.00	12.18	18.4	13.02							0.03	87	8838	63	6400	100	10158	8.46	859
31	Thu	0.00	12.20	21.0	12.87							0.03	113	11498	79	8038	116	11803	9.07	923
Total		2.58	395.80		403.13	582.00	25.89	364.80	2.01		8.50	7.24								
Mean			12.77		13.00	116.40	5.18	91.20	0.50		2.13	0.23	69	7523	47	5061	108	11892	7.12	758
Maximum		1.21	15.89	40.0	16.21	177.60	8.08	156.60	0.90		3.15	1.78	123	14792	82	8309	276	36576	9.18	952
Minimum			11.74		10.51	25.80	0.59	37.80	0.16		0.85	0.00	33	3487	24	2500	54	5625	4.91	521
# of Data		31	31	31	31	5	5	4	4		4	31	23	23	27	27	27	27	27	27
# of Data<MDL																				
Wk1: 07/30-08-05			12.88		12.21								48	5225	33	3487	76	8183	6.65	710
Wk2: 08/06-08-12			13.15		13.40								74	8401	50	5521	129	14587	6.64	739
Wk3: 08/13-08-19			12.94		12.79								71	7933	50	5545	128	14733	6.73	730
Wk4: 08/20-08-26			12.80		13.47								57	6355	38	4131	95	10497	7.19	769
Wk5: 08/27-09-02			12.04		12.73								87	6340	62	5393	104	10535	8.21	714

Total Est. Bypass Flow (MG): 955.30 Total Bypass Occurances (days/month): 5

Date	Clarifier Effluent Data								Final Effluent Data									
	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria	<MDL		<MDL		10		1.5		Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL		626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML 235 DML <MDL
1	7.3	<	3.5		12.8		0.12		4.0	417	< 3.5		365	2.0	208	0.07	7.3	180	170
2	6.8	<	3.3		14.2		0.07		3.7	395	< 3.3		353	4.8	513	0.04	4.3	140	128
3	8.0	<	3.7		11.5		0.17		3.6	363	< 3.7		373	2.6	262	0.03	3.0	190	200
4		<	3.7		12.0		0.09				< 3.7		372	2.7	272	0.06	6.0	62	81
5																		250	200
6									3.7	445	< 3.3		397	3.6	433				
7	6.1	<	4.0		12.6		0.20		4.6	526	< 4.0		458	2.1	240	0.10	11.4	190	
8	9.1	<	3.7		12.2		0.11		4.3	491	< 3.7		422	2.4	274	0.04	4.6	390	
9	7.5		3.1		14.0		0.22		4.0	450	< 3.5		393	7.0	787	0.07	7.9	540	
10	5.9	<	3.3		12.6		0.14		3.7	364	< 3.3		325	2.8	276	0.02	2.0	220	
11			8.7		11.7		0.41				< 3.5		378	5.0	540	0.23	24.8	1200	
12																		2400	
13									4.6	457	< 4.0		398	3.8	378	0.05	5.0		
14	< 4.6	<	4.0		9.4		0.18		4.6	486	< 4.0		423	3.4	359	0.06	6.3	360	
15	6.5	<	4.0		10.6		0.14		4.6	496	< 4.0		432	2.4	259	0.04	4.3	500	
16	7.0	<	3.5		9.8		0.18		4.0	412	< 3.5		361	2.6	268	0.05	5.2	270	
17	5.3	<	3.7		8.0		0.08		4.3	570	< 3.7		490	0.8	106	0.04	5.3	3400	4600
18		<	3.5		8.2		0.09				< 3.5		374	0.4	43	0.04	4.3	51	40
19																		58	
20									4.0	408	< 3.5		357	2.6	265	0.06	6.1		
21	6.0	<	4.0		16.0		0.16		4.6	481	< 4.0		418	2.0	209	0.06	6.3	290	
22	5.8	<	3.5		9.8		0.15		4.0	418	< 3.5		365	3.2	334	0.06	6.3	460	
23	6.5	<	3.2		8.6		0.17		3.5	444	< 3.2		406	1.5	190	0.04	5.1	640	700
24	3.7	<	3.0		11.0		0.11		3.3	345	< 3.0		314	0.6	63	0.04	4.2	110	
25		<	3.7		11.8		0.33				< 3.7		380	2.0	205	0.08	8.2	230	
26																		150	
27									3.7	362	< 3.3		323	5.2	509	0.11	10.8		
28	7.6	<	3.3		11.0		0.12		3.7	383	< 3.3		342	3.0	310	0.04	4.1	150	210
29	7.4	<	3.3		13.0		0.15		3.7	375	< 3.3		334	3.8	385	0.04	4.1	22	13
30	9.2		4.7		13.2		0.14		3.3	335	2.9		295	4.2	427	0.04	4.1	25	27
31	5.5	<	4.0		12.0		0.13		4.6	468	< 4.0		407	3.8	387	0.06	6.1	8	24
Total																			
Mean	6.6		3.8		11.6		0.16		4.0	430	3.6		380	3.0	315	0.06	6.4	462.44	477.89
Maximum	9.2		8.7		16.0		0.41		4.6	570	4.0		490	7.0	787	0.23	24.8	3400.00	4600.00
Minimum	3.7		3.0		8.0		0.07		3.3	335	2.9		295	0.4	43	0.02	2.0	8.00	13.00
# of Data	19		23		23		23		23	23	27		27	27	27	26	26	27	27
# of Data<MDL	1		20						21		26					1		0	0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR SEPTEMBER 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML 235 DML <MDL
1	Fri	0.00	12.14	18.8	12.38							0.00			60	6075	142	14377	8.40	850		< 3.7	10.4	0.11			< 3.7	375	1.6	162	0.06	6.1	15	15
2	Sat	0.00	11.48	17.0	10.95							0.03																				12	11
3	Sun	0.00	11.59	16.5	10.45							0.03	73	7056	48	4640	77	7443	8.62	833					4.0	387	< 3.5	338	3.0	290	0.07	6.8		
4	Mon	0.00	8.37	16.0	9.49							0.01	59	4119	36	2513	88	6143	6.55	457	< 4.0	< 3.5	11.4	0.06	4.0	279	< 3.5	244	2.8	195	0.04	2.8	13	17
5	Tue	0.00	11.28	25.0	9.91							0.00	146	13735	70	6585	241	22672	10.80	1016	8.4	< 3.5	16.8	0.57	4.0	376	< 3.5	329	3.8	357	0.20	18.8	200	250
6	Wed	0.02	11.26	22.0	9.91							0.00	96	9015	61	5728	112	10518	10.10	948	8.5	< 3.5	14.0	0.16	4.0	376	< 3.5	329	5.2	488	0.11	10.3	61	48
7	Thu	0.00	11.42	17.0	10.39							0.00	107	10191	81	7715	109	10381	8.40	800	7.6	< 3.5	14.2	0.06	4.0	381	< 3.5	333	3.8	362	0.09	8.6	25	30
8	Fri	0.00	8.20	18.0	11.13							0.02			72	4924	142	9711	8.28	566			3.7	13.0	0.14			< 3.7	253	3.0	205	0.16	10.9	50	80
9	Sat	0.00	11.25	16.5	10.03							0.01													4.0	375	< 3.5	328					49	31
10	Sun	0.55	12.94	40.0	11.93	34.800	0.792	55.200	0.424	71.400	0.385	0.00	102	11008	75	8094	249	26872	5.46	589					4.6	496	< 3.7	399	4.0	432	0.13	14.0		
11	Mon	2.96	15.81	40.0	17.06	454.200	20.666	418.200	15.857	491.400	18.821	> 1.68	100	13186	57	7516	144	18987	5.22	688	13.0	8.3	11.6	0.19	8.6	1134	7.2	949	2.8	369	0.11	14.5	36	31
12	Tue	0.33	24.92	31.0	26.33	218.400	9.937	283.200	10.293	238.200	9.123	> 3.60	27	5611	15	3117	64	13301	3.14	653	6.1	< 3.7	9.3	0.09	4.3	894	< 3.7	769	2.8	582	0.06	12.5	71	54
13	Wed	0.00	22.13	32.0	20.99					11.400	0.218	1.26	35	6460	18	3322	49	9044	3.08	568	7.6	< 3.7	9.6	0.07	4.2	775	< 3.7	683	2.6	480	0.12	22.1	220	
14	Thu	0.31	21.76	33.8	20.82			20.400	0.464	43.200	0.827	0.72	23	4174	27	4900	52	9437	4.48	813	5.6	< 3.5	11.2	0.09	4.0	726	< 3.5	635	3.4	617	0.03	5.4	290	360
15	Fri	0.00	17.88	30.0	18.29							0.34			41	6114	92	13719	5.66	844		< 3.7	8.8	0.10			< 3.7	552	1.1	164	0.02	3.0	59	70
16	Sat	0.00	15.79	29.0	16.96							0.11																				31	37
17	Sun	0.00	15.55	20.8	16.27							0.04	41	5317	21	2723	54	7003	4.31	559					4.0	519	< 3.5	454	3.0	389	0.02	2.6		
18	Mon	0.00	14.99	20.1	15.69							0.00	52	6501	26	3250	75	9376	6.75	844	< 4.3	< 3.7	11.4	0.12	4.3	538	< 3.7	463	2.6	325	0.03	3.8	43	39
19	Tue	0.00	14.58	22.0	15.20							0.01	51	6201	30	3648	74	8998	5.07	616	7.9	< 3.7	10.6	0.11	4.3	523	< 3.7	450	2.8	340	0.04	4.9	51	39
20	Wed	0.58	17.41	38.3	17.71	33.600	0.764			72.000	1.379	0.04	79	11471	39	5663	162	23522	6.44	935	6.0	< 3.7	13.9	0.09	4.2	610	< 3.7	537	3.8	552	0.03	4.4	32	28
21	Thu	0.00	12.31	20.0	15.67							0.01	22	2259	13	1335	49	5031	6.16	632	4.2	< 3.5	11.4	0.08	4.0	411	< 3.5	359	7.0	719	0.08	8.2	36	31
22	Fri	0.41	16.40	38.5	16.32	35.400	0.805			40.800	0.781	0.08			24	3283	123	16823	4.87	666		< 3.7	9.4	0.06			< 3.7	506	4.2	574	0.08	10.9	15	15
23	Sat	0.00	14.86	30.0	15.22							0.26																				23	18
24	Sun	0.24	16.65	31.5	15.99							0.13	38	5277	31	4305	67	9304	3.64	505					4.0	555	< 3.5	486	4.0	555	0.16	22.2		
25	Mon	0.01	13.48	19.8	14.00							0.00	59	6633	33	3710	78	8769	5.99	673	5.2	< 3.5	11.4	0.06	4.0	450	< 3.5	393	3.2	360	0.09	10.1	34	27
26	Tue	0.00	13.62	19.0	14.28							0.00	69	7838	29	3294	68	7724	4.24	482	7.7	< 3.3	11.2	0.08	3.7	420	< 3.3	375	2.6	295	0.13	14.8	26	22
27	Wed	0.00	12.53	18.0	13.53							0.00	100	10450	44	4598	121	12645	8.13	850	7.2	< 3.7	16.2	0.09	4.3	449	< 3.7	387	3.8	397	0.14	14.6	32	26
28	Thu	0.00	11.63	17.7	12.46							0.00	75	7275	38	3686	97	9408	8.57	831	6.1	< 3.5	13.3	0.12	4.0	388	< 3.5	339	3.2	310	0.10	9.7	100	32
29	Fri	0.00	11.97	17.0	12.80							0.00			44	4393	95	9484	4.76	475		< 3.7	15.2	0.08			< 3.7	369	2.2	220	0.09	9.0	47	37
30	Sat	0.00	11.21	16.5	11.86							0.00																				35	31
Total		5.41	425.41		434.02	776.40	32.96	777.00	27.04		31.53	8.35																					
Mean			14.18		14.47	155.28	6.59	194.25	6.76		4.50	0.28	68	7689	41	4605	105	12028	6.28	708	6.8	3.8	12.1	0.12	4.3	527	3.7	448	3.3	390	0.09	10.0	61.77	62.27
Maximum		2.96	24.92	40.0	26.33	454.20	20.67	418.20	15.86		18.82	3.60	146	13735	81	8094	249	26872	10.80	1016	13.0	8.3	16.8	0.57	8.6	1134	7.2	949	7.0	719	0.20	22.2	290.00	360.00
Minimum			8.20		9.49	33.60	0.76	20.40	0.42		0.22	0.00	22	2259	13	1335	49	5031	3.08	457	4.0	3.3	8.8	0.06	3.7	279	3.3	244	1.1	162	0.02	2.6	12.00	11.00
# of Data		30	30	30	30	5	5	4	4		7	30	20	20	25	25	25	25	25	25	16	21	21	21	21	21	26	26	25	25	25	25	26	26
# of Data<MDL																					2	20			19		25				0		0	0
Wk1: 9/03-9/09/2000			10.48		10.19								96	8823	61	5351	128	11145	8.79	601					4.0	335	3.5	301	3.6	306	0.11	9.6	66	76
Wk2: 9/10-9/16/2000			18.75		18.91								57	8088	39	5511	108	15227	4.51	568					5.1	811	4.3	671	2.8	437	0.08	11.8	118	132
Wk3: 9/17-9/23/2000			15.16		16.01								49	6350	26	3317	89	11782	5.60	539					4.2	559	3.6	489	3.9	525	0.05	6.2	33	28
Wk4: 9/24-9/30/2000			15.29		16.26								49	6350	26	3317	89	11782	5.60	575					4.2	559	3.6	489	3.9	525	0.05	6.2	35	32

Total Est. Bypass Flow (MG): 91.54 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR NOVEMBER 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Wed	0.00	10.83	15.0	10.99							0.01	112	10116	67	6052		0	10.00	903	6.3	3.5	13.0	0.06	2.3	208	3.5	316	4.6	415	0.03	2.7		
2	Thu	0.00	10.30	14.0	10.58							0.00	79	6786	59	5068	130	11167	9.63	827	6.6	5.2	14.2	0.06	5.4	464	4.7	404	4.6	395	0.02	1.7		
3	Fri	0.00	10.28	14.0	10.00							0.00		0	47	4030	112	9602	9.52	816		3.7	15.6	0.06	3.7	317		0	3.2	274	0.05	4.3		
4	Sat	0.00	9.95	15.0	9.62							0.00		0		0		0								0		0		0		0.0		
5	Sun	0.00	9.92	14.0	9.33							0.00	74	6122	71	5874	100	8273	7.92	655					4.6	381	4.0	331	7.8	645	0.04	3.3		
6	Mon	0.35	11.98	36.0	11.79	34.200	0.800	27.600	0.480	50.400	11.030	0.00	121	12089	97	9692	223	22281	6.97	696	6.0	3.2	16.8	0.07	4.2	420	3.2	320	5.2	520	0.04	4.0		
7	Tue	0.00	10.33	36.0	10.76							0.00	93	8012	84	7237	193	16627	5.94	512	5.5	3.5	12.6	0.06	4.0	345	3.5	302	5.6	482	0.04	3.4		
8	Wed	0.04	10.04	14.0	10.13							0.00	66	5526	62	5191	67	5610	8.34	698	9.2	8.3	12.2	0.05	3.4	285	2.9	243	4.0	335	0.03	2.5		
9	Thu	1.40	16.42	40.0	19.17	195.600	4.800	232.800	4.040	196.800	43.050	0.92	94	12873	48	6573	147	20131	5.49	752	8.7	4.0	13.4	0.06	4.6	630	4.0	548	2.8	383	0.02	2.7		
10	Fri	0.00	11.42	16.0	12.07							1.54		0	44	4191	83	7905	7.50	714		4.0	11.0	0.11		0	4.0	381	2.1	200	0.05	4.8		
11	Sat	0.00	11.27	16.0	12.38							1.35		0		0		0								0		0		0		0.0		
12	Sun	0.10	11.43	19.0	13.50							1.13	93	8865	49	4671	90	8579	7.28	694					4.0	381	3.5	334	3.4	324	0.07	6.7		
13	Mon	0.32	15.28	29.5	16.91	9.600	0.200			16.200	3.540	1.15	101	12871	71	9048	148	18860	6.22	793	5.6	4.2	9.6	0.07	4.0	510	3.5	446	3.0	382	0.05	6.4		
14	Tue	0.01	11.47	16.0	12.52							1.00	82	7844	63	6027	73	6983	5.89	563	9.8	8.4	9.4	0.03	6.5	622	4.8	459	3.2	306	0.03	2.9		
15	Wed	0.00	11.32	16.0	12.47	9.600	0.200					0.85	102	9630	60	5665	108	10196	8.90	840	8.8	4.3	13.2	0.05	4.3	406	3.7	349	3.4	321	0.03	2.8		
16	Thu	0.00	11.20	16.0	12.14							0.60	158	14758	75	7006	108	10088	7.62	712	9.2	6.3	11.0	0.08	6.3	588	5.4	504	3.4	318	0.06	5.6		
17	Fri	0.00	10.89	15.0	11.48							0.35		0	48	4359	104	9446	7.50	681		3.8	10.0	0.05		0	3.5	318	4.0	363	0.02	1.8		
18	Sat	0.00	10.65	15.0	11.19							0.24		0		0		0								0		0		0		0.0		
19	Sun	0.02	10.48	15.0	10.90							0.16	58	5069	40	3496	89	7779	6.95	607					4.9	428	4.0	350	3.5	306	0.06	5.2		
20	Mon	0.00	10.37	15.0	10.71							0.08	80	6919	56	4843	92	7957	7.84	678	8.3	4.0	28.6	0.05	4.6	398	4.0	346	4.2	363	0.03	2.6		
21	Tue	0.00	10.45	14.0	10.82							0.01	79	6885	54	4706	125	10894	8.82	769	6.2	4.0	16.4	0.05	4.6	401	4.0	349	7.6	662	0.05	4.4		
22	Wed	0.00	10.48	15.0	10.92							0.00	84	7342	45	3933	119	10401	8.63	754	19.0	4.0	0.0	0.08	5.0	437	4.0	350	3.6	315	0.03	2.6		
23	Thu	0.00	9.93	15.0	9.98							0.00	107	8861	68	5632	108	8944	7.34	608	8.2	3.5	14.0	0.05	4.0	331	3.5	290	4.2	348	0.01	0.8		
24	Fri	0.00	9.77	14.0	9.78							0.00		0	54	4400	86	7007	8.90	725		4.6	9.8	0.06		0	4.6	375	2.1	171	0.02	1.6		
25	Sat	0.32	12.06	27.0	12.19							0.00		0		0		0								0		0		0		0.0		
26	Sun	0.07	10.14	16.0	10.91							0.00	69	5835	52	4398	78	6596	6.16	521					4.0	338	3.5	296	3.6	304	0.02	1.7		
27	Mon	0.00	9.71	14.0	9.93							0.00	65	5264	57	4616	92	7450	8.96	726	6.1	3.8	10.2	0.03	4.3	348	3.7	300	2.8	227	0.01	0.8		
28	Tue	0.00	9.70	14.0	9.55							0.00	103	8332	71	5744	120	9708	7.78	629	5.8	3.4	10.2	0.07	4.6	372	4.0	324	3.2	259	0.05	4.0		
29	Wed	0.18	11.20	15.0	11.68							0.00	130	12143	77	7192	171	15973	8.88	829	5.0	4.0	10.8	0.10	3.9	364	3.2	299	3.0	280	0.04	3.7		
30	Thu	0.00	9.87	14.0	9.90							0.00	149	12265	83	6832	132	10866	7.66	631	7.7	3.2	9.6	0.06	3.3	272	3.1	255	2.4	198	0.03	2.5		
Total		2.81	329.14		344.30	249.00	6.00	260.40	4.52		57.62	9.39																					
Mean			10.97		11.48	62.25	1.50	130.20	2.26		19.21	0.31	95	6480	62	4882	116	8977	7.79	705	7.9	4.4	12.3	0.06	4.4	308	3.8	293	3.9	303	0.04	2.9		
Maximum		1.40	16.42	40.0	19.17	195.60	4.80	232.80	4.04		43.05	1.54	158	14758	97	9692	223	22281	10.00	903	19.0	8.4	28.6	0.11	6.5	630	5.4	548	7.8	662	0.07	6.7		
Minimum			9.70		9.33	9.60	0.20	27.60	0.48		3.54	0.00	58	0	40	0	67	0	5.49	512	5.0	3.2	0.0	0.03	2.3	0	2.9	0	2.1	0	0.01	0.0		
# of Data		30	30	30	30	4	4	2	2		3	30	22	22	26	26	25	25	26	26	18	22	22	22	23	23	25	25	26	26	26	26		
# of Data<MDL																					0	12			13		20				0			
Wk1: 10/29-11/04/00			10.43																														
Wk2: 11/05-11/11/00			11.63																														
Wk3: 11/12-11/18/00			11.75																														
Wk4: 11/19-11/25/00			10.51																														
Wk5: 11/26-12/01/00			10.46																														

Total Est. Bypass Flow (MG): 68.14 Total Bypass Occurances (days/month): 2

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR DECEMBER 2000

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)									
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0								
1	Fri	0.00	9.85	14.0	9.86	0.000	0.000	0.000	0.000	0.000	0.000	0.00			62	5093	121	9940	8.74	718
2	Sat	0.00	9.83	14.0	10.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00								
3	Sun	0.00	9.68	13.5	9.58	0.000	0.000	0.000	0.000	0.000	0.000	0.00	174	14047	79	6378	200	16146	6.61	534
4	Mon	0.00	9.63	14.0	9.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	122	9798	64	5140	129	10361	8.96	720
5	Tue	0.00	9.79	14.0	9.38	0.000	0.000	0.000	0.000	0.000	0.000	0.00	132	10778	81	6614	143	11676	8.18	668
6	Wed	0.02	10.36	15.0	10.28	0.000	0.000	0.000	0.000	0.000	0.000	0.00	212	18317	98	8467	208	17972	9.80	847
7	Thu	0.00	9.90	14.0	9.82	0.000	0.000	0.000	0.000	0.000	0.000	0.00	172	14201	91	7514	158	13045	10.10	834
8	Fri	0.00	10.20	14.0	9.71	0.000	0.000	0.000	0.000	0.000	0.000	0.00			52	4424	157	13356	8.57	729
9	Sat	0.00	9.78	14.0	9.09	0.000	0.000	0.000	0.000	0.000	0.000	0.00								
10	Sun	0.00	9.76	15.0	9.55	0.000	0.000	0.000	0.000	0.000	0.000	0.00	124	10093	60	4884	103	8384	7.95	647
11	Mon	0.00	9.48	14.0	9.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	136	10753	76	6009	127	10041	11.60	917
12	Tue	0.00	9.95	14.5	9.12	0.000	0.000	0.000	0.000	0.000	0.000	0.00	160	13277	66	5477	166	13775	8.51	706
13	Wed	0.00	9.62	13.0	9.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00	177	14201	65	5215	181	14522	8.40	674
14	Thu	0.00	9.54	13.5	9.08	0.000	0.000	0.000	0.000	0.000	0.000	0.00	151	12014	125	9945	113	8991	12.60	1003
15	Fri	0.00	9.63	13.5	9.77	0.000	0.000	0.000	0.000	0.000	0.000	0.00			59	4739	163	13091	10.20	819
16	Sat	0.00	10.61	17.0	10.73	0.000	0.000	0.000	0.000	0.000	0.000	0.00								
17	Sun	0.00	10.57	14.5	11.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	65	5730	53	4672	177	15603	9.74	859
18	Mon	0.00	10.31	15.0	11.64	0.000	0.000	0.000	0.000	0.000	0.000	0.00	141	12124	77	6621	140	12038	9.46	813
19	Tue	0.00	10.72	16.0	11.98	0.000	0.000	0.000	0.000	0.000	0.000	0.00	182	16272	76	6795	267	23871	8.34	746
20	Wed	0.00	9.92	13.5	10.85	0.000	0.000	0.000	0.000	0.000	0.000	0.00	146	12079	71	5874	172	14230	7.78	644
21	Thu	0.00	9.74	13.5	10.19	0.000	0.000	0.000	0.000	0.000	0.000	0.00	175	14216	87	7067	193	15678	7.84	637
22	Fri	0.00	9.29	13.0	10.89	0.000	0.000	0.000	0.000	0.000	0.000	0.00			131	10150	172	13326	9.18	711
23	Sat	0.00	8.79	12.5	10.55	0.000	0.000	0.000	0.000	0.000	0.000	0.00								
24	Sun	0.00	8.91	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	120	8917	60	4459	137	10180	9.74	724
25	Mon	0.00	8.59	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	89	6376	65	4657			12.40	888
26	Tue	0.00	8.55	12.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	118	8414	71	5063	134	9555	8.68	619
27	Wed	0.00	8.94	13.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	84	6263	64	4772	116	8649	7.28	543
28	Thu	0.00	8.83	13.0		0.000	0.000	0.000	0.000	0.000	0.000	0.00	194	14287	126	9279	177	13035	10.00	736
29	Fri	0.00	8.88	13.0	10.22	0.000	0.000	0.000	0.000	0.000	0.000	0.00			87	6443			8.12	601
30	Sat	0.00	8.89	14.0	10.10	0.000	0.000	0.000	0.000	0.000	0.000	0.00								
31	Sun	0.00	9.31	13.0	9.74	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	6833	76	5901	115	8929	8.53	662
Total		0.02	297.85		262.25	0.00	0.00	0.00	0.00		0.00	0.00								
Mean			9.61		10.09	0.00	0.00	0.00	0.00		0.00	0.00	141	11380	78	6217	157	12766	9.13	731
Maximum		0.02	10.72	17.0	11.98	0.00	0.00	0.00	0.00		0.00	0.00	212	18317	131	10150	267	23871	12.60	1003
Minimum			8.55		9.08	0.00	0.00	0.00	0.00		0.00	0.00	65	5730	52	4424	103	8384	6.61	534
# of Data		31	31	31	26	31	31	31	31		31	31	21	21	26	26	24	24	26	26
# of Data<MDL																				
Wk1: 12/03-12/09/00			9.91		9.65								162	13428	78	6423	166	13759	8.70	722
Wk2: 12/10-12/16/00			9.80		9.55								150	12068	75	6045	142	11467	9.88	794
Wk3: 12/17-12/23/00			9.91		11.10								142	12084	83	6863	187	15791	8.72	735
Wk4: 12/24-12/30/00			10.17		11.13								142	12084	83	6863	187	15791	8.72	735

Date	Day of Week	Clarifier Effluent Data								Final Effluent Data								Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
		TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)		
Design Criteria		<MDL		<MDL		10		1.5		Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Fri		<	3.5		11.4		0.14				3.5	288	3.2	263	0.04	3.3		
2	Sat																		
3	Sun									3.7	299	3.3	266	1.6	129	0.05	4.0		
4	Mon	6.9	<	3.7		11.6		0.06		4.3	345	3.7	297	3.2	257	0.09	7.2		
5	Tue	10.5		3.7		12.0		0.07		6.2	506	3.4	278	3.7	302	0.06	4.9		
6	Wed	10.3		3.2		11.0		0.14		5.2	449	3.6	311	3.2	276	0.05	4.3		
7	Thu	9.5		5.3		12.0		0.06		8.2	677	5.3	438	3.6	297	0.04	3.3		
8	Fri	11.6		4.6		11.6		0.07				5.2	442	4.4	374	0.03	2.6		
9	Sat																		
10	Sun									5.2	423	3.3	269	4.0	326	0.03	2.4		
11	Mon	9.1		4.6		13.0		0.06		6.0	474	3.3	261	6.0	474	0.05	4.0		
12	Tue	7.2	<	3.0		11.6		0.04		3.9	324	3.0	249	5.8	481	0.02	1.7		
13	Wed	6.8	<	3.2		13.6		0.06		3.9	313	3.2	257	7.0	562	0.04	3.2		
14	Thu	7.3		3.4		11.2		0.03		4.8	382	3.3	263	5.2	414	0.02	1.6		
15	Fri		<	4.6		9.8		0.04				4.6	369	4.9	394	0.02	1.6		
16	Sat																		
17	Sun									6.7	591	5.0	441	6.2	547	0.10	8.8		
18	Mon	11.0		5.0		14.0		0.24		6.8	585	3.3	284	5.4	464	0.14	12.0		
19	Tue	9.0		4.1		10.2		0.22		6.4	572	3.2	286	5.4	483	0.18	16.1		
20	Wed	10.6		4.6		11.0		0.06		6.6	546	4.0	331	4.2	347	0.06	5.0		
21	Thu	10.3		4.7		11.6		0.06		6.6	536	3.2	260	5.8	471	0.04	3.2		
22	Fri			4.4		9.8		0.09				3.9	302	6.2	480	0.06	4.6		
23	Sat																		
24	Sun									3.7	275	3.3	245	5.8	431	0.04	3.0		
25	Mon	8.3		6.2		8.0		0.05		5.1	365	4.0	287	5.2	373	0.02	1.4		
26	Tue	7.9		3.1		9.4		0.07		4.4	314	3.3	235	4.6	328	0.04	2.9		
27	Wed	8.2		3.7		9.0		0.06		5.6	418	3.2	239	4.8	358	0.04	3.0		
28	Thu	11.0		5.1		11.0		0.10		5.8	427	3.1	228	5.4	398	0.06	4.4		
29	Fri			5.3		10.0		0.08				4.4	326	4.6	341	0.07	5.2		
30	Sat																		
31	Sun									5.0	388	3.2		5.2	404	0.07	5.4		
Total																			
Mean		9.1		4.2		11.1		0.09		5.4	439	3.7	298	4.8	384	0.06	4.6		
Maximum		11.6		6.2		14.0		0.24		8.2	677	5.3	442	7.0	562	0.18	16.1		
Minimum		6.8		3.0		8.0		0.03		3.7	275	3.0	228	1.6	129	0.02	1.4		
# of Data		17		21		21		21		21	21	26	26	26	26	26	26		
# of Data<MDL		0		5						3		17				0			
Wk1: 12/03-12/09/00										5.5	449	4.1	332	3.3	267	0.05	4.3		
Wk2: 12/10-12/16/00										4.8	369	3.5	270	5.5	427	0.03	2.3		
Wk3: 12/17-12/23/00										6.6	621	3.8	352	5.5	517	0.10	9.3		
Wk4: 12/24-12/30/00										6.6	621	3.8	352	5.5	517	0.10	9.3		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data								Final Effluent Data											
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100		Effluent E. coli (col/100 mLs)	
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																													
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10		1.5	Report Only <MDL	Report Only		7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML				
1	Mon	0.00	8.38	13.0	8.52							0.00	113	7897	56	3914	112	7828	6.72	470	6.7		3.8		10.4		0.05	3.6	252	<	3.1	217	3.8	266	0.05	3.5				
2	Tue	0.00	8.81	12.0	9.38							0.00	87	6392	53	3894	84	6172	8.06	592	10.3		3.5		9.0		0.03	5.7	419		2.7	198	4.0	294	0.02	1.5				
3	Wed	0.00	8.98	13.0	9.62							0.00	182	13631	97	7265	189	14155	10.60	794	12.0		5.5		11.4		0.34	8.1	607		4.1	307	4.0	300	0.20	15.0				
4	Thu	0.00	8.37	12.5	8.72							0.00	108	7539	69	4817	83	5794	6.44	450	10.1		4.4		11.6		0.07	6.1	426		3.0	209	3.8	265	0.04	2.8				
5	Fri	0.00	8.79	13.5	9.06							0.00			53	3885	170	12462	5.94	435			4.4		12.8		0.21			<	5.4	396	3.5	257	0.09	6.6				
6	Sat	0.00	8.50	12.0	8.86							0.00																												
7	Sun	0.00	8.79	12.5	9.01							0.00	87	6378	59	4325	82	6011	10.53	772								5.3	389		2.4	176	4.0	293	0.02	1.5				
8	Mon	0.00	8.72	14.5	9.25							0.00	188	13672	70	5091	191	13890	7.62	554	7.4	<	3.7		15.4		0.06	4.3	313	<	3.9	284	4.4	320	0.05	3.6				
9	Tue	0.00	8.78	12.0	9.50							0.00	147	10764	72	5272	134	9812	8.13	595	11.0		4.0		10.8		0.38	5.2	381		2.7	198	4.0	293	0.22	16.1				
10	Wed	0.00	10.42	17.0	10.00							0.00	187	16251	67	5822	144	12514	9.52	827	11.0		4.5		10.1		0.40	7.5	652		3.2	278	4.4	382	0.38	33.0				
11	Thu	0.00	10.94	17.0	9.88							0.00	106	9671	64	5839	96	8759	6.33	578	9.1		4.1		11.0		0.20	4.5	411		2.2	201	4.4	401	0.08	7.3				
12	Fri	0.00	10.77	16.0	9.48							0.00			73	6557	103	9252	12.40	1114			3.9		9.4		0.54				2.2	198	2.5	225	0.14	12.6				
13	Sat	0.00	10.71	19.0	9.19							0.00																												
14	Sun	0.20	13.65	20.0	12.85							0.00	89	10132	46	5237	94	10701	6.09	693								6.7	763	<	5.5	626	2.3	262	0.02	2.3				
15	Mon	0.30	12.91	18.0	13.31							0.00	70	7537	40	4307	77	8291	4.77	514	8.0		2.7		10.4		0.05	3.8	409		2.5	269	3.0	323	0.03	3.2				
16	Tue	0.00	12.22	17.0	11.71							0.00	106	10803	65	6624	79	8051	7.17	731	8.6		3.4		10.4		0.14	3.6	367	<	3.3	336	3.4	347	0.10	10.2				
17	Wed	0.00	12.25	17.0	12.01							0.00	107	10932	64	6539	90	9195	7.78	795	10.1		4.8		9.2		0.09	6.1	623		3.7	378	3.2	327	0.08	8.2				
18	Thu	0.00	12.07	17.0	11.52							0.00	103	10368	63	6342	76	7650	8.90	896	9.1		3.3		9.4		0.04	4.3	433	<	3.7	372	2.8	282	0.03	3.0				
19	Fri	0.01	12.02	17.0	11.31							0.00			58	5814	74	7418	7.95	797			2.9		10.0		0.05			<	3.0	301	2.0	200	0.03	3.0				
20	Sat	0.00	12.00	17.0	11.45							0.00																												
21	Sun	0.00	11.57	16.0	10.89							0.00	98	9456	57	5500	58	5597	7.76	749								3.8	367	<	3.3	318	0.4	39	0.03	2.9				
22	Mon	0.00	11.87	16.5	11.20							0.00	88	8712	56	5544	116	11484	9.07	898	4.9	<	3.5		9.3		0.06	4.3	426	<	3.5	346	0.6	59	0.04	4.0				
23	Tue	0.00	11.71	17.0	10.93							0.00	84	8204	68	6641	87	8497	7.06	689	6.5	<	3.5		6.8		0.04	3.0	293	<	3.5	342	1.4	137	0.03	2.9				
24	Wed	0.00	11.89	17.0	11.00							0.00	100	9916	61	6049	105	10412	6.89	683	6.9	<	3.5		9.0		0.06	3.1	307	<	3.5	347	3.2	317	0.03	3.0				
25	Thu	0.00	11.60	16.0	10.23							0.00	132	12770	79	7643	116	11222	7.00	677	7.2		3.3		9.6		0.05	3.6	348	<	4.0	387	3.0	290	0.03	2.9				
26	Fri	0.00	11.58	17.0	10.32							0.00			46	4443	102	9851	10.20	985		<	3.1		8.4		0.04			<	3.2	309	2.4	232	0.03	2.9				
27	Sat	0.00	11.59	17.5	9.79							0.00																												
28	Sun	0.00	10.87	16.5	9.53							0.00	83	7524	74	6709	72	6527	8.15	739								3.7	335	<	3.1	281	3.0	272	0.04	3.6				
29	Mon	0.57	19.33	40.0	16.90	88.800	2.160	21.600	0.375	162.600	3.560	0.00	132	21280	90	14509	232	37401	7.72	1245	22.0		8.2		55.8		0.26	16.0	2579		5.5	887	30.6	4933	0.23	37.1				
30	Tue	0.20	15.87	30.0	15.55							0.00	234	30971	106	14030	530	70149	6.38	844	14.0		6.3		15.7		0.83	6.9	913		4.4	582	4.2	556	0.41	54.3				
31	Wed	0.01	14.17	19.5	13.13							0.00	72	8509	54	6382	75	8863	6.33	748	6.9		3.5		9.4		0.02	4.1	485	<	3.5	414	0.6	71	< 0.02	2.4				
Total		1.29	350.13		334.10	88.80	2.16	21.60	0.38		3.56	0.00																												
Mean			11.29		10.78	88.80	2.16	21.60	0.38		3.56	0.00	118	11274	65	6259	125	12517	7.83	736	9.6		4.1		12.4		0.17	5.4	543		3.5	339	4.0	442	0.09	9.2				
Maximum		0.57	19.33	40.0	16.90	88.80	2.16	21.60	0.38		3.56	0.00	234	30971	106	14509	530	70149	12.40	1245	22.0		8.2		55.8		0.83	16.0	2579		5.5	887	30.6	4933	0.41	54.3				
Minimum			8.37		8.52	88.80	2.16	21.60	0.38		3.56	0.00	70	6378	40	3885	58	5597	4.77	435	4.9		2.7		6.8		0.02	3.0	252		2.2	176	0.4	39	0.02	1.5				
# of Data		31	31	31	31	1	1	1	1		1	31	23	23	27	27	27	27	27	27	19		23		23		23	23	23		27	27	27	27	27	27				
# of Data<MDL																					0		5					4			15				1					
			8.70		9.15								142	10397	70	5109	142	10354	8.21	600								5.8	447		3.6	275	4.0	303	0.10	8.1				
			11.66		10.92								112	10879	59	5731	99	9595	7.71	743								5.2	498		3.2	302	3.3	306	0.13	10.8				
			11.93		11.33								96	9534	61	6063	84	8307	8.09	804								4.3	409		3.5	326	1.7	166	0.04	3.8				
			12.00		11.44								100	10054	61	6061	82	8232	8.11	811								4.4	424		3.4	326	2.1	200	0.05	5.0				

Total Est. Bypass Flow (MG): 6.10 Total Bypass Occurances (days/month): 1

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges (1)						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Thu	0.00	13.43	19.0	12.66							0.00	82	9185	53	5936	61	6832	6.38	715	9.0	< 4.0	12.0	0.11	5.6	627	4.6	515	1.8	202	0.04	4.5		
2	Fri	0.00	13.32	19.0	12.90							0.00			49	5443	100	11109	6.16	684		< 4.6	10.8	0.05			< 4.6	511	2.7	300	0.02	2.2		
3	Sat	0.00	12.78	17.0	12.29							0.00																					
4	Sun	0.03	12.92	17.0	12.31	–						0.00	102	10991	66	7112	79	8512	4.03	434					5.4	582	4.1	442	1.2	129	< 0.02	2.2		
5	Mon	0.00	12.65	18.0	11.84							0.00	76	8018	48	5064	95	10023	4.64	490	8.4	< 4.6	9.8	<0.02	4.0	422	< 4.6	485	2.4	253	< 0.02	2.1		
6	Tue	0.14	14.06	22.0	12.96	0.190	0.200					0.00	69	8091	48	5628	72	8443	5.43	637	6.6	< 4.6	7.4	0.05	4.6	539	< 4.6	539	0.4	47	0.07	8.2		
7	Wed	0.02	12.57	17.0	11.73							0.00	107	11217	55	5766	101	10588	5.88	616	8.2	4.6	8.8	0.03	4.7	493	< 3.7	388	1.2	126	0.05	5.2		
8	Thu	0.43	15.06	40.0	13.74	1.910	1.900	12.000	1.470	109.200	23.890	0.00	84	10550	42	5275	84	10550	3.98	500	4.8	3.8	10.4	0.03	5.4	678	4.2	528	2.8	352	0.04	5.0		
9	Fri	0.66	18.48	39.5	18.37	1.200	1.200	337.800	5.860	78.600	17.190	0.00			62	9556	266	40997	3.58	552		< 4.3	12.1	0.11			< 4.3	663	1.6	247	0.04	6.2		
10	Sat	0.00	17.44	29.0	16.64			12.600	0.220			0.00																					
11	Sun	0.00	16.37	28.0	15.92							0.00	69	9420	36	4915	71	9693	4.26	582					5.0	683	< 4.6	628	2.2	300	0.04	5.5		
12	Mon	0.00	16.32	28.0	15.83							0.00	90	12250	47	6397	100	13611	4.03	549	7.8	< 4.6	8.2	0.03	5.0	681	< 4.6	626	1.0	136	0.02	2.7		
13	Tue	0.05	15.76	28.0	15.05							0.00	109	14327	54	7098	127	16693	3.92	515	7.1	< 4.6	8.8	0.03	5.4	710	< 4.6	605	1.5	197	0.07	9.2		
14	Wed	0.11	16.92	30.5	15.79							0.00	104	14676	70	9878	131	18486	4.59	648	7.2	< 4.6	6.8	0.04	4.6	649	< 4.6	649	1.2	169	< 0.01	1.4		
15	Thu	0.00	15.27	20.0	14.79							0.00	90	11462	48	6113	104	13245	4.00	509	6.5	< 4.0	6.0	0.03	4.6	586	< 4.0	509	1.4	178	0.01	1.3		
16	Fri	0.00	14.91	19.5	15.58							0.00			58	7212	193	23999	7.08	880		< 4.6	8.2	0.04			< 4.6	572	1.9	236	< 0.02	2.5		
17	Sat	0.00	14.07	18.5	14.69							0.00																					
18	Sun	0.00	13.72	18.0	14.09							0.00	162	18537	51	5836	124	14189	5.04	577					5.0	572	< 4.2	481	2.2	252	0.03	3.4		
19	Mon	0.00	13.58	18.0	13.57							0.00	131	14837	67	7588	165	18687	7.56	856	5.6	< 4.3	8.6	0.06	5.0	566	< 4.3	487	2.2	249	0.03	3.4		
20	Tue	0.00	13.37	20.0	13.19							0.00	132	14719	74	8251	207	23082	7.22	805	4.7	3.5	9.6	0.11	3.3	368	2.9	323	1.6	178	0.10	11.2		
21	Wed	0.00	13.31	18.5	13.02							0.00	135	14986	54	5994	151	16762	4.87	541	6.6	< 4.3	10.2	0.04	5.0	555	< 4.3	477	1.8	200	0.07	7.8		
22	Thu	0.00	12.92	17.0	12.27							0.00	90	9698	62	6681	172	18533	6.22	670	3.0	< 4.3	6.8	0.13	5.0	539	< 4.3	463	3.2	345	0.07	7.5		
23	Fri	0.00	12.75	17.0	11.81							0.00			57	6061	146	15525	5.91	628		3.4	5.6	0.06			3.4	362	2.0	213	0.03	3.2		
24	Sat	1.43	17.19	40.0	17.35	5.420	5.700	361.200	6.270	19.200		0.74																					
25	Sun	0.02	14.86	19.0	14.97			89.400	1.550			1.33	82	10162	45	5577	137	16979	3.08	382					5.0	620	< 4.3	533	2.8	347	0.04	5.0		
26	Mon	0.00	16.01	21.0	15.66							0.55	109	14554	64	8545	135	18026	3.75	501	6.6	< 4.6	9.4	0.11	5.2	694	< 4.2	561	2.2	294	0.03	4.0		
27	Tue	0.00	15.97	20.0	16.20							0.28	121	16116	46	6127	190	25306	4.26	567	5.0	< 4.2	9.2	0.06	5.0	666	< 4.2	559	1.8	240	0.06	8.0		
28	Wed	0.00	15.58	14.0	15.74							0.08	120	15592	55	7147	166	21570	4.65	604	6.5	< 4.2	7.6	0.04	5.0	650	< 4.2	546	1.4	182	0.04	5.2		
Total		2.89	411.59		400.96	8.72	9.00	813.00	15.37		41.08	2.98																					
Mean			14.70		14.32	2.18	2.25	162.60	3.07		20.54	0.11	103	12469	55	6633	132	16310	5.02	602	6.5	4.3	8.8	0.06	4.9	594	4.3	519	1.9	224	0.04	4.9		
Maximum		1.43	18.48	40.0	18.37	5.42	5.70	361.20	6.27		23.89	1.33	162	18537	74	9878	266	40997	7.56	880	9.0	4.6	12.1	0.13	5.6	710	4.6	663	3.2	352	0.10	11.2		
Minimum			12.57		11.73	0.19	0.20	12.00	0.22		17.19	0.00	69	8018	36	4915	61	6832	3.08	382	3.0	3.4	5.6	0.03	3.3	368	2.9	323	0.4	47	0.01	1.3		
# of Data		28	28	28	28	4	4	5	5		2	28	20	20	24	24	24	24	24	24	16	20	20	19	20	20	24	24	24	24	24	24		
# of Data<MDL																					0	16			13		19				4			
Wk1: 02/03-02/09/00			14.07		13.32								88	9773	54	6400	116	14843	4.59	538					4.8	505	4.3	479	1.6	181	0.04	4.5		
Wk2: 02/10-02/16/00			16.14		15.66								92	12427	52	6935	121	15954	4.65	614					4.9	635	4.5	582	1.5	198	0.03	3.6		
Wk3: 02/17-02/23/00			13.39		13.23								130	14555	61	6735	161	17796	6.14	680					4.7	514	3.9	424	2.2	234	0.06	5.9		
Wk4: 02/24-02/28/00			13.70		13.77								130	14555	61	6735	169	17796	6.33	680					4.7	514	4.1	424	2.2	242	0.05	5.9		

Total Est. Bypass Flow (MG): 65.45 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MARCH 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data							
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005										
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)	Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0								
1	Thu		15.08	19.0	14.88							0.08	96	12074	59	7420	102	12828	5.38	677
2	Fri		14.73	25.0	13.90										99	12162	153	18796	7.00	860
3	Sat		14.13		13.75							0.03								
4	Sun		13.51		12.95							0.01	79	8901	44	4958	64	7211	5.10	575
5	Mon		13.27	18.5	13.28								61	6751	48	5312	79	8743	6.50	719
6	Tue		13.36	18.0	12.84								78	8691	60	6685	66	7354	6.38	711
7	Wed		13.89	20.0	13.22								125	14480	51	5908	151	17492	5.49	636
8	Thu		13.35	18.0	12.50								138	15365	48	5344	245	27278	6.44	717
9	Fri		12.90	18.0	12.28										85	9145	242	26036	9.44	1016
10	Sat		12.65	17.5	12.01															
11	Sun	0.12	13.59	22.0	13.15								146	16548	55	6234	242	27428	5.99	679
12	Mon	0.10	13.48	23.5	12.99								145	16301	58	6521	206	23159	5.04	567
13	Tue		12.39	19.0	12.14								106	10953	74	7647	96	9920	6.78	701
14	Wed	0.07	12.84	19.0	12.39								139	14885	61	6532	163	17455	6.83	731
15	Thu	0.33	14.94	32.0	14.95								110	13706	59	7351	168	20933	6.38	795
16	Fri	0.13	14.88	22.0	15.44										45	5584	67	8315	5.21	647
17	Sat	0.09	14.73	28.0	14.23															
18	Sun		13.45	21.0	14.52								78	8749	43	4823	87	9759	4.96	556
19	Mon		12.92	19.0	13.39								117	12607	53	5711	138	14870	7.39	796
20	Tue		13.23	19.0	13.47								151	16661	64	7062	221	24385	7.73	853
21	Wed		13.43	19.0	13.38								114	12769	60	6720	114	12769	7.56	847
22	Thu		13.12	19.0	12.66								136	14881	62	6784	188	20571	8.01	876
23	Fri		13.20	17.0	12.59										54	5945	166	18275	7.84	863
24	Sat		12.72	17.5	11.74															
25	Sun		12.81	17.0	11.95								130	13889	58	6196	233	24893	5.63	601
26	Mon		12.88	18.0	11.91								85	9131	49	5264	115	12353	5.03	540
27	Tue		12.67	18.0	11.37								121	12786	46	4861	138	14582	7.84	828
28	Wed		12.51	17.0	11.28								136	14189	62	6469	232	24205	7.45	777
29	Thu	0.01	12.25	17.0	10.89								131	13384	61	6232	233	23804	8.62	881
30	Fri		12.01	19.0	10.70										77	7713	225	22537	8.23	824
31	Sat	0.05	11.74	17.0	10.36															
Total		0.90	412.66		397.11	0.00	0.00	0.00	0.00		0.00	0.12								
Mean			13.31		12.81							0.04	115	12748	59	6561	159	17537	6.70	741
Maximum		0.33	15.08	32.0	15.44	0.00	0.00	0.00	0.00		0.00	0.08	151	16661	99	12162	245	27428	9.44	1016
Minimum			11.74		10.36	0.00	0.00	0.00	0.00		0.00	0.01	61	6751	43	4823	64	7211	4.96	540
# of Data		8	31	29	31	0	0	0	0		0	3	21	21	26	26	26	26	26	26
# of Data<MDL																				
Wk1: 10/03-10/09/01			13.49		12.97								96	10838	56	6152	141	15686	6.56	729
Wk2: 10/10-10/16/01			13.54		13.30								129	14479	59	6680	157	17868	6.04	687
Wk3: 10/17-10/23/01			13.44		13.46								119	13134	56	6174	152	16771	7.25	799
Wk4: 10/24-10/30/01			13.68		13.87								119	13134	55	6149	136	15111	6.81	763

Date	Day of Week	Clarifier Effluent Data								Final Effluent Data									
		TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)		TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100
Design Criteria		<MDL		<MDL		10		1.5		Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL		888 AML 1339 AWL		8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML	
1	Thu	8.5	<	4.2		7.4		0.03	<	5.0	629	4.2	<	528		1.9	239	0.04	5.0	
2	Fri		<	4.2		8.0		0.05				4.2	<	516		0.9	111	0.02	2.5	
3	Sat																			
4	Sun									2.7	304	3.5	<	394		1.2	135	0.03	3.4	
5	Mon	4.6	<	4.0		11.8		0.03	<	4.6	509	4.0	<	443		3.0	332	0.02	2.2	
6	Tue	7.1	<	4.0		10.0		0.04		4.0	446	4.0	<	446		1.2	134	0.02	2.2	
7	Wed	8.0	<	4.0		13.2		0.04		3.6	417	4.0	<	463		1.0	116	0.03	3.5	
8	Thu	6.6	<	4.2		13.0		0.21	<	5.0	557	4.2	<	468		2.6	289	0.08	8.9	
9	Fri		<	4.2		10.2		0.04				4.2	<	452		1.0	108	0.03	3.2	
10	Sat																			
11	Sun									3.2	363	3.0	<	340		2.2	249	0.03	3.4	
12	Mon	6.9		2.2		13.4		0.04		2.7	304	1.6		180		3.0	337	0.03	3.4	
13	Tue	10.4		3.4		13.2		0.03		4.3	444	4.2	<	434		2.4	248	0.02	2.1	
14	Wed	7.7		4.0		13.6		0.05	<	4.6	493	4.0	<	428		2.6	278	0.04	4.3	
15	Thu	13.2		3.9		15.6		0.06		4.9	611	4.2	<	523		2.7	336	0.04	5.0	
16	Fri		<	4.2		12.8		0.06				4.2	<	521		1.8	223	0.02	2.5	
17	Sat																			
18	Sun									4.4	494	4.0	<	449		2.4	269	0.04	4.5	
19	Mon	11.0		5.0		2.8		0.05		6.0	647	4.0		431		2.2	237	0.02	2.2	
20	Tue	9.9	<	4.6		16.6		0.05	<	5.5	607	4.6	<	508		2.4	265	0.04	4.4	
21	Wed	11.7		10.2		18.4		0.03	<	5.4	605	4.6	<	515		3.0	336	0.02	2.2	
22	Thu	10.8	<	4.6		17.8		0.04	<	5.4	591	4.6	<	503		2.6	284	0.03	3.3	
23	Fri		<	4.2		18.6		0.10				4.2	<	462		2.8	308	0.07	7.7	
24	Sat																			
25	Sun								<	3.3	353	3.0	<	321		3.0	321	0.03	3.2	
26	Mon	9.4		3.3		19.4		0.06	<	4.3	462	3.7	<	397		1.6	172	0.02	2.1	
27	Tue	5.0	<	4.2		19.3		0.04	<	5.0	528	4.2	<	444		2.6	275	0.02	2.1	
28	Wed	10.0		3.8		20.6		0.04		4.4	459	2.8		292		2.2	230	0.03	3.1	
29	Thu	8.0	<	3.7		20.2		0.08	<	4.3	439	3.7	<	378		3.0	306	0.07	7.2	
30	Fri		<	5.0		17.2		0.07				5.0	<	501		1.3	130	0.02	2.0	
31	Sat																			
Total																				
Mean		8.8		4.3		14.2		0.06		4.4	489	3.9		436		2.2	241	0.03	3.7	
Maximum		13.2		10.2		20.6		0.21		6.0	647	5.0		528		3.0	337	0.08	8.9	
Minimum		4.6		2.2		2.8		0.03		2.7	304	1.6		180		0.9	108	0.02	2.0	
# of Data		17		22		22		22		21	21	26		26		26	26	26	26	
# of Data<MDL		1		14						11		23						0		
Wk1: 10/03-10/09/01										4.0	430	4.0		426		1.7	179	0.04	3.7	
Wk2: 10/10-10/16/01										3.9	433	3.5		401		2.5	274	0.03	3.4	
Wk3: 10/17-10/23/01										5.3	599	4.3		481		2.6	285	0.04	4.1	
Wk4: 10/24-10/30/01										5.3	599	4.3		498		2.4	274	0.03	3.3	

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR MAY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Tue	0.00	11.10	11.0	10.34							0.00	164	15182	72	6665	212	19626	11.00	1018	7.7	2.7	12.0	0.19	< 3.3	305	< 3.0	278	4.4	407	0.10	9.3	17	10
2	Wed	0.00	10.40	17.0	11.26							0.01	124	10755	71	6158	205	17781	9.01	781	8.2	< 3.5	10.8	0.29	< 4.0	347	< 3.5	304	2.2	191	0.12	10.4		
3	Thu	0.00	11.02	17.0	9.90							0.01	136	12499	61	5606	186	17095	7.34	675	8.5	3.4	12.0	0.48	< 3.5	322	< 3.2	294	2.0	184	0.21	19.3	19	14
4	Fri	0.00	11.07	15.5	9.66							0.00			71	6555	220	20311	11.20	1034		< 4.0	13.8	0.25			< 4.0	369	1.6	148	0.17	15.7	4	3
5	Sat	0.19	11.76	32.5	11.41							0.00																					37	28
6	Sun	0.14	11.49	29.0	11.18							0.00	86	8241	78	7474	66	6325	10.60	1016					5.2	498	3.0	287	5.8	556	0.04	3.8		
7	Mon	0.00	11.00	18.0	10.52							0.00	62	5688	57	5229	96	8807	10.20	936	5.7	< 3.0	13.6	0.17	< 3.3	303	< 3.0	275	5.4	495	0.10	9.2	3	7
8	Tue	0.00	10.81	16.0	10.06							0.00	171	15417	68	6131	230	20736	10.20	920	8.0	2.9	12.6	0.34	2.8	252	< 3.2	288	3.0	270	0.21	18.9	22	15
9	Wed	0.00	10.71	16.0	9.74							0.00	159	14202	60	5359	194	17328	6.33	565	6.0	2.6	10.4	0.12	< 3.3	295	< 3.0	268	3.0	268	0.11	9.8	4	13
10	Thu	0.11	11.75	22.0	11.34							0.00	125	12249	48	4704	196	19207	8.23	806	7.7	< 3.5	9.4	0.11	< 4.0	392	< 3.5	343	2.3	225	0.11	10.8	5	4
11	Fri	0.17	11.50	22.5	11.47							0.01			49	4700	83	7961	7.84	752		< 5.0	11.0	0.27			< 5.0	480	2.0	192	0.13	12.5	1	< 1
12	Sat	0.00	9.90	15.0	8.81							0.00																					3	6
13	Sun	0.00	10.48	15.0	8.47							0.00	103	9003	56	4895	144	12586	6.69	585					< 3.5	306	< 3.1	271	2.0	175	0.07	6.1		
14	Mon	0.38	12.51	40.0	11.01							0.00	100	10433	67	6990	324	33804	9.55	996	4.2	< 3.5	13.9	0.40	< 4.0	417	< 3.5	365	3.2	334	0.23	24.0	3	1
15	Tue	0.00	11.04	17.0	9.22							0.00	68	6261	59	5432	108	9944	7.67	706	8.3	2.8	12.8	0.59	< 3.3	304	< 3.0	276	3.2	295	0.38	35.0	7	12
16	Wed	0.47	13.37	40.0	12.45	46.200	1.100	79.200	1.400	84.000	1.810	0.09	95	10593	50	5575	188	20963	8.85	987	9.6	3.6	16.8	0.36	< 3.7	413	< 3.3	368	4.4	491	0.35	39.0	16	12
17	Thu	0.00	11.45	19.0	10.75							0.00	153	14610	65	6207	203	19385	11.80	1127	7.2	< 3.0	9.2	0.34	< 3.3	315	< 3.0	286	1.0	95	0.18	17.2	4	9
18	Fri	0.03	11.12	17.0	10.74							0.00			68	6306	233	21609	8.96	831		< 4.0	10.0	0.29			< 4.0	371	2.5	232	0.14	13.0	4	20
19	Sat	0.00	11.55	16.0	9.46							0.00																					6	8
20	Sun	0.00	10.62	18.0	9.58							0.00	88	7794	70	6200	89	7883							< 4.6	407	< 4.0	354	1.8	159	0.07	6.2		
21	Mon	0.73	15.65	40.0	16.03			27.000	0.500	67.200	1.500	0.13	110	14357	64	8353	195	25452	7.82	1021	7.3	< 3.0	17.4	0.17	< 3.3	431	< 3.0	392	3.2	418	0.05	6.5	24	21
22	Tue	0.00	10.45	45.0	9.79							0.11	72	6275	50	4358	56	4881	10.30	898	8.8	2.8	10.9	0.11	< 4.0	349	< 3.5	305	1.8	157	0.11	9.6	7	10
23	Wed	0.14	11.14	19.0	10.81							0.04	76	7061	69	6411	122	11335	8.34	775	9.3	3.0	12.0	0.75	< 3.3	307	< 3.0	279	2.2	204	0.54	50.2	11	8
24	Thu	0.13	11.19	27.0	10.77							0.00	104	9706	75	6999	117	10919	9.52	888	5.2	2.6	10.6	0.33	2.7	252	2.2	205	2.2	205	0.23	21.5	4	3
25	Fri	0.29	11.54	21.0	11.16							0.00			60	5775	55	5293	9.30	895		< 5.0	9.4	0.46			< 5.0	481	1.0	96	0.30	28.9	3	8
26	Sat	0.89	13.75	24.5	14.49	121.200	2.900	202.800	3.500	130.800	2.900	0.29																					8	2
27	Sun	0.37	14.10	26.0	16.16	61.200	1.500	153.000	2.700	57.000	1.200	1.01	72	8467	51	5997	50	5880	9.07	1067					< 5.0	588	< 4.2	494	0.8	94	0.11	12.9		
28	Mon	0.00	11.48	22.5	12.33							0.51	57	5457	45	4308	64	6128	7.32	701	3.1	< 3.0	13.0	0.08	< 3.3	316	< 3.0	287	1.6	153	0.08	7.7	26	21
29	Tue	0.00	11.81	18.5	12.59							0.31	70	6895	46	4531	69	6796	9.14	900	7.9	< 4.0	11.0	0.26	< 5.0	492	< 4.0	394	4.6	453	0.09	8.9	2	7
30	Wed	0.00	11.93	18.5	12.55							0.13	98	9751	66	6567	135	13432	6.50	647	3.2	< 3.0	12.6	0.30	< 3.3	328	< 3.0	298	4.8	478	0.22	21.9	6	14
31	Thu	0.42	13.56	40.0	14.46	50.400	1.200	55.800	1.000	52.800	1.200	0.18	178	20130	79	8934	311	35171	7.84	887	9.1	7.7	17.2	0.37	2.8	317	2.7		3.0	339	0.26	29.4	9	10
Total		4.46	361.25		348.51	279.00	6.70	517.80	9.10		8.61	2.83																						
Mean			11.65		11.24	69.75	1.68	103.56	1.82		1.72	0.09	107	10479	62	6016	154	15061	8.87	862	7.1	3.5	12.3	0.31	3.7	359	3.4	331	2.8	271	0.17	16.9	9.81	10.27
Maximum		0.89	15.65	45.0	16.16	121.20	2.90	202.80	3.50		2.90	1.01	178	20130	79	8934	324	35171	11.80	1127	9.6	7.7	17.4	0.75	5.2	588	5.0	494	5.8	556	0.54	50.2	37.00	28.00
Minimum			9.90		8.47	46.20	1.10	27.00	0.50		1.20	0.00	57	5457	45	4308	50	4881	6.33	565	3.1	2.6	9.2	0.08	2.7	252	2.2	205	0.8	94	0.04	3.8	1.00	1.00
# of Data		31	31	31	31	4	4	5	5		5	31	23	23	27	27	27	27	26	26	19	23	23	23	23	23	27	27	27	27	27	27	26	26
# of Data<MDL																					0	13			19		24				0		0	1
Wk1:			11.12		10.35								123	11209	66	6059	165	15100	9.31	858					3.6	313	3.2	274	3.5	301	0.14	11.7	15	13
Wk2:			11.51		10.40								98	8090	55	5383	174	17411	8.14	805					3.7	326	3.6	321	2.9	258	0.21	19.1	6	6
Wk3:			11.71		11.02								100	10020	64	6306	150	15083	9.44	664					3.7	346	3.4	317	2.1	205	0.18	16.4	9	13
Wk4:			12.03		11.26								104	10726	61	6167	161	16688	9.55	695					3.8	363	3.5	329	2.5	248	0.15	14.4	10	13

Total Est. Bypass Flow (MG): 24.41 Total Bypass Occurances (days/month): 5

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JUNE 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Fri	0.08	13.66	26.0	14.96							0.35			56	6380	122	13899	7.84	893			3.8	12.6	0.21			< 4.3	490	1.8	205	0.13	14.8	9	10
2	Sat	0.06	11.87	18.0	12.69							0.20																					4	2
3	Sun	0.00	11.41	16.0	11.82							0.12	50	4758	40	3806	35	3331	6.16	586					< 5.5	523	< 4.6	438	0.6	57	0.04	3.8		
4	Mon	0.00	11.96	17.0	12.45							0.08	143	14264	64	6384	219	21844	6.72	670	12.0	3.3	12.2	0.20	< 5.0	499	< 4.3	429	4.6	459	0.12	12.0	4	7
5	Tue	0.95	16.49	37.0	16.92	170.400	4.100	252.000	4.400	169.800	3.750	0.95	83	11415	62	8527	138	18979	4.76	655	12.0	< 4.3	22.6	0.27	< 5.0	688	< 4.3	591	3.6	495	0.27	37.1	56	48
6	Wed	0.06	13.97	20.0	14.43							0.91	63	7340	50	5825	70	8156	4.40	513	9.1	< 4.3	13.8	0.42	< 5.0	583	< 4.3	501	2.8	326	0.30	35.0	6	8
7	Thu	0.00	15.08	19.0	13.22							0.39	104	13080	38	4779	125	15721	5.04	634	8.7	< 4.3	8.7	0.19	< 5.0	629	< 4.3	541	0.6	75	0.16	20.1	12	8
8	Fri	0.00	13.33	20.0	13.16							0.17			56	6226	228	25347	6.10	678		< 4.3	12.4	0.21			< 4.3	478	0.8	89	0.12	13.3	7	12
9	Sat	0.00	12.83	19.0	12.06							0.80																					13	21
10	Sun	0.00	12.63	18.0	11.58							0.40	125	13167	38	4003	127	13377	7.84	826					< 4.6	485	< 4.0	421	2.2	232	0.11	11.6		
11	Mon	0.00	12.98	19.0	12.11							0.12	97	10501	35	3789	146	15805	6.78	734	7.0	< 4.3	11.2	0.89	< 5.0	541	< 4.3	465	2.4	260	0.65	70.4	24	15
12	Tue	1.40	20.50	40.0	20.15	193.200	4.720	181.200	3.200	237.600	6.460	3.00	107	18294	38	6497	158	27013	5.77	986	13.0	< 4.3	20.0	0.53	< 5.0	855	< 4.3	735	3.2	547	0.42	71.8	340	280
13	Wed	0.00	16.00	27.5	16.89							1.10	42	5604	24	3203	57	7606	5.68	758	7.8	4.3	6.6	0.65	< 5.0	667	< 4.3	574	1.4	187	0.26	34.7	260	
14	Thu	0.15	15.98	33.5	16.54							0.44	96	12794	35	4665	141	18792	4.54	605	7.4	< 4.3	6.0	0.11	< 5.0	666	< 4.3	573	1.8	240	0.09	12.0	30	32
15	Fri	0.00	14.95	27.5	15.64							0.02			32	3990			4.70	586		< 4.3	10.3	0.34			< 4.3	536	2.0	249	0.06	7.5	270	100
16	Sat	0.00	13.78	19.5	14.32							0.01																					210	240
17	Sun	0.05	13.09	18.0	13.08							0.00	45	4913	35	3821	50	5459	5.49	599					< 5.0	546	< 4.3	469	5.8	633	0.05	5.5		
18	Mon	0.00	13.69	19.0	13.73							0.00	56	6394	46	5252	86	9819	6.61	755	7.4	< 4.3	6.0	0.26	< 5.0	571	4.5	514	0.8	91	0.14	16.0	75	39
19	Tue	0.00	13.83	19.0	13.98							0.00	55	6344	33	3806	65	7497	5.15	594	7.6	< 4.3	9.6	0.10	< 5.0	577	< 4.3	496	1.0	115	0.05	5.8	98	85
20	Wed	0.00	13.26	18.5	13.73							0.00	62	6856	44	4866	74	8184	7.50	829	8.4	< 4.3	9.4	0.22	< 5.0	553	< 4.3	476	2.0	221	0.08	8.8	74	70
21	Thu	0.93	15.70	36.0	15.52	121.200	2.950	148.200	3.200	114.600	2.510	0.66	40	5238	34	4452	60	7856	5.32	697	9.6	< 4.3	11.4	0.20	< 5.0	655	< 4.3	563	0.4	52	0.08	10.5	76	69
22	Fri	0.00	13.55	23.0	13.69							0.56			42	4746	90	10171	7.96	900		< 4.3	10.0	0.19			< 4.3	486	1.6	181	0.07	7.9	56	36
23	Sat	0.00	12.94		13.28							0.27																					17	23
24	Sun	0.00	12.75	17.0	12.98							0.12	51	5423	38	4041	47	4998	8.06	857					< 5.4	574	< 4.6	489			0.07	7.4		
25	Mon	0.00	13.18	19.0	14.14							0.00	80	8794	33	3627	112	12311	10.14	1115	7.2	< 4.0	15.4	0.20	< 4.6	506	< 4.0	440	0.8	88	0.11	12.1	17	18
26	Tue	0.00	13.15	18.0	13.96							0.00	98	10748	39	4277	106	11625	11.82	1296	6.6	< 4.3	10.8	0.32	< 5.0	548	< 4.3	472	0.4	44	0.19	20.8	12	7
27	Wed	0.00	13.56	18.0	13.77							0.00	167	18886	52	5881	129	14589	5.66	640	16.0	6.2	12.2	0.61	8.2	927	6.2	701	1.6	181	0.42	47.5	26	30
28	Thu	0.00	13.00	19.0	13.03							0.00	130	14095	55	5963	83	8999	6.44	698	18.0	7.8	9.8	0.33	10.4	1128	7.8	846	1.2	130	0.19	20.6	52	25
29	Fri	0.00	13.09	18.0	13.14							0.00			42	4585	97	10590	6.98	762		< 4.3	14.4	0.26			< 4.3	469	1.6	175	0.09	9.8	30	18
30	Sat	0.00	12.64	17.0	12.64							0.00																					48	33
Total		3.68	414.85		419.61	484.80	11.77	581.40	10.80		12.72	10.67																						
Mean			13.83		13.99	161.60	3.92	193.80	3.60		4.24	0.36	85	9945	42	4936	107	12582	6.54	755	9.9	4.5	11.7	0.32	5.4	636	4.5	528	1.9	222	0.17	20.7	70.23	58.31
Maximum		1.40	20.50	40.0	20.15	193.20	4.72	252.00	4.40		6.46	3.00	167	18886	64	8527	228	27013	11.82	1296	18.0	7.8	22.6	0.89	10.4	1128	7.8	846	5.8	633	0.65	71.8	340.00	280.00
Minimum			11.41		11.58	121.20	2.95	148.20	3.20		2.51	0.00	40	4758	24	3203	35	3331	4.40	513	6.6	3.3	6.0	0.10	4.6	485	4.0	421	0.4	44	0.04	3.8	4.00	2.00
# of Data		30	30	29	30	3	3	3	3		3	30	20	20	25	25	24	24	25	25	16	21	21	21	20	20	25	25	24	24	25	25	26	26
# of Data<MDL																					0	16			18		22				0		0	0
Wk1: 06/03-06/09/2001			13.58		13.44								89	10171	52	5925	136	15563	5.53	623					5.1	584	4.4	500	2.2	256	0.17	20.2	16	17
Wk2: 06/10-06/16/2001			15.26		15.32								93	12072	34	4358	126	16519	5.89	749					4.9	637	4.3	550	2.2	283	0.27	34.0	189	158
Wk3: 06/17-06/23/2001			13.72		13.86								52	5949	39	4491	71	8164	6.34	729					5.0	584	4.3	504	1.9	217	0.08	7.8	66	54
Wk4: 06/24-06/30/2001			13.84		14.01								52	5949	39	4491	71	8164	6.34	729					5.0	584	4.3	504	1.9	217	0.08	7.8	98	90

Total Est. Bypass Flow (MG): 35.29 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JULY 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100 mLs)	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sun	0.00	12.12	16.0	11.17							0.02	96	9704	38	3841	134	13545	7.39	747					< 5.0	505	< 4.3	435	3.6	364	0.07	7.1		
2	Mon	0.00	12.24	17.0	10.97								119	12148	46	4696	179	18273	6.72	686	6.3	4.0	14.2	0.11	< 4.6	470	< 4.0	408	1.0	102	0.03	3.1	32	24
3	Tue	0.42	14.26	40.0	13.80	64.800	1.600	80.400	1.400	67.200	1.470		63	7492	44	5233	104	12369	8.40	999	6.4	4.0	12.4	0.19	< 4.6	547	< 4.0	476	5.2	618	0.11	13.1	400	300
4	Wed	0.00	12.05	16.5	11.77								39	3919	36	3618	35	3517	6.22	625	8.2	4.0	13.4	0.10	< 4.6	462	< 4.0	402	2.4	241	0.02	2.0	250	110
5	Thu	0.00	11.79	16.0	11.69								35	3442	29	2852	47	4621	7.84	771	8.7	4.0	13.0	0.65	< 4.6	452	< 4.0	393	1.8	177	0.29	28.5	23	20
6	Fri	0.00	12.28	17.0	9.81									0	39	3994	128	13109	9.18	940		4.0	12.0	0.22			< 4.0	410	1.6	164	0.04	4.1	360	75
7	Sat	0.15	13.38	29.5	14.29																												33	32
8	Sun	0.00	11.73	16.0	11.31								64	6261	42	4109	101	9881	7.84	767					< 3.3	323	< 3.0	293	2.0	196	0.07	6.8		
9	Mon	0.00	12.60	18.0	12.51								108	11349	44	4624	189	19861	6.94	729	7.2	4.0	9.2	0.12	< 4.6	483	< 4.0	420	2.2	231	0.06	6.3	44	36
10	Tue	0.00	12.28	17.5	11.59								77	7886	37	3789	112	11471	6.72	688	7.7	4.0	13.6	0.08	< 4.6	471	< 4.0	410	5.8	594	0.04	4.1	300	130
11	Wed	0.00	12.41	17.0	12.28								117	12109	40	4140	164	16974	6.44	667	6.4	4.0	8.0	0.24	< 4.6	476	< 4.0	414	0.7	72	0.13	13.5	250	130
12	Thu	0.00	12.32	17.0	11.21								78	8014	25	2569	71	7295	7.84	806	5.5	3.5	7.4	0.71	< 4.0	411	< 3.5	360	1.5	154	0.32	32.9	26	18
13	Fri	0.00	12.45	17.0	10.59									0	36	3738	272	28243	10.10	1049		4.0	8.4	0.24			< 4.0	415	2.0	208	0.29	30.1	40	33
14	Sat	0.00	12.01	16.0	10.88																									0			11	5
15	Sun	0.00	11.98	16.0	10.82								64	6394	29	2897	81	8093	8.77	876					< 4.3	430	< 3.7	370	1.5	150	0.03	3.0		
16	Mon	0.00	12.41	17.0	11.74								101	10453	34	3519	131	13558	8.46	876	6.7	4.0	10.2	0.28	3.7	383	3.3	342	3.4	352	0.12	12.4	19	40
17	Tue	0.69	14.02	34.0	13.22					40.200	0.900		102	11927	61	7133	160	18708	7.28	851	7.7	3.4	10.2	0.15	< 4.3	503	< 3.7	433	2.2	257	0.07	8.2	59	55
18	Wed	0.02	12.72	17.0	13.03								92	9760	61	6471	70	7426	8.51	903	6.9	3.5	9.4	0.14	< 4.0	424	< 3.5	371	2.4	255	0.08	8.5	230	100
19	Thu	0.00	12.47	17.0	12.29								141	14664	57	5928	130	13520	7.06	734	8.4	4.0	8.8	0.09	< 4.6	478	< 4.0	416	2.6	270	0.03	3.1	130	140
20	Fri	0.00	12.54	17.0	12.26									0	50	5229	185	19348	10.00	1046		4.0	8.6	0.23			< 4.0	418	2.0	209	0.11	11.5	47	48
21	Sat	0.95	14.27	29.0	13.36	51.000	1.200	81.600	1.400	112.800	2.450	0.15					135	16067															6	12
22	Sun	0.62	15.08	31.0	14.77	14.400	0.400	327.600	5.700	99.600	2.150	1.03	54	6791	38	4779			5.15	648					< 5.0	629	< 3.7	465	3.2	402	0.08	10.1		
23	Mon	1.56	17.50	35.5	16.84	284.800	5.400	249.000	4.300	271.600	7.960	2.88	31	4524	21	3065	76	11092	4.17	609	< 4.6	< 4.0	8.8	0.48	< 4.6	671	< 4.0	584	3.6	525	0.24	35.0	26	27
24	Tue	0.00	17.86	30.0	15.86			19.800	0.300			4.83	47	7001	32	4766	64	9533	2.63	392	3.9	< 3.5	7.2	0.08	< 4.0	596	< 3.5	521	3.3	492	0.03	4.5	48	8
25	Wed	0.30	18.25	30.5	16.68	103.200	2.500			64.800	1.400	4.63	38	5784	31	4718	63	9589	1.87	285	< 4.6	< 4.0	9.8	0.05	< 4.6	700	< 4.0	609	2.2	335	0.02	3.0	290	210
26	Thu	0.00	16.83	28.0	14.86							3.69	47	6597	39	5474	65	9124	7.62	1070	4.9	< 3.7	6.8	0.17	< 4.3	604	< 3.7	519	4.4	618	0.03	4.2	220	150
27	Fri	0.00	16.30	20.0	14.04							2.63			41	5574	102	13866	5.60	761		4.3	11.2	0.09			< 4.3	585	5.6	761	0.03	4.1	170	100
28	Sat	0.00	14.66	18.0	13.56							2.19																					510	
29	Sun	0.00	14.53	18.0	13.77							2.03	56	6786	50	6059	55	6665	6.44	780					< 3.7	448	< 3.3	400	3.4	412	0.03	3.6		
30	Mon	0.00	14.59	29.0	13.94							1.52	63	7666	48	5841	82	9978	5.60	681	6.2	< 3.0	9.8	5.88	< 3.3	402	< 3.0	365	7.2	876	0.50	60.8	220	170
31	Tue	0.00	14.45	19.0	13.93							0.79	66	7954	30	3615	101	12172	4.58	552	5.7	< 3.0	8.8	0.14	< 3.3	398	< 3.0	362	3.6	434	0.08	9.6	270	210
Total		4.71	424.38		398.84	518.20	11.10	758.40	13.10		16.33	26.39																						
Mean			13.69		12.87	103.64	2.22	151.68	2.62		2.72	2.20	74	7255	40	4529	112	12515	6.87	761	6.4	3.8	10.1	0.47	4.3	490	3.8	429	3.0	338	0.11	12.3	154.38	105.50
Maximum		1.56	18.25	40.0	16.84	284.80	5.40	327.60	5.70		7.96	4.83	141	14664	61	7133	272	28243	10.10	1070	8.7	4.3	14.2	5.88	5.0	700	4.3	609	7.2	876	0.50	60.8	510.00	560.00
Minimum			11.73		9.81	14.40	0.40	19.80	0.30		0.90	0.00	31	0	21	2569	35	3517	1.87	285	3.9	3.0	6.8	0.05	3.3	323	3.0	293	0.7	0	0.02	2.0	6.00	5.00
# of Data		31	31	31	31	5	5	5	5		6	12	23	23	27	27	27	27	27	27	18	22	22	22	23	23	27	27	27	27	27	27	26	26
# of Data<MDL																					2	21			22		26				0		0	0
Wk1: 07/1-07/7/01			12.58		12.17								62	5411	39	4071	101	10560	7.74	677					4.3	370	3.8	378	2.5	260	0.10	9.8	185	96
Wk2: 07/8-07/14/01			12.27		11.30								87	7476	34	3442	139	12923	8.06	827					4.2	340	3.8	356	2.5	236	0.16	14.5	108	59
Wk3: 07/15-07/21/01			14.09		13.68								84	7944	48	5434	126	11682	7.03	798					4.5	440	3.8	437	2.7	312	0.10	12.4	83	64
Wk4: 07/22-07/28/01			13.36		12.95								98	8933	50	5510	135	12093	7.74	843					4.3	393	3.7	398	2.6	284	0.08	8.7	82	66

Total Est. Bypass Flow (MG): 40.33 Total Bypass Occurances (days/month): 7

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR AUGUST 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Wed	0.00	14.12	18.0	13.77							0.00	71	8361	52	6124	75	8832	8.66	1020	6.2	3.5	8.0	0.28	< 4.0	471	< 3.5	412	8.6	1013	0.11	13.0	26	34
2	Thu	0.44	15.41	32.0	13.87	18.600	0.500	70.800	1.200	80.400	1.800	0.04	51	6554	44	5655	48	6169	5.60	720	4.8	3.5	9.0	0.13	< 4.0	514	< 3.5	450	4.2	540	0.05	6.4	160	210
3	Fri	0.02	14.13	19.0	14.20							0.00			43	5067	117	13788	7.59	894		< 4.3	6.8	0.31			< 4.3	507	3.7	436	0.06	7.1	80	230
4	Sat	0.00	13.33	18.0	12.30							0.00																					47	41
5	Sun	0.00	13.46	17.0	12.01							0.00	64	7184	36	4041	74	8307	5.10	573					3.2	359	3.0	337	1.8	202	0.04	4.5		
6	Mon	0.00	13.68	19.0	12.01							0.00	116	13235	77	8785	154	17570	19.00	2168	4.7	3.3	7.6	0.80	< 3.7	422	< 3.3	377	2.6	297	0.38	43.4	340	260
7	Tue	0.00	13.58	18.0	12.39							0.00	81	9174	54	6116	107	12119	15.00	1699	5.2	3.2	9.2	0.22	< 3.5	396	< 3.2	362	3.4	385	0.20	22.7	47	38
8	Wed	0.00	13.59	18.0	12.73							0.00	69	7821	57	6460	85	9634	8.29	940	4.5	3.0	8.4	0.11	< 3.3	374	< 3.0	340	5.2	589	0.06	6.8	180	120
9	Thu	0.28	14.96	39.5	14.78	38.400	0.900	27.000	0.500	43.800	1.010	0.00	81	10106	54	6737	139	17343	8.31	1037	< 4.0	3.5	8.0	0.18	< 4.0	499	< 3.5	437	3.0	374	0.05	6.2	26	17
10	Fri	0.00	13.33	28.0	12.53							0.00			43	4780	137	15231	5.60	623		< 3.5	6.0	0.08			< 3.5	389	1.2	133	0.02	2.2	44	45
11	Sat	0.00	12.32	16.0	12.37							0.00																					9	8
12	Sun	0.00	12.42	16.0	11.19							0.00	38	3936	25	2590	122	12637	6.78	702					< 3.5	363	< 3.1	321	3.0	311	0.02	2.1		
13	Mon	0.00	12.43	16.5	10.71							0.00	38	3939	26	2695	82	8501	12.00	1244	4.9	3.0	18.6	0.14	< 3.3	342	< 3.0	311	2.6	270	0.10	10.4	190	240
14	Tue	0.00	12.42	17.5	11.97							0.00	66	6836	42	4350	112	11601	11.10	1150	6.5	3.2	13.4	0.28	< 3.5	363	< 3.2	331	2.2	228	0.12	12.4	22	17
15	Wed	0.00	12.14	16.5	9.22							0.00	54	5467	39	3949	70	7087	10.20	1033	6.9	3.5	10.2	0.14	< 4.0	405	< 3.5	354	2.2	223	0.07	7.1	68	51
16	Thu	0.39	15.63	37.0	14.81			20.400	0.400	20.400	0.450	0.00	64	8343	40	5214	282	36760	7.87	1026	4.4	4.0	10.4	0.05	< 4.6	600	< 4.0	521	2.6	339	0.02	2.6	62	54
17	Fri	0.00	12.30	17.5	11.09							0.00			50	5129	53	5437	8.34	856		< 4.0	11.2	0.43			< 4.0	410	2.4	246	0.13	13.3	8	14
18	Sat	0.51	15.25	38.0	13.96	51.600	2.500	85.800	4.170	58.800	1.290	0.00																					19	60
19	Sun	0.32	13.82	33.0	13.08	23.400	1.100	33.600	1.630	40.200	0.880	0.03	47	5417	39	4495	57	6570	5.38	620					< 5.0	576	< 4.2	484	4.0	461	0.05	5.8		
20	Mon	0.00	12.09	17.0	11.12							0.00	55	5546	45	4537	59	5949	7.67	773	5.7	3.0	8.8	0.34	< 3.0	302	< 3.0	302	2.4	242	0.07	7.1	18	12
21	Tue	0.12	13.52	34.5	12.30	24.000	1.200	24.000	1.170	25.200	0.550	0.00	53	5976	47	5300	51	5751	7.39	833	6.0	3.3	9.8	0.06	4.4	496	< 3.3	372	3.0	338	0.01	1.1	77	64
22	Wed	0.00	12.94	21.0	12.38							0.00	99	10684	71	7662	163	17591	5.88	635	< 3.5	< 3.2	9.4	0.13	< 3.5	378	< 3.2	345	2.7	291	0.02	2.2	57	41
23	Thu	0.00	12.44	17.0	11.51							0.00	53	5499	39	4046	115	11931	7.06	732	3.5	< 3.0	13.4	0.06	< 3.3	342	< 3.0	311	3.6	373	0.05	5.2	68	41
24	Fri	0.14	12.42	29.0	13.82							0.00			78	8079	125	12948	9.77	1012		< 4.3	9.4	0.06			< 4.3	445	3.0	311	0.03	3.1	14	12
25	Sat	0.27	14.57	33.0	13.12	12.000	0.300	13.800	0.200	33.000	0.720	0.00																					690	510
26	Sun	0.02	12.47	16.0	10.57							0.00	41	4264	28	2912	65	6760	7.61	791					< 3.3	343	< 3.0	312	3.0	312	0.06	6.2		
27	Mon	0.00	12.77	18.0	11.56							0.00	78	8307	52	5538	91	9692	11.20	1193	4.3	2.9	6.8	0.84	3.5	373	3.2	341	1.2	128	0.39	41.5	30	21
28	Tue	0.00	12.33	17.5	10.47							0.00	59	6067	46	4730	94	9666	7.16	736	< 4.0	< 3.5	4.4	0.20	< 4.0	411	< 3.5	360	2.8	288	0.11	11.3	90	110
29	Wed	0.00	13.07	17.5	10.86							0.00	72	7848	45	4905	142	15479	12.70	1384	< 4.6	< 4.0	6.0	0.04	< 4.6	501	< 4.0	436	3.0	327	0.02	2.2	23	8
30	Thu	0.30	14.38	37.0	12.41					28.200	0.620	0.00	92	11033	66	7915	174	20868	14.70	1763	4.9	2.6	7.0	0.59	< 3.3	396	< 3.0	360	3.5	420	0.31	37.2	32	210
31	Fri	0.18	14.08	27.0	14.26			29.400	0.500	12.000	0.260	0.00			59	6928	127	14913	13.38	1571		< 4.2	7.4	0.73			< 4.2	493	1.7	200	0.58	68.1	37	5
Total		2.99	415.40		383.37	168.00	6.50	304.80	9.77		7.58	0.07																						
Mean			13.40		12.37	28.00	1.08	38.10	1.22		0.84	0.00	66	7345	48	5361	108	12190	9.23	1027	4.9	3.5	9.1	0.27	3.8	419	3.5	386	3.1	344	0.12	13.0	91.26	91.59
Maximum		0.51	15.63	39.5	14.81	51.60	2.50	85.80	4.17		1.80	0.04	116	13235	78	8785	282	36760	19.00	2168	6.9	4.3	18.6	0.84	5.0	600	4.3	521	8.6	1013	0.58	68.1	690.00	510.00
Minimum			12.09		9.22	12.00	0.30	13.80	0.20		0.26	0.00	38	3936	25	2590	48	5437	5.10	573	3.5	2.6	4.4	0.04	3.0	302	3.0	302	1.2	128	0.01	1.1	8.00	5.00
# of Data		31	31	31	31	6	6	8	8		9	31	22	22	27	27	27	27	27	27	18	23	23	23	22	22	27	27	27	27	27	27	27	27
# of Data<MDL																					4	21			19		25				0		0	1
Wk1: 07/29-08/04/2001			13.82		12.92								82	9504	54	6201	113	13127	10.55	1218					3.5	379	3.4	370	3.3	359	0.13	13.7	120	118
Wk2: 08/05-08/11/2001			12.96		11.83								52	5704	36	3930	134	15303	8.93	963					3.8	369	3.4	334	2.3	225	0.06	5.5	66	69
Wk3: 08/12-08/18/2001			13.19		12.21								61	6624	49	5195	83	8871	6.95	742					3.8	282	3.5	344	3.0	302	0.06	3.3	41	39
Wk4: 08/19-08/25/2001			13.65		12.68								64	7193	49	5390	111	13009	7.09	790					4.1	332	3.6	378	2.9	298	0.05	2.9	40	41

Total Est. Bypass Flow (MG): 23.85 Total Bypass Occurances (days/month): 9

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR SEPTEMBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data						Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																							
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Sat	0.00	11.69	16.0	10.00							0.00																				37	61
2	Sun	0.00	11.31	17.0	9.36							0.00	48	4528	40	3773	62	5848	7.71	727						3.3	311	< 3.0	283	1.6	151	0.22	20.8		
3	Mon	0.00	11.86	18.0	9.67							0.00	49	4847	41	4055	64	6330	8.74	864	6.2	< 4.0	8.6	0.06	4.6	455	< 4.0	396	1.1	109	0.04	4.0	10	6
4	Tue	0.00	12.09	17.0	9.91							0.00	75	7562	52	5243	80	8066	19.50	1966	6.6	< 4.0	11.0	0.70	4.6	464	< 4.0	403	1.2	121	0.33	33.3	32	28
5	Wed	0.00	12.41	19.0	9.95							0.00	72	7452	48	4968	99	10246	11.00	1138	7.3	< 4.0	10.6	0.13	4.6	476	< 4.0	414	2.4	248	0.02	2.1	28	23
6	Thu	0.81	13.45	38.5	11.74	91.200	2.200	105.000	1.800	95.400	2.430	0.00	81	9086	55	6170	116	13012	5.60	628	7.8	< 4.0	12.2	0.12	4.6	516	< 4.0	449	2.2	247	0.09	10.1	140	90
7	Fri	0.08	14.01	23.5	13.65	15.000	0.400	37.800	0.700	15.000	0.330	0.08			89	10399	167	19513	12.50	1461		2.9	10.0	0.27			< 3.7	432	1.2	140	0.04	4.7	32	28
8	Sat	0.00	12.39	16.0	10.20							0.64																				360	
9	Sun	0.59	15.06	32.0	14.14	25.200	0.600	53.400	0.900	63.600	1.390	0.21	49	6154	40	5024	74	9294	4.90	615					4.3	540	< 3.7	465	1.2	151	0.01	1.3		
10	Mon	0.00	12.36	17.5	9.84							0.79	68	7010	49	5051	80	8247	10.70	1103	6.0	< 4.0	10.6	0.04	4.6	474	< 4.0	412	2.0	206	< 0.02	2.1	41	40
11	Tue	0.00	12.02	17.0	9.45							1.02	74	7418	49	4912	101	10125	17.50	1754	9.2	3.9	10.7	0.76	4.3	431	3.9	391	1.8	180	0.30	30.1	56	48
12	Wed	0.00	12.32	17.0	9.82							0.41	85	8734	52	5343	95	9761	14.80	1521	8.3	< 4.0	9.8	0.52	4.6	473	< 4.0	411	2.2	226	0.36	37.0	83	75
13	Thu	0.01	12.39	18.0	9.88							0.11	74	7647	48	4960	62	6407	11.10	1147	6.2	< 4.0	12.4	0.14	4.6	475	< 4.0	413	2.8	289	0.13	13.4	53	68
14	Fri	0.00	11.91	17.0	9.18							0.04			44	4370	72	7152	8.00	795		< 3.5	10.8	0.11			< 3.5	348	2.2	219	0.08	7.9	76	61
15	Sat	0.00	11.53	15.5	8.63							0.00																				34	39
16	Sun	0.00	11.63	15.0	8.96							0.00	94	9117	57	5529	89	8632	8.29	804					4.0	388	< 3.5	339	2.4	233	0.04	3.9		
17	Mon	0.45	13.73	33.0	11.42	29.400	0.700	63.600	1.100	46.800	1.020	0.00	101	11565	65	7443	127	14543	12.00	1374	5.6	< 4.6	9.4	0.24	5.4	618	< 4.6	527	2.0	229	0.07	8.0	92	85
18	Tue	0.28	11.09	21.0	10.68	94.200	2.300	82.800	1.400	91.800	2.010	0.00	84	7769	61	5642	115	10636	6.46	597	5.5	< 4.0	9.8	0.15	4.6	425	< 4.0	370	2.0	185	0.08	7.4	72	81
19	Wed	0.35	12.68	32.0	14.01							1.01	93	9835	46	4865	102	10787	6.78	717	8.1	< 4.0	10.0	0.08	4.6	486	< 4.0	423	2.0	212	0.06	6.3	33	26
20	Thu	0.02	9.74	13.0	9.77							0.50	93	7555	66	5361	62	5036	7.45	605	< 4.2	< 3.7	8.2	0.05	4.2	341	< 3.7	301	1.8	146	< 0.02	1.6	33	23
21	Fri	0.04	9.94	14.5	10.33							0.28			47	3896	87	7212	7.28	604		< 3.1	8.2	0.07			< 3.1	257	1.4	116	0.01	0.8	26	53
22	Sat	0.00	9.33	14.0	9.16							0.12																				51	43
23	Sun	0.72	13.57	34.0	14.35	85.200	2.100	53.400	0.900	82.800	1.810	83.00	62	7017	48	5432	68	7696	7.22	817					4.0	453	3.7	419	2.9	328	0.03	3.4		
24	Mon	0.63	15.12	29.5	16.29							1.41	70	8827	43	5422	78	9836	9.24	1165	8.8	< 4.0	9.6	0.95	4.6	580	< 4.0	504	3.0	378	0.65	82.0	68	41
25	Tue	0.21	13.51	28.5	15.48	14.400	0.300	20.400	0.400	16.200	0.350	1.40	52	5859	27	3042	67	7549	5.57	628	7.4	< 3.7	9.8	<0.02	4.3	484	< 3.7	417	1.4	158	< 0.02	2.3	41	33
26	Wed	0.00	10.82	16.5	12.30							0.99	54	4873	39	3519	56	5053	6.42	579	6.4	< 3.7	9.2	<0.02	4.3	388	< 3.7	334	1.0	90	0.03	2.7	42	59
27	Thu	0.00	11.02	14.0	11.46							0.07	68	6250	50	4595	88	8088	10.10	928	5.5	< 3.5	10.4	0.04	4.0	368	< 3.5	322	1.4	129	0.06	5.5	24	31
28	Fri	0.00	10.83	15.0	9.94							0.50			58	5239	74	6684	9.69	875		< 5.0	6.2	0.06			< 5.0	452	0.5	45	0.02	1.8	34	29
29	Sat	0.00	10.34	14.5	10.21							0.34																						
30	Sun	0.00	10.29	15.0	10.24							0.23	39	3347	30	2575	45	3862	6.94	596					5.4	463	< 4.6	395	1.0	86	0.09	7.7	1800	1900
Total		4.19	360.44		330.02	354.60	8.60	416.40	7.20		9.34	93.15																						
Mean			12.01		11.00	50.66	1.23	59.49	1.03		1.33	3.11	71	7260	50	5073	85	8785	9.42	960	6.8	3.9	9.9	0.25	4.5	458	3.9	395	1.8	185	0.11	12.0	131.92	128.84
Maximum		0.81	15.12	38.5	16.29	94.20	2.30	105.00	1.80		2.43	83.00	101	11565	89	10399	167	19513	19.50	1966	9.2	5.0	12.4	0.95	5.4	618	5.0	527	3.0	378	0.65	82.0	1800.00	1900.00
Minimum			9.33		8.63	14.40	0.30	20.40	0.40		0.33	0.00	39	3347	27	2575	45	3862	4.90	579	4.2	2.9	6.2	0.04	3.3	311	3.0	257	0.5	45	0.01	0.8	10.00	6.00
# of Data		30	30	30	30	6	7	7	7		7	30	21	21	25	25	25	25	25	25	16	20	20	18	21	21	25	25	25	25	25	25	25	25
# of Data<MDL																					1	18			20		23				3		0	0
Wk1: 09/02-09/08/2001			13.04		11.32								65	7020	54	5977	100	11077	10.37	1112					4.5	418	3.9	372	1.6	147	0.09	7.8	100	71
Wk2: 09/09-09/15/2001			12.02		9.39								79	7985	50	5028	83	8387	11.73	1187					4.4	354	3.8	304	2.2	177	0.16	12.4	57	55
Wk3: 09/16-09/22/2001			11.44		11.39								87	8748	56	5440	94	9318	7.87	786					4.6	456	3.9	379	2.0	203	0.05	4.5	51	52
Wk4: 09/23-09/29/2001			11.16		10.62								93	9168	57	5456	97	9474	8.04	784					4.6	421	3.8	349	1.9	175	0.05	4.4	51	52

Total Est. Bypass Flow (MG): 24.84 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR OCTOBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																						
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	5.0 AML 7.5 AWL <MDL	626 AML 939 AWL	6.0 AML 9 AWL	751 AML 1127 AWL	1.5 AML 2.3 AWL <MDL	188 AML 282 AWL	200 AML 400 AWL <MDL	125 AML <MDL
1	Mon	0.00	10.52	17.0	10.42							0.15	48	4211	41	3597	67	5878	8.74	767	7.4	< 4.6	9.4	0.56	< 5.5	483	< 4.6	404	0.9	79	0.28	24.6	160	140
2	Tue	0.00	10.56	17.0	11.04							0.13	36	3171	27	2378	74	6517	6.10	537	7.7	< 4.6	8.6	0.20	< 5.5	484	< 4.6	405	2.2	194	0.19	16.7	200	160
3	Wed	0.00	10.45	15.0	13.03							0.10	94	8192	46	4009	103	8977	8.54	744	9.2	< 4.6	12.2	0.17	< 5.5	479	< 4.6	401	1.6	139	0.08	7.0	80	26
4	Thu	1.18	12.83	32.0	13.91	133.200	3.200	294.600	5.100	133.200	2.910	0.38	94	10058	53	5671	133	14231	7.37	789	10.5	< 4.6	13.8	0.26	< 5.4	578	< 4.6	492	0.8	86	0.11	11.8	30	21
5	Fri	0.92	14.13	20.0	18.25	111.600	2.700	328.800	5.700	108.600	2.380	2.80			24	2828	99	11667	4.20	495		< 4.3	13.0	0.13			< 4.3	507	1.2	141	0.03	3.5	37	25
6	Sat	0.00	12.63	17.0	14.75							1.04																					150	70
7	Sun	0.00	12.22	15.0	14.39							0.40	83	8459	37	3771	77	7847	5.88	599					< 5.5	561	< 4.6	469	1.7	173	0.07	7.1		
8	Mon	0.00	12.03	17.0	14.20							0.19	104	10434	39	3913	125	12541	7.78	781	9.7	< 4.6	13.4	0.03	< 5.5	552	< 4.6	462	1.4	140	0.02	2.0	29	20
9	Tue	0.00	11.89	16.0	13.82							0.14	104	10313	44	4363	90	8925	10.64	1055	11.0	< 4.6	14.0	0.72	< 5.5	545	< 4.6	456	2.0	198	0.43	42.6	40	34
10	Wed	0.05	11.69	16.0	13.34							0.03	78	7605	34	3315	98	9554	7.34	716	10.0	< 4.6	17.8	0.21	< 5.5	536	< 4.6	448	1.8	175	0.19	18.5	35	25
11	Thu	0.15	11.12	16.5	11.92							0.08	81	7512	36	3339	83	7697	7.70	714	8.9	< 4.3	16.8	0.11	< 5.0	464	< 4.3	399	1.2	111	0.05	4.6	36	26
12	Fri	1.04	16.03	32.5	19.81	237.600	5.800	269.400	4.700	186.000	4.070	1.97			72	9626	118	15775	5.49	734		< 4.6	16.0	0.11			< 4.6	615	2.2	294	0.07	9.4	47	36
13	Sat	1.49	16.71	31.0	20.20	284.400	6.900	268.200	4.700	264.000	5.770	2.24																					17	25
14	Sun	0.23	19.94	27.0	22.66	25.800	0.600	26.400	0.500	12.600	0.280	3.52	34	5654	19	3160	74	12306	3.19	530					< 5.5	915	< 4.6	765	2.2	366	0.04	6.7		
15	Mon	0.04	17.24	25.0	19.90							1.23	32	4601	20	2876	81	11646	4.03	579	12.0	6.0	18.4	0.05	< 5.5	791	< 4.6	661	1.8	259	0.03	4.3	210	38
16	Tue	0.20	18.45	26.0	20.93							0.70	76	11694	31	4770	121	18619	3.14	483	9.3	< 4.6	11.4	0.79	< 5.5	846	< 4.6	708	2.2	339	0.71	109.2	250	160
17	Wed	0.00	15.66	24.0	18.50							0.38	63	8228	31	4049	81	10579	6.94	906	11.0	< 4.6	15.0	0.02	< 5.5	718	< 4.6	601	1.8	235	0.02	2.6	150	58
18	Thu	0.00	15.95	24.5	18.03							0.26	64	8513	35	4656	57	7582	8.23	1095	12.0	< 4.6	12.8	0.22	< 5.5	732	< 4.6	612	1.0	133	0.10	13.3	28	22
19	Fri	0.00	14.07	24.5	16.61							0.14			37	4342	87	10209	6.56	770		< 3.2	12.0	0.09			< 3.2	376	1.2	141	0.03	3.5	59	42
20	Sat	0.00	13.15	17.0	15.99							0.13																					18	16
21	Sun	0.00	10.21	16.0	15.87							0.01	86	7323	41	3491	80	6812	8.74	744					< 5.5	468	< 4.6	392	3.2	272	0.03	2.6		
22	Mon	0.03	12.37	17.0	15.39							0.11	135	13927	48	4952	174	17951	12.99	1340	12.0	< 4.6	16.0	0.32	< 5.5	567	< 4.6	475	1.4	144	0.20	20.6	54	43
23	Tue	0.85	16.29	39.0	19.04	120.000	2.900	123.000	2.100	127.800	3.340	2.13	79	10733	32	4347	114	15488	5.38	731	10.0	< 4.0	15.8	0.09	< 5.5	747	< 4.6	625	1.2	163	0.14	19.0	67	50
24	Wed	0.63	14.28	29.0	16.99	111.600	2.700	163.200	2.800	146.400	4.060	2.50	77	9170	43	5121	84	10004	5.15	613	12.0	< 4.6	12.6	0.31	< 5.5	655	< 4.6	548	3.6	429	0.25	29.8	27	20
25	Thu	0.00	15.52	25.0	17.50							2.19	59	7637	37	4789	66	8543	6.55	848	10.0	< 4.6	16.8	0.03	< 5.5	712	< 4.6	595	1.4	181	0.03	3.9	51	44
26	Fri	0.00	14.46	18.0	16.86							0.68			29	3497	123	14833	5.24	632		< 4.6	11.6	0.18			< 4.6	555	1.0	121	0.12	14.5	100	140
27	Sat	0.00	13.90	17.0	16.12							0.26																					32	18
28	Sun	0.00	14.04	17.0	16.33							0.17	85	9953	32	3747	90	10538	5.65	662					< 5.4	632	< 4.6	539	6.0	703	< 0.02	2.3		
29	Mon	0.00	13.06	17.0	14.81							0.00	82	8931	39	4248	124	13506	8.85	964	8.0	< 4.6	16.0	0.26	< 5.5	599	< 4.6	501	1.2	131	< 0.17	18.5	17	14
30	Tue	0.03	12.86	18.0	14.83							0.00	121	12978	39	4183	125	13407	10.64	1141	11.1	< 4.6	16.4	0.09	< 5.5	590	< 4.6	493	3.2	343	0.16	17.2	14	7
31	Wed	0.00	12.57	17.0	14.28							0.06	101	10588	33	3460	87	9121	10.14	1063	11.2	< 4.6	15.4	0.10	< 5.5	577	< 4.6	482	1.6	168	0.10	10.5	12	6
Total		6.84	426.83		499.72	1024.20	24.80	1473.60	25.60		22.81	24.12																						
Mean			13.77		16.12	146.31	3.54	210.51	3.66		3.26	0.78	79	8691	37	4167	98	11139	7.08	779	10.2	4.5	14.1	0.22	5.5	619	4.5	518	1.9	217	0.14	15.8	72.22	47.63
Maximum		1.49	19.94	39.0	22.66	284.40	6.90	328.80	5.70		5.77	3.52	135	13927	72	9626	174	18619	12.99	1340	12.0	6.0	18.4	0.79	5.5	915	4.6	765	6.0	703	0.71	109.2	250.00	160.00
Minimum			10.21		10.42	25.80	0.60	26.40	0.50		0.28	0.00	32	3171	19	2378	57	5878	3.14	483	7.4	3.2	8.6	0.02	5.0	464	3.2	376	0.8	79	0.02	2.0	12.00	6.00
# of Data		31	31	31	31	7	7	7	7		7	31	23	23	27	27	27	27	27	27	19	23	23	23	23	23	27	27	27	27	27	27	27	27
# of Data<MDL																					0	22			23		27				2		0	0
Wk1: 9/30-10/06/01			12.31		14.48								96	7909	41	4093	105	10698	7.40	744					5.5	625	4.6	546	1.5	173	0.12	14.3	61	33
Wk2: 10/07-10/13/01			15.88		18.39								60	6178	35	4514	96	12600	5.15	626					5.4	804	4.6	589	1.9	297	0.18	29.0	99	52
Wk3: 10/14-10/20/01			13.96		17.06								85	8121	37	4306	99	11437	8.14	931					5.5	797	4.4	629	1.6	225	0.09	12.4	63	39
Wk4: 10/21-10/27/01			14.27		17.33								85	8281	37	4377	100	11959	7.77	890					5.5	814	4.4	641	1.8	264	0.18	29.3	93	57

Total Est. Bypass Flow (MG): 73.21 Total Bypass Occurances (days/month): 7

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR NOVEMBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data								Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005			TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)		TBOD5 (lb/day)		CBOD5 (mg/L)		CBOD5 (lb/day)		TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																											
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10		1.5		Report Only <MDL		Report Only		7.1 AML 10.7 AWL <MDL		888 AML 1339 AWL	8.5 AML 12.8 AML	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL		188 AML 751 DML		
1	Thu	0.06	12.12	16.5	13.31							0.09	101	10209	39	3942	138	13949	8.12	821	11.8	<	4.6	16.4	0.08	<	5.5	556	<	4.6	465	0.6	61	0.12	12.1		
2	Fri	0.36	14.42	37.0	16.04			37.800	0.700	21.600	0.470	0.02			45	5412	77	9260	7.22	868		<	4.6	13.8	0.06				<	4.6	553	2.4	289	0.03	3.6		
3	Sat	0.00	11.42	15.0	12.42							0.00																									
4	Sun	0.00	11.12	15.5	12.01							0.00	86	7976	74	6863	90	8347	9.24	857							<	3.3	306	<	3.0	278	2.6	241	0.03	2.8		
5	Mon	0.00	11.52	16.0	12.64							0.00	90	8647	67	6437	105	10088	9.77	939	6.8	<	3.0	12.0	0.09		3.5	336	<	3.0	288	2.0	192	0.02	1.9		
6	Tue	0.00	11.37	16.0	12.68							0.00	76	7207	54	5121	83	7871	10.40	986	8.5	<	3.5	15.0	0.10		4.2	398	<	3.5	332	1.8	171	0.07	6.6		
7	Wed	0.00	11.28	16.0	12.88							0.00	60	5645	37	3481	76	7150	9.40	884	8.4	<	4.0	13.8	0.07	<	4.6	433	<	4.0	376	1.8	169	0.04	3.8		
8	Thu	0.10	11.11	15.0	12.50							0.00	96	8895	51	4726			10.70	991	7.4	<	3.0	14.2	0.10		4.8	445	<	3.0	278	3.4	315	0.03	2.8		
9	Fri	0.00	10.74	15.0	12.35							0.00			42	3762	143	12809	11.87	1063		<	4.0	12.0	0.33				<	4.0	358	2.4	215	0.19	17.0		
10	Sat	0.00	10.26	14.0	11.78							0.00																									
11	Sun	0.00	10.18	13.0	12.11							0.00	90	7641	38	3226	88	7471	8.40	713							<	4.6	391	<	4.0	340	1.4	119	0.04	3.4		
12	Mon	0.00	10.11	14.0	11.41							0.00	49	4132	26	2192	53	4469	6.19	522	10.4	<	4.6	13.4	0.07	<	5.5	464	<	4.6	388	2.8	236	0.02	1.7		
13	Tue	0.00	10.16	15.0	10.96							0.00	106	8982	52	4406	106	8982	8.69	736	7.6	<	5.0	12.2	0.03	<	5.0	424	<	4.3	364	2.0	169	0.01	0.8		
14	Wed	0.15	11.04	26.5	11.94							0.00	89	8195	42	3867	98	9023	6.83	629	11.1	<	4.6	13.4	0.04	<	5.5	506	<	4.6	424	4.2	387	0.04	3.7		
15	Thu	0.00	9.69	12.5	10.13							0.00	64	5172	39	3152	68	5495	6.72	543	10.4	<	4.6	14.0	0.01	<	5.5	444	<	4.6	372	3.0	242	0.05	4.0		
16	Fri	0.00	9.73	17.0	10.05							0.00			50	4057	81	6573	4.98	404		<	4.3	15.8	0.05				<	4.3	349	3.6	292	0.07	5.7		
17	Sat	0.00	9.32	12.0	9.35							0.00																									
18	Sun	0.08	9.66	14.0	9.46							0.00	100	8056	85	6848	88	7090	8.74	704							<	3.3	266	<	3.0	242	3.6	290	0.04	3.2		
19	Mon	0.23	11.71	31.0	12.38							0.00	68	6641	48	4688	84	8204	5.88	574	6.3	<	4.0	14.4	0.03		4.4	430	<	4.0	391	2.6	254	0.08	7.8		
20	Tue	0.00	9.45	13.5	9.81							0.00	86	6778	65	5123	74	5832	6.69	527	7.2	<	3.0	14.8	0.02		6.5	512	<	3.0	236	1.2	95	0.04	3.2		
21	Wed	0.00	9.75	15.0	10.36							0.00	131	10652	89	7237	108	8782	15.40	1252	9.9	<	3.3	17.4	0.39		4.0	325	<	3.3	268	3.2	260	0.19	15.4		
22	Thu	0.00	9.40	14.0	10.41							0.00	125	9800	68	5331	78	6115	7.67	601	12.1	<	4.6	16.8	0.18	<	5.5	431	<	4.6	361	3.0	235	0.16	12.5		
23	Fri	0.00	9.45	13.0	10.13							0.00			61	4808	120	9458	8.51	671		<	4.3	21.8	0.10				<	4.3	339	1.8	142	0.06	4.7		
24	Sat	0.58	10.78	31.0	12.30	54.000	1.300	85.200	1.500	76.800	2.100	0.24																									
25	Sun	0.11	10.24	18.0	11.90							0.23	80	6832	37	3160	94	8028	7.73	660							<	3.5	299	<	3.1	265	2.6	222	0.06	5.1		
26	Mon	0.07	10.01	17.0	11.47							0.14	65	5426	43	3590	64	5343	11.09	926	8.2	<	4.0	15.8	0.03	<	4.6	384	<	4.0	334	2.3	192	0.08	6.7		
27	Tue	0.00	9.85	13.5	10.89							0.12	100	8215	43	3532	159	13062	10.81	888	7.7		3.2	14.6	0.07		3.7	304	<	3.0	246	2.2	181	0.07	5.8		
28	Wed	0.08	9.86	14.5	10.76							0.09	101	8305	61	5016	98	8059	11.47	943	11.0	<	4.6	14.0	0.14	<	5.5	452	<	4.6	378	1.2	99	0.08	6.6		
29	Thu	0.45	12.28	28.0	13.82							0.10	128	13109	74	7579	127	13007	11.61	1189	7.3	<	3.0	14.6	0.13	<	3.3	338	<	3.0	307	1.0	102	0.15	15.4		
30	Fri	0.34	12.17	27.0	15.91	103.200	5.000	45.600	2.220	87.000	1.900	0.88			61	6191	240	24359	9.74	989		<	4.0	13.6	0.18				<	4.0	406	2.0	203	0.13	13.2		
Total		2.61	320.20		354.16	157.20	6.30	168.60	4.42	185.40	4.47	1.91																									
Mean			10.67		11.81	78.60	3.15	56.20	1.47	61.80	1.49	0.06	90	7929	54	4759	102	9153	9.00	803	8.9		4.0	14.7	0.10		4.6	402		3.8	344	2.3	207	0.07	6.5		
Maximum		0.58	14.42	37.0	16.04	103.20	5.00	85.20	2.22	87.00	2.10	0.88	131	13109	89	7579	240	24359	15.40	1252	12.1		5.0	21.8	0.39		6.5	556		4.6	553	4.2	387	0.19	17.0		
Minimum			9.32		9.35	54.00	1.30	37.80	0.70	21.60	0.47	0.00	49	4132	26	2192	53	4469	4.98	404	6.3		3.0	12.0	0.01		3.3	266		3.0	236	0.6	61	0.01	0.8		
# of Data		30	30	30	30	2	2	3	3		3	30	21	21	26	26	25	25	26	26	17		22	22	22		21	21		26	26	26	26	26	26		
# of Data<MDL																					0		21				14			26				0			
Wk1: 10/28-11/03/2001			11.22		12.50								82	5481	54	4341	99	7711	10.23	953							4.1	428		3.4	357	2.3	243	0.06	6.6		
Wk2: 11/04-11/10/2001			10.17		11.20								80	4874	41	2986	82	7002	6.97	591							5.2	491		4.4	407	2.8	261	0.04	3.5		
Wk3: 11/11-11/17/2001			9.82		10.27								102	5990	69	4891	92	7580	8.82	722							4.7	414		3.7	324	2.6	223	0.10	8.3		
Wk4: 11/18-11/24/2001			9.86		10.26								102	5990	68	4766	86	7099	8.23	677							4.7	414		3.7	323	2.9	248	0.10	8.5		

Total Est. Bypass Flow (MG): 15.19 Total Bypass Occurances (days/month): 3

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR DECEMBER 2001

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data								Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																								
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)	CBOD5 (mg/L)	TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)		
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL	<MDL	10	1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL	888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Sat	0.01	10.33	12.0	12.19	0.000	0.000	0.000	0.000	0.000	0.000	0.47																						
2	Sun	0.00	10.32	13.0	12.04	0.000	0.000	0.000	0.000	0.000	0.000	0.25	104	8951	56	4820	112	9640	10.30	887					<	4.6	396	<	4.0	344	2.0	172	0.05	4.3		
3	Mon	0.00	10.24	13.0	12.15	0.000	0.000	0.000	0.000	0.000	0.000	0.15	83	7088		0	83	7088	10.52	898	6.4	< 4.6	11.2	0.06	<	5.5	470	<	4.6	393	1.0	85	0.02	1.7		
4	Tue	0.00	10.39	13.0	12.13	0.000	0.000	0.000	0.000	0.000	0.000	0.14	125	10832		0	164	14211	9.63	834	< 6.0	< 5.0	13.4	0.32	<	15.0	1300	<	7.5	650	1.4	121	0.30	26.0		
5	Wed	0.14	11.30	28.0	12.97	0.000	0.000	0.000	0.000	0.000	0.000	0.14	150	14136	92	8670	134	12628	10.20	961	< 4.3	< 3.7	15.8	0.16	<	12.0	1131	<	8.5	801	2.0	188	0.05	4.7		
6	Thu	0.00	10.04	15.0	11.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	97	8122	68	5694	160	13397	7.76	650	8.7	< 5.5	11.4	0.06	<	8.5	712	<	6.6	553	0.4	33	0.05	4.2		
7	Fri	0.00	10.04	14.0	11.23	0.000	0.000	0.000	0.000	0.000	0.000	0.00			88	7369	119	9964	13.02	1090		< 6.0	10.4	0.23				<	6.0	502	3.8	318	0.38	31.8		
8	Sat	0.00	9.60	13.0	10.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
9	Sun	0.00	9.33	15.0	9.47	0.000	0.000	0.000	0.000	0.000	0.000	0.00	127	9882	90	7003	72	5602	11.40	887					<	10.0	778	<	7.5	584	2.0	156	0.08	6.2		
10	Mon	0.00	9.94	16.0	10.06	0.000	0.000	0.000	0.000	0.000	0.000	0.00	150	12435	88	7295	154	12767	12.30	1020	< 8.5	< 6.6	12.2	0.11	<	8.5	705	<	6.6	547	1.4	116	0.06	5.0		
11	Tue	0.00	9.80	16.0	9.80	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	12096	77	6293	139	11361	10.70	875	< 10.0	< 6.0	12.2	0.08	<	20.0	1635	<	12.0	981	3.2	262	0.05	4.1		
12	Wed	0.12	10.00	14.5	9.85	0.000	0.000	0.000	0.000	0.000	0.000	0.00	181	15095	98	8173	198	16513	12.00	1001	< 4.3	< 3.3	13.8	0.34	<	4.3	359	<	3.3	275	1.5	125	0.07	5.8		
13	Thu	0.00	10.43	18.0	10.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	181	15745	78	6785	150	13048	11.90	1035	< 4.3	< 3.3	12.6	0.05	<	4.3	374	<	3.3	287	1.8	157	0.05	4.3		
14	Fri	0.28	11.75	28.0	12.00	0.000	0.000	0.000	0.000	0.000	0.000	0.00			77	7546	203	19893	8.94	876		< 7.5	12.2	0.27				<	7.5	735	1.4	137	0.03	2.9		
15	Sat	0.00	9.33	13.0	9.07	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
16	Sun	0.22	10.65	18.5	11.34	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	13146	89	7905	140	12435	10.90	968					<	4.6	409	<	4.0	355	2.2	195	0.20	17.8		
17	Mon	0.14	11.38	18.0	13.21	0.000	0.000	0.000	0.000	0.000	0.000	0.00	132	12528	102	9681	133	12623	10.25	973	6.9	< 3.5	24.8	0.05	<	4.0	380	<	3.5	332	0.8	76	0.05	4.7		
18	Tue	0.00	9.79	14.0	10.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	163	13309	107	8736	113	9226	10.64	869	7.2	< 3.5	11.4	0.05	<	4.0	327	<	3.5	286	2.2	180	0.05	4.1		
19	Wed	0.05	10.08	16.0	10.91	0.000	0.000	0.000	0.000	0.000	0.000	0.00	127	10677	77	6473	94	7902	9.80	824	10.0	< 4.0	12.6	0.45	<	4.6	387	<	4.0	336	1.0	84	0.13	10.9		
20	Thu	0.00	9.53	13.0	10.16	0.000	0.000	0.000	0.000	0.000	0.000	0.00	63	5007	54	4292	48	3815	5.04	401	< 5.0	< 3.7	14.6	0.17	<	5.0	397	<	3.7	294	2.2	175	0.16	12.7		
21	Fri	0.00	9.49	14.5	10.48	0.000	0.000	0.000	0.000	0.000	0.000	0.00			62	4907	100	7915	5.10	404		< 5.0	12.0	0.09				<	5.0	396	1.5	119	0.08	6.3		
22	Sat	0.10	9.93	15.0	11.47	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
23	Sun	0.00	9.74	13.0	10.24	0.000	0.000	0.000	0.000	0.000	0.000	0.00	108	8773	48	3899	107	8692	10.60	861					4.7		382	<	4.0	325	1.2	97	0.06	4.9		
24	Mon	0.00	9.42	11.0	9.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	113	8878	50	3928	104	8171	8.34	655	13.5	5.2	19.5	0.09	10.0		786		6.1	479	22.7	1783	0.09	7.1		
25	Tue	0.00	9.25	11.0	9.14	0.000	0.000	0.000	0.000	0.000	0.000	0.00	138	10646	62	4783	126	9720	10.50	810	12.9	< 5.4	12.8	0.10	<	6.6	509	<	5.4	417	15.8	1219	0.10	7.7		
26	Wed	0.00	9.61	11.0	9.54	0.000	0.000	0.000	0.000	0.000	0.000	0.00	148	11862	54	4328	172	13785	11.40	914	11.0	< 4.3	11.2	0.15	<	6.0	481	<	4.3	345	8.4	673	0.08	6.4		
27	Thu	0.00	9.25	13.0	9.09	0.000	0.000	0.000	0.000	0.000	0.000	0.00	92	7097	53	4089	67	5169	12.50	964	12.1	4.1	9.0	0.05	6.1		471	<	4.2	324	2.6	201	0.04	3.1		
28	Fri	0.00	9.13	12.0	9.41	0.000	0.000	0.000	0.000	0.000	0.000	0.00			46	3503	67	5102	12.30	937		< 4.2	6.8	0.13			0	<	4.2	320	3.7	282	0.10	7.6		
29	Sat	0.00	8.78	12.0	8.98	0.000	0.000	0.000	0.000	0.000	0.000	0.00																						
30	Sun	0.00	8.94	13.0	8.83	0.000	0.000	0.000	0.000	0.000	0.000	0.00	50	3728	35	2610	63	4697	8.96	668					2.6		194	<	4.0	298	2.8	209	0.08	6.0		
31	Mon	0.00	8.32	12.5	8.35	0.000	0.000	0.000	0.000	0.000	0.000	0.00	57	3955	48	3331	73	5065	19.90	1381	< 15.0	< 8.5	86.0	0.19	<	6.0	416	<	4.3	298	4.1	284	0.06	4.2		
Total		1.06	306.13		326.73	0.00	0.00	0.00	0.00		0.00	1.15																						
Mean			9.88		10.54	0.00	0.00	0.00	0.00		0.00	0.04	122	10181	71	5466	119	10017	10.57	871	8.6	4.9	16.5	0.15	7.1	565	5.3	441	3.6	286	0.10	7.9		
Maximum		0.28	11.75	28.0	13.21	0.00	0.00	0.00	0.00		0.00	0.47	181	15745	107	9681	203	19893	19.90	1381	15.0	8.5	86.0	0.45	20.0	1635	12.0	981	22.7	1783	0.38	31.8		
Minimum			8.32		8.35	0.00	0.00	0.00	0.00		0.00	0.00	50	3728	35	0	48	3815	5.04	401	4.3	3.3	6.8	0.05	2.6	0	3.3	275	0.4	33	0.02	1.7		
# of Data		31	31	31	31	31	31	31	31		31	31	22	22	24	24	26	26	26	26	17	21	21	21	22	22	26	26	26	26	26	26		
# of Data<MDL																					8	19			18		25				0			
Wk1: 12/2-12/08/2001			10.13		11.36								116	10012	85	4789	122	10482	10.42	887					10.2	994	6.8	654	1.8	169	0.15	14.1		
Wk2: 12/09-12/15/2001			10.27		10.40								162	13703	85	7333	164	14336	11.12	962					8.3	704	6.1	538	1.9	169	0.08	6.9		
Wk3: 12/16-12/22/2001			9.99		11.02								119	10059	75	6331	99	8362	8.57	722					4.5	408	4.0	359	1.5	133	0.09	7.9		
Wk4: 12/23-12/29/2001			10.12		11.18								127	10933	82	6999	105	8986	8.62	740					4.4	415	4.0	365	1.7	150	0.11	10.2		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR JANUARY 2002

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]						Outfall 006 CSO Lagoon (MGD)	Influent Data								Clarifier Effluent Data				Final Effluent Data									
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005																							
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)		Ammonia-N (mg/L)		TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10		1.5	Report Only <MDL	Report Only	7.1 AML 10.7 AWL <MDL		888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL		188 AML 751 DML		
1	Tue	0.00	8.55	11.5	8.50	0.000	0.000	0.000	0.000	0.000	0.000	0.00	63	4492	46	3280	95	6774	9.91	707	7.8	<	4.3		11.9		0.07	<	5.0	357	<	4.3	307	4.2	299	0.03	2.1		
2	Wed	0.00	8.92	13.0	8.70	0.000	0.000	0.000	0.000	0.000	0.000	0.00	105	7811	53	3943	149	11085	10.40	774	7.8	<	4.0		10.6		0.03	<	4.6	342	<	4.0	298	3.6	268	0.01	0.7		
3	Thu	0.00	8.69	13.0	8.62	0.000	0.000	0.000	0.000	0.000	0.000	0.00	129	9349	89	6450	106	7682	13.30	964	7.4	<	4.2		9.2		0.09	<	4.1	297	<	4.2	304	11.8	855	0.03	2.2		
4	Fri	0.00	8.59	13.0	8.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			58	4155	153	10961	11.20	802		<	4.6		8.8		0.24				<	4.6	330	1.8	129	0.04	2.9		
5	Sat	0.00	8.51	12.0	8.06	0.000	0.000	0.000	0.000	0.000	0.000	0.00																										
6	Sun	0.00	9.03	14.5	8.54	0.000	0.000	0.000	0.000	0.000	0.000	0.00	151	11372	50	3766	193	14535	11.03	831								<	6.0	452	<	4.3	324	2.2	166	0.23	17.3		
7	Mon	0.00	8.55	12.0	8.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00	144	10268	49	3494	176	12550	10.17	725	12.0	<	4.6		13.0		0.20	<	5.4	385	<	4.6	328	2.6	185	0.06	4.3		
8	Tue	0.00	8.55	12.0	8.39	0.000	0.000	0.000	0.000	0.000	0.000	0.00	129	9199	88	6275	100	7131	9.83	701	11.1		3.8		9.4		0.24		6.3	449	<	4.0	285	2.6	185	0.09	6.4		
9	Wed	0.00	8.70	12.0	8.36	0.000	0.000	0.000	0.000	0.000	0.000	0.00	39	2830	25	1814	41	2975	5.04	366	9.7	<	4.0		9.8		0.10		5.8	421	<	4.0	290	2.6	189	0.13	9.4		
10	Thu	0.00	8.33	12.0	8.02	0.000	0.000	0.000	0.000	0.000	0.000	0.00	73	5071	26	1806	80	5558	4.65	323	11.0	<	4.2		9.4		0.03		5.5	382	<	4.2	292	3.0	208	0.03	2.1		
11	Fri	0.00	8.29	12.0	8.16	0.000	0.000	0.000	0.000	0.000	0.000	0.00			53	3664	64	4425	8.23	569			4.6		6.2		0.11				<	4.6	318	2.0	138	0.31	21.4		
12	Sat	0.00	8.16	12.0	7.83	0.000	0.000	0.000	0.000	0.000	0.000	0.00																										
13	Sun	0.00	7.98	12.0	7.72	0.000	0.000	0.000	0.000	0.000	0.000	0.00	86	5724	65	4326	44	2928	7.73	514									4.6	306	<	4.0	266	3.0	200	0.03	2.0		
14	Mon	0.05	7.99	14.0	7.50	0.000	0.000	0.000	0.000	0.000	0.000	0.00	102	6797	60	3998	79	5264	9.41	627	11.0	<	4.6		12.4		0.05		6.0	400	<	4.6	307	3.0	200	0.02	1.3		
15	Tue	0.00	7.98	12.0	7.31	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	5857	55	3660	82	5457	7.39	492	11.0	<	4.0		10.0		0.03		5.5	366	<	4.0	266	2.2	146	0.01	0.7		
16	Wed	0.00	8.56	14.0	8.20	0.000	0.000	0.000	0.000	0.000	0.000	0.00	152	10851	96	6853	128	9138	6.04	431	10.6	<	4.0		10.4		0.03		5.5	393	<	4.0	286	3.6	257	0.02	1.4		
17	Thu	0.00	8.36	13.0	7.68	0.000	0.000	0.000	0.000	0.000	0.000	0.00	183	12759	107	7460	109	7600	5.60	390	9.7	<	4.2		12.7		0.04	<	5.0	349	<	4.2	293	3.8	265	0.04	2.8		
18	Fri	0.00	8.13	12.5	8.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			90	6102	90	6102	7.34	498		<	5.0		11.4		0.06				<	5.0	339	3.5	237	0.02	1.4		
19	Sat	0.00	7.79	12.0	7.44	0.000	0.000	0.000	0.000	0.000	0.000	0.00																										
20	Sun	0.00	7.64	11.5	6.90	0.000	0.000	0.000	0.000	0.000	0.000	0.00	49	3122	36	2294	43	2740	4.20	268								<	5.4	344	<	4.6	293	1.6	102	0.04	2.5		
21	Mon	0.09	7.98	13.0	7.92	0.000	0.000	0.000	0.000	0.000	0.000	0.00	91	6056	61	4060	85	5657	8.68	578	8.9	<	4.6		9.4		0.12	<	5.4	359	<	4.6	306	2.9	193	0.03	2.0		
22	Tue	0.02	7.75	12.0	7.38	0.000	0.000	0.000	0.000	0.000	0.000	0.00	159	10277	89	5753	94	6076	11.98	774	9.4	<	4.3		9.2		0.13	<	5.0	323	<	4.3	278	2.2	142	0.04	2.6		
23	Wed	0.03	7.55	12.0	7.28	0.000	0.000	0.000	0.000	0.000	0.000	0.00	174	10956	106	6675	126	7934	10.20	642	8.5	<	4.6		8.2		0.04	<	5.4	340	<	4.6	290	1.8	113	0.02	1.3		
24	Thu	0.00	7.79	12.0	7.26	0.000	0.000	0.000	0.000	0.000	0.000	0.00	156	10135	104	6757	118	7666	10.00	650	10.4	<	4.0		10.6		0.15	<	4.6	299	<	4.0	260	2.0	130	0.26	16.9		
25	Fri	0.00	7.81	12.0	7.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00			73	4755	100	6514	8.93	582		<	4.6		14.6		0.07				<	4.6	300	2.2	143	0.06	3.9		
26	Sat	0.00	7.52	12.0	7.31	0.000	0.000	0.000	0.000	0.000	0.000	0.00																										
27	Sun	0.00	7.57	12.0	7.43	0.000	0.000	0.000	0.000	0.000	0.000	0.00	99	6250	63	3977	106	6692	8.54	539									4.7	297	<	4.0	253	2.4	152	0.04	2.5		
28	Mon	0.00	7.43	13.0	6.92	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	5453	75	4647	104	6444	8.34	517	11.0	<	4.0		13.2		0.03	<	4.7	291	<	4.0	248	2.6	161	0.04	2.5		
29	Tue	0.08	7.92	20.0	7.99	0.000	0.000	0.000	0.000	0.000	0.000	0.00	88	5813	41	2708	122	8058	8.40	555	9.4	<	4.0		12.6		0.06		4.4	291	<	4.0	264	2.4	159	0.20	13.2		
30	Wed	0.33	10.77	26.5	11.15	0.000	0.000	0.000	0.000	0.000	0.000	0.00	89	7994	68	6108	184	16527	5.38	483	8.7	<	4.6		11.6		0.26	<	5.5	494	<	4.6	413	3.2	287	1.01	90.7		
31	Thu	0.61	10.85	18.0	12.65	0.000	0.000	0.000	0.000	0.000	0.000	0.00	76	6877	42	3801	94	8506	5.94	538	12.0		4.6		12.6		0.16		6.3	570	<	4.6	416	2.8	253	0.06	5.4		
Total		1.21	258.24		251.71	0.00	0.00	0.00	0.00		0.00	0.00																										
Mean			8.33		8.12	0.00	0.00	0.00	0.00		0.00	0.00	109	7622	65	4540	106	7518	8.44	587	9.9		4.3		10.7		0.10		5.2	370		4.3	302	3.0	213	0.11	8.2		
Maximum		0.61	10.85	26.5	12.65	0.00	0.00	0.00	0.00		0.00	0.00	183	12759	107	7460	193	16527	13.30	964	12.0		5.0		14.6		0.26		6.3	570		5.0	416	11.8	855	1.01	90.7		
Minimum			7.43		6.90	0.00	0.00	0.00	0.00		0.00	0.00	39	2830	25	1806	41	2740	4.20	268	7.4		3.8		6.2		0.03		4.1	291		4.0	248	1.6	102	0.01	0.7		
# of Data		25	31	31	31	31	31	31	31		31	31	23	23	27	27	27	27	27	27	19		23		23		23		23	23		27	27	27	27	27	27		
# of Data<MDL																					0		21						13			27				0			
Wk1: 01/01-01/05/00			8.66		8.37								118	8604	60	4326	128	9306	10.10	731									5.5	387		4.3	301	3.9	279	0.10	6.8		
Wk2: 01/06-01/12/00			8.18		7.82								100	6860	59	4051	80	5462	7.24	493									5.4	350		4.2	276	2.8	183	0.07	4.7		
Wk3: 01/13-01/19/00			7.89		7.58								131	8634	82	5391	91	6018	8.00	525									5.2	325		4.6	289	2.6	170	0.03	2.0		
Wk4: 01/20-01/26/00			8.03		7.71								127	8613	80	5420	92	6219	7.31	490									5.3	334		4.5	288	2.9	192	0.03	2.0		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

EAST CHICAGO SANITARY DISTRICT WASTEWATER TREATMENT PLANT
MONTHLY REPORT OF OPERATIONS SUMMARY FOR FEBRUARY 2002

Date	Day of Week	Precip. @ WWTP (inches)	Influent Flow (MGD)	Peak Influent Flow (MGD)	Outfall 001 Effluent Flow (MGD)	CSO Pump Station Discharges [1]							Influent Data								Clarifier Effluent Data								Final Effluent Data											
						Michigan Outfall 002		Alder - Outfall 003		Magoun - Outfall 005		Outfall 006 CSO Lagoon (MGD)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)	CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	TBOD5 (mg/L)		CBOD5 (mg/L)		TSS (mg/L)	Ammonia-N (mg/L)	TBOD5 (mg/L)	TBOD5 (lb/day)	CBOD5 (mg/L)		CBOD5 (lb/day)	TSS (mg/L)	TSS (lb/day)	Ammonia-N (mg/L)	Ammonia-N (lb/day)	Effluent Fecal coliform (col/100	Effluent E. coli (col/100 mLs)
						Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Est. Flow (MGD)	Run Time Minutes	Flow (MGD)																											
Design Criteria			15 Avg 27 Max	36 Peak							Metered Lagoon Influent	>Max Q=3.0									<MDL		<MDL		10	1.5	Report Only <MDL	Report Only		7.1 AML 10.7 AWL <MDL		888 AML 1339 AWL	8.5 AML 12.8 AWL	1063 AML 1601 AWL	1.5 AML 2.3 AWL <MDL	188 AML 751 DML		
1	Fri	0.15	9.76	15.0	12.50	0.000		0.000		0.000		0.00			50	4070	83	6756	5.32	433		<	4.0	11.4	0.10			<	4.0	326	2.0	163	0.03	2.4		
2	Sat	0.00	8.49	13.0	9.72	0.000		0.000		0.000		0.00																								
3	Sun	0.00	8.73	13.0	10.23	0.000		0.000		0.000		0.00	49	3568	43	3131	34	2475	3.73	272							5.0	364	<	4.3	313	1.0	73	0.10	7.3		
4	Mon	0.00	8.36	12.0	9.40	0.000		0.000		0.000		0.00	74	5159	54	3765	81	5648	9.40	655	7.1	<	4.0	12.6	0.15		4.6	321	<	4.0	279	3.0	209	0.02	1.4		
5	Tue	0.00	8.35	12.0	9.25	0.000		0.000		0.000		0.00	86	5989	51	3552		0	7.56	526	11.0	<	4.3	11.0	0.04		5.4	376	<	4.3	299	4.0	279	0.03	2.1		
6	Wed	0.00	8.76	13.0	9.64	0.000		0.000		0.000		0.00	135	9863	95	6941	137	10009	13.40	979	7.9	<	4.0	11.4	0.15		4.6	336	<	4.0	292	2.2	161	0.13	9.5		
7	Thu	0.00	8.74	13.0	10.00	0.000		0.000		0.000		0.00	94	6852	52	3790	101	7362	11.20	816	8.6	<	4.0	10.8	0.13		4.6	335	<	4.0	292	2.4	175	0.05	3.6		
8	Fri	0.00	8.61	13.5	9.90	0.000		0.000		0.000		0.00			56	4021	103	7396	9.41	676		<	3.7	9.4	0.09			<	3.7	266	2.2	158	0.04	2.9		
9	Sat	0.00	9.10	15.5	10.33	0.000		0.000		0.000		0.00																								
10	Sun	0.02	8.89	13.5	10.12	0.000		0.000		0.000		0.00	155	11492	63	4671	234	17349	7.16	531							4.7	348	<	3.7	274	3.4	252	0.05	3.7		
11	Mon	0.00	8.76	13.0	10.61	0.000		0.000		0.000		0.00	144	10520	81	5918	150	10959	9.52	696	8.8	<	3.5	12.4	0.24		4.0	292	<	3.5	256	2.0	146	0.09	6.6		
12	Tue	0.00	8.84	13.0	10.98	0.000		0.000		0.000		0.00	130	9584	56	4129	156	11501	8.32	613	8.3		4.4	17.0	0.11		4.0	295	<	3.5	258	4.0	295	0.03	2.2		
13	Wed	0.00	8.86	12.5	11.13	0.000		0.000		0.000		0.00	222	16404	92	6798	252	18621	11.00	813	8.5	<	3.7	11.0	0.17		4.0	296	<	3.5	259	1.0	74	0.08	5.9		
14	Thu	0.00	8.91	13.0	10.17	0.000		0.000		0.000		0.00	136	10106	48	3567	235	17463	8.12	603	8.9	<	3.7	11.6	0.14		4.3	320	<	3.7	275	1.8	134	0.07	5.2		
15	Fri	0.00	8.80	12.5	10.04	0.000		0.000		0.000		0.00			49	3596	105	7706	10.30	756		<	3.5	10.0	0.15			<	3.5	257	1.7	125	0.04	2.9		
16	Sat	0.00	8.72	12.5	9.80	0.000		0.000		0.000		0.00																								
17	Sun	0.00	8.35	12.0	8.89	0.000		0.000		0.000		0.00	114	7939	67	4666	147	10237	7.22	503							3.7	258	<	3.3	230	2.3	160	0.04	2.8		
18	Mon	0.00	8.61	12.0	9.16	0.000		0.000		0.000		0.00	87	6247	36	2585	132	9479	6.06	435	6.6		6.2	9.2	0.07		4.0	287	<	3.5	251	2.5	180	0.06	4.3		
19	Tue	0.50	12.46	23.0	15.00	0.000		0.000		0.000		0.00	95	9872	66	6858	177	18393	5.66	588	9.4	<	3.5	10.8	0.26		4.0	416	<	3.5	364	2.4	249	0.18	18.7		
20	Wed	0.20	10.64	22.0	13.35	0.000		0.000		0.000		0.00	84	7454	45	3993	130	11536	5.15	457	8.4	<	3.5	10.5	0.04		4.0	355	<	3.5	311	1.9	169	0.03	2.7		
21	Thu	0.02	9.10	13.0	9.82	0.000		0.000		0.000		0.00	123	9335	48	3643	177	13433	8.40	638	8.8	<	3.5	9.8	0.05		4.0	304	<	3.5	266	2.1	159	0.04	3.0		
22	Fri	0.00	8.94	13.0	10.12	0.000		0.000		0.000		0.00			75	5592	194	14465	8.12	605		<	4.6	10.0	0.15			<	4.6	343	2.6	194	0.07	5.2		
23	Sat	0.00	8.72	13.0	9.98	0.000		0.000		0.000		0.00																								
24	Sun	0.00	8.77	13.0	9.90	0.000		0.000		0.000		0.00	57	4169	38	2779	67	4901	3.41	249							5.0	366	<	3.5	256	2.1	154	0.06	4.4		
25	Mon	0.04	9.40	15.0	11.54	0.000		0.000		0.000		0.00	89	6977	39	3057	97	7604	7.34	575	20.0		4.4	12.0	0.10		4.3	337	<	3.7	290	5.0	392	0.04	3.1		
26	Tue	0.14	10.07	17.0	10.93	0.000		0.000		0.000		0.00	83	6971	36	3023	155	13017	6.47	543	8.2	<	3.7	30.8	1.06		4.6	386	<	4.0	336	1.0	84	0.07	5.9		
27	Wed	0.00	8.94	14.0	9.85	0.000		0.000		0.000		0.00	94	7009	36	2684	127	9469	5.42	404	13.0		3.6	23.0	0.53		4.3	321	<	3.7	276	2.0	149	0.43	32.1		
28	Thu	0.00	8.63	14.0	9.09	0.000		0.000		0.000		0.00	70	5038	25	1799	117	8421	4.08	294	7.6	<	3.7	16.0	0.08		4.3	309	<	3.7	266	5.0	360	0.05	3.6		
Total		1.07	253.31		291.45	0.00	0.00	0.00	0.00		0.00	0.00																								
Mean			9.05		10.41			0.00				0.00	106	8027	54	4110	139	10175	7.57	569	9.4	4.0	13.0	0.19	4.4	331	3.8	285	2.5	187	0.08	5.9		
Maximum		0.50	12.46	23.0	15.00	0.00	0.00	0.00	0.00		0.00	0.00	222	16404	95	6941	252	18621	13.40	979	20.0	6.2	30.8	1.06	5.4	416	4.6	364	5.0	392	0.43	32.1		
Minimum			8.35		8.89	0.00	0.00	0.00	0.00		0.00	0.00	49	3568	25	1799	34	0	3.41	249	6.6	3.5	9.2	0.04	3.7	258	3.3	230	1.0	73	0.02	1.4		
# of Data		28	28	28	28	28	0	28	0		0	28	20	20	24	24	23	23	24	24	16	20	20	20	20	20	24	24	24	24	24	24		
# of Data<MDL																					0	16			16		24				0			
Wk1: 02/03-02/09/00			8.66		9.82								88	6286	59	4200	91	7604	9.12	654					4.8	391	4.1	329	2.5	159	0.06	5.1		
Wk2: 02/10-02/16/00			8.83		10.41								157	11621	65	4780	189	13933	9.07	669					4.2	371	3.6	312	2.3	203	0.06	5.3		
Wk3: 02/17-02/23/00			9.55		10.90								101	8169	56	4556	160	12924	6.77	538					3.9	371	3.7	336	2.3	211	0.07	7.1		
Wk4: 02/24-02/28/00			9.55		10.88								101	8169	56	4556	160	12924	6.77	538					3.9	371	3.7	336	2.3	211	0.07	7.1		

Total Est. Bypass Flow (MG): 0.00 Total Bypass Occurances (days/month): 0

Note [1]: Run time meters are not read at midnight for Michigan and Magoun.

APPENDIX II

WATER QUALITY INFORMATION

Gary Sanitary District

Grand Calumet River and Indiana Harbor Ship Canal CSO
Discharge Impact Initial Assessment Study

NRDC

Testing the Waters 2003

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 2-5
DRY WEATHER ANALYSES
CLINE AVENUE BRIDGE LOCATION
B3

Greeley and Hansen
June 23, 1998 Through May 3, 1999

PARAMETER	SAMPLE DATE						Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit	GLI Water Quality Chronic Limit
	23-Jun-98	20-Aug-98	21-Oct-98	28-Dec-98	23-Feb-99	3-May-99						
E-coli (CFU / 100mL)	20.00	60.00	10.00	60.00	10.00	20.00	23.00	60.00	10.00	10.00	235	235
Oil and Grease	<2.00	<2.00	<2.00	<2.00	<2.00	3.20	0.49	3.20	0.33	2.00	-	-
Ammonia (NH_3), as N	0.45	0.25	0.33	0.43	0.38	0.41	0.37	0.45	0.25	0.01	3.5	0.80
Carbonaceous Biochemical Oxygen Demand (CBOD)	7.10	<2.00	<2.00	27.00	3.60	5.90	4.40	27.00	1.33	2.00	-	-
Chemical Oxygen Demand (COD)	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	0.00	0.00	0.00	20.00	-	-
Chloride	37.00	33.00	34.00	29.00	37.00	41.00	34.96	41.00	29.00	1.00	860.00	230.00
Cyanide, Amenable to Chlorination (ATC)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000	0.005	0.022	0.0052
Fluoride, (F)	0.36	0.32	0.46	0.47	0.36	0.48	0.41	0.48	0.32	0.10	12	3.4
Hardness, Total as $CaCO_3$	180.00	150.00	160.00	180.00	260.00	130.00	172.43	260.00	130.00	2.00	-	-
Nitrogen, Total Kjeldahl as N (TKN)	0.77	0.75	0.79	0.82	1.10	1.10	0.88	1.10	0.75	0.50	-	-
Phosphorus, Total	0.05	0.07	0.06	<0.04	<0.04	<0.04	0.02	0.07	0.01	0.02	-	-
Solids, Total Dissolved (TDS)	160.00	210.00	220.00	200.00	240.00	160.00	196.04	240.00	160.00	10.00	-	-
Solids, Total Suspended (TSS)	7.00	4.80	2.60	3.60	6.40	14.00	5.52	14.00	2.60	1.00	-	-
Solids, Total Volatile Suspended (TVSS)	2.00	1.60	1.60	<1.0	1.20	1.50	1.58	2.00	1.20	2.00	-	-
Sulfate (SO_4)	43.00	36.00	31.00	42.00	34.00	47.00	38.43	47.00	31.00	8.00	-	-
pH (pH units)	8.12		8.24	7.99	7.89	7.89	8.02	8.24	7.89	0.01	8<=pH<=9	6<=pH<=9
METALS												
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.002	0.01	0.00	0.01	0.34	0.15
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.34	0.15
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000	0.005	0.0082	0.0037
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000	0.005	0.0078	0.0034
Chromium (Cr), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	2.8	0.13
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.88	0.11
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	0.02	<0.01	0.02	0.01	0.02	0.00	0.01	0.023	0.015
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.022	0.014
Iron (Fe), Total Recoverable	0.44	0.53	0.43	0.45	0.39	0.66	0.48	0.66	0.39	0.05	-	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	-	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	0.24	0.013
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	0.24	0.013
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0000	0.0000	0.0000	0.0002	0.0017	0.00091
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0000	0.0000	0.0000	0.0002	0.0014	0.00077
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.74	0.082
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.73	0.081
Zinc (Zn), Total Recoverable	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.19	0.19
Zinc (Zn), Dissolved	<0.01	<0.01	0.01	0.01	0.01	<0.01	0.01	0.01	0.01	0.01	0.18	0.19

NOTES:

All parameters are listed in milligrams per liter unless otherwise noted.

[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".

[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.

[3]The minimum value may be equal to the calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 2-8
DRY WEATHER ANALYSES
DICKEY ROAD BRIDGE LOCATION
B6

Greeley and Hansen
June 23, 1998 Through May 3, 1999

PARAMETER	SAMPLE DATE						Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit	GLI Water Quality Chronic Limit
	23-Jun-98	20-Aug-98	21-Oct-98	28-Dec-98	23-Feb-99	3-May-99						
E-coli (CFU / 100mL)	40.00	<10.00	40.00	150.00	20.00	30.00	32.00	150.00	8.00	10.00	235	235
Oil and Grease	2.50	<2.00	<2.00	<2.00	<2.00	4.50	1.14	4.50	0.67	2.00	-	-
Ammonia (NH_3), as N	0.20	0.18	0.21	0.51	0.41	0.42	0.30	0.51	0.18	0.01	7.9	1.8
Carbonaceous Biochemical Oxygen Demand (CBOD)	5.40	<2.00	<2.00	23.00	<2.00	6.30	3.04	23.00	1.00	2.00	-	-
Chemical Oxygen Demand (COD)	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	0.00	0.00	0.00	20.00	-	-
Chloride	40.00	33.00	40.00	45.00	54.00	66.00	45.15	66.00	33.00	1.00	860.00	230.00
Cyanide, Amenable to Chlorination (ATC)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000	0.005	0.022	0.0052
Fluoride, (F)	0.41	0.35	0.53	0.48	0.45	0.49	0.45	0.53	0.35	0.10	12	3.4
Hardness, Total as $CaCO_3$	190.00	150.00	160.00	170.00	220.00	190.00	178.55	220.00	150.00	2.00	-	-
Nitrogen, Total Kjeldahl as N (TKN)	0.72	0.63	0.69	1.10	1.20	1.20	0.89	1.20	0.63	0.50	-	-
Phosphorus, Total	<0.02	0.07	0.08	0.41	0.09	<0.04	0.06	0.41	0.01	0.02	-	-
Solids, Total Dissolved (TDS)	290.00	220.00	250.00	220.00	310.00	220.00	249.17	310.00	220.00	10.00	-	-
Solids, Total Suspended (TSS)	5.60	4.80	4.00	4.40	6.20	6.20	5.13	6.20	4.00	1.00	-	-
Solids, Total Volatile Suspended (TVSS)	6.00	1.40	<1.0	2.80	2.00	<1.0	2.09	6.00	1.33	2.00	-	-
Sulfate (SO_4)	48.00	44.00	38.00	54.00	59.00	95.00	53.82	95.00	38.00	8.00	-	-
pH (pH units)	8.19	8.39	8.16	7.77	7.86	7.77	8.02	8.39	7.77	0.01	6<=pH<=9	6<=pH<=9
METALS												
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.34	0.15
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.34	0.15
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.001	0.006	0.001	0.005	0.0093	0.0041
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000	0.005	0.0088	0.0037
Chromium (Cr), Total Recoverable	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	0.003	0.09	0.00	0.01	3.1	0.15
Chromium (Cr), Dissolved	<0.01	<0.01	0.10	<0.01	<0.01	<0.01	0.003	0.10	0.00	0.01	0.96	0.13
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.026	0.016
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.025	0.015
Iron (Fe), Total Recoverable	0.34	0.34	0.40	0.43	0.50	0.52	0.42	0.52	0.34	0.05	-	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	-	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	0.28	0.015
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	0.00	0.00	0.05	0.28	0.015
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.00004	0.0002	0.0000	0.0002	0.0017	0.00091
Mercury (Hg), Dissolved	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.00005	0.0003	0.0000	0.0002	0.0014	0.00077
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.81	0.090
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.01	0.81	0.090
Zinc (Zn), Total Recoverable	0.02	0.02	0.02	0.02	0.04	0.03	0.02	0.04	0.02	0.01	0.21	0.21
Zinc (Zn), Dissolved	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.20	0.20

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to the calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 3-6
WET WEATHER ANALYSIS
CLINE AVENUE BRIDGE LOCATION
B3

Greeley and Hansen
April 8-10, 1999

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	<10.00	10.00	80.00	100.00	630.00	4000.00	490.00	200.00	100.00	200.00	500.00	198.00	4000.00	10.00	100.00	235
Oil and Grease	<2.00	<2.00	<2.00	<2.00	3.30	3.90	<2.00	2.00				1.25	3.90	0.75	2.00	-
Ammonia (NH_3), as N	0.47	0.52	0.55	0.52	0.81	0.78	0.86	0.51	0.38	0.42	0.43	0.52	0.78	0.38	0.01	3.7
Carbonaceous Biochemical Oxygen Demand (CBOD)	<2.00	6.30	4.00	5.50	9.70	5.70	11.00	<2.00	9.20	5.10	6.90	5.19	11.00	1.64	2.00	-
Chemical Oxygen Demand (COD)	<20.00	<20.00	<20.00	240.00	140.00	130.00	120.00	180.00				60.70	240.00	12.50	20.00	-
Chloride	45.00	42.00	40.00	55.00	46.00	43.00	44.00	37.00				43.74	55.00	37.00	4.00	860
Cyanide, Amenable to Chlorination (ATC)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005				0.002	0.006	0.001	0.010	0.022
Fluoride, (F)	0.41	0.46	0.42	0.38	0.48	0.50	0.34	0.33				0.41	0.50	0.33	0.10	12
Hardness, Total as $CaCO_3$	130.00	170.00	180.00	200.00	180.00	200.00	200.00	190.00				179.72	200.00	130.00	2.00	-
Nitrogen, Total Kjeldahl as N (TKN)	1.30	1.60	1.90	1.40	1.80	1.60	1.70	1.10	1.30	1.90	1.40	1.54	1.90	1.10	0.50	-
Phosphorus, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10				0.00	0.00	0.00	0.10	-
Solids, Total Dissolved (TDS)	200.00	230.00	240.00	120.00	220.00	250.00	250.00	230.00				212.70	250.00	120.00	10.00	-
Solids, Total Suspended (TSS)	7.60	9.60	14.00	96.00	14.00	15.00	5.40	6.40				12.78	96.00	5.40	1.00	-
Solids, Total Volatile Suspended (TVSS)	5.60	7.20	10.00	61.00	<1.0	<1.0	4.00	3.60				4.65	61.00	0.75	1.00	-
Sulfate (SO_4)	35.00	34.00	34.00	34.00	38.00	34.00	42.00	34.00				35.53	42.00	34.00	5.00	-
pH (pH units)												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0093
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0088
Chromium (Cr), Total Recoverable	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01				0.002	0.01	0.00	0.01	3.1
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.96
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	0.01				0.004	0.03	0.00	0.01	0.026
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.025
Iron (Fe), Total Recoverable	0.91	1.41	2.12	1.61	1.79	1.73	1.34	1.02				1.48	2.12	0.91	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.28
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.28
Mercury (Hg), Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.81
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.81
Zinc (Zn), Total Recoverable	0.03	0.05	0.03	0.08	0.08	0.06	0.05	0.04				0.05	0.08	0.03	0.01	0.21
Zinc (Zn), Dissolved	0.03	0.01	<0.01	0.01	0.03	0.02	<0.01	0.01				0.01	0.03	0.01	0.01	0.20

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 3-9
WET WEATHER ANALYSIS
DICKEY ROAD BRIDGE LOCATION
B6

Greeley and Hansen
April 8-10, 1999

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	20.00	50.00	120.00	50.00	150.00	3500.00	100.00	900.00	1700.00	2900.00	3500.00	329.00	3500.00	20.00	100.00	235
Oil and Grease	2.30	2.60	2.30	<2.0	3.00	5.30	2.80	2.40				2.67	5.30	1.75	2.00	-
Ammonia (NH_3), as N	0.58	0.56	0.52	0.53	0.52	0.50	0.49	0.53	0.56	0.65	0.59	0.55	0.65	0.49	0.01	9.6
Carbonaceous Biochemical Oxygen Demand (CBOD)	5.60	2.80	2.80	2.60	<2.00	3.00	2.60	<2.00	9.10	9.00	4.80	3.49	9.10	1.64	2.00	-
Chemical Oxygen Demand (COD)	<20.00	<20.00	<20.00	<20.00	<20.00	90.00	<20.00	<20.00				3.91	90.00	2.50	20.00	-
Chloride	54.00	52.00	48.00	53.00	51.00	54.00	54.00	61.00				53.27	61.00	48.00	4.00	860
Cyanide, Amenable to Chlorination (ATC)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005				0.002	0.008	0.001	0.010	0.022
Fluoride, (F)	0.60	0.63	0.57	0.56	0.59	0.50	0.48	0.53				0.56	0.63	0.48	0.10	12
Hardness, Total as $CaCO_3$	210.00	200.00	200.00	180.00	200.00	200.00	220.00	210.00				202.20	220.00	180.00	2.00	-
Nitrogen, Total Kjeldahl as N (TKN)	1.50	1.90	1.40	1.60	2.00	1.90	2.50	1.70	2.00	2.10	1.70	1.82	2.50	1.40	0.50	-
Phosphorus, Total	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10				0.02	0.13	0.01	0.10	-
Solids, Total Dissolved (TDS)	250.00	210.00	310.00	320.00	270.00	170.00	30.00	290.00				194.87	320.00	30.00	10.00	-
Solids, Total Suspended (TSS)	28.00	8.00	4.40	16.00	8.80	6.80	11.00	10.00				10.05	28.00	4.40	1.00	-
Solids, Total Volatile Suspended (TVSS)	21.00	5.00	<1.0	2.50	4.40	5.10	6.80	8.00				4.80	21.00	0.88	1.00	-
Sulfate (SO_4)	50.00	120.00	51.00	47.00	50.00	40.00	51.00	56.00				54.87	120.00	40.00	5.00	-
pH (pH units)												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.010
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0098
Chromium (Cr), Total Recoverable	0.02	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01				0.01	0.02	0.00	0.01	3.3
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	1.0
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.028
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.027
Iron (Fe), Total Recoverable	3.42	0.93	0.66	0.98	0.89	1.22	1.60	1.45				1.23	3.42	0.66	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Mercury (Hg), Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002				0.00003	0.0002	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.002	0.01	0.00	0.01	0.88
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.88
Zinc (Zn), Total Recoverable	0.11	0.05	0.04	0.05	0.05	0.05	0.09	0.06				0.06	0.11	0.04	0.01	0.22
Zinc (Zn), Dissolved	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02				0.02	0.03	0.02	0.01	0.22

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 3-14
WET WEATHER ANALYSIS
CLINE AVENUE BRIDGE LOCATION
B3

Greeley and Hansen
April 19-20, 2000

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	100.00	100.00	100.00	100.00	100.00	<100.00	<100.00	<100.00	300.00	4100.00	20000.00	230.00	20000.00	73.00	100.00	235.00
Oil and Grease	<2.00	3.00	<2.00	<2.00	2.70	<2.00	2.70	<2.00				1.23	3.00	0.75	2.00	-
Ammonia (NH_3), as N	0.32	0.32	0.31	0.36	0.44	0.42	0.35	0.33	0.31	0.51	0.42	0.37	0.51	0.31	0.01	3.7
Carbonaceous Biochemical Oxygen Demand (CBOD)	2.80	3.80	2.40	2.20	2.40	3.00	2.80	3.20	10.00	6.40	6.00	3.60	10.00	2.20	2.00	-
Chemical Oxygen Demand (COD)	70.00	30.00	50.00	70.00	40.00	<20.00	<20.00	<20.00				29.50	70.00	12.50	20.00	-
Chloride	38.00	39.00	43.00	45.00	50.00	45.00	39.00	41.00				42.33	50.00	38.00	4.00	860.00
Cyanide, Amenable to Chlorination (ATC)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010				0.000	0.000	0.000	0.010	0.022
Fluoride, (F)	0.68	0.73	0.71	0.74	0.72	0.64	0.56	0.57				0.68	0.74	0.56	0.10	12
Hardness, Total as $CaCO_3$	190.00	170.00	180.00	190.00	190.00	180.00	190.00	180.00				180.93	190.00	160.00	2.00	-
Nitrogen, Total Kjeldahl as N (TKN)	1.50	1.30	1.30	1.50	1.30	1.30	1.40	1.50	2.70	1.80	1.60	1.53	2.70	1.30	0.50	-
Phosphorus, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10				0.00	0.00	0.00	0.10	-
Solids, Total Dissolved (TDS)	280.00	160.00	250.00	290.00	270.00	280.00	280.00	280.00				255.00	290.00	160.00	10.00	-
Solids, Total Suspended (TSS)	9.80	16.00	14.00	19.00	16.00	21.00	21.00	13.00				15.77	21.00	9.80	1.00	-
Solids, Total Volatile Suspended (TVSS)	2.00	4.00	5.20	4.80	4.40	3.00	3.20	3.20				3.58	5.20	2.00	1.00	-
Sulfate (SO_4)	32.00	29.00	36.00	39.00	39.00	39.00	33.00	32.00				34.88	39.00	29.00	5.00	-
pH (pH units)												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0093
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0088
Chromium (Cr), Total Recoverable	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01				0.002	0.01	0.00	0.01	3.1
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.98
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.026
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.025
Iron (Fe), Total Recoverable	1.06	0.53	1.25	2.10	3.29	2.27	1.82	1.46				1.53	3.29	0.53	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.28
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.28
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.81
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.81
Zinc (Zn), Total Recoverable	0.02	0.01	0.02	0.05	0.07	0.05	0.03	0.03				0.03	0.07	0.01	0.01	0.21
Zinc (Zn), Dissolved	<0.01	<0.01	0.01	0.02	0.01	0.01	<0.01	0.01				0.01	0.02	0.01	0.01	0.20

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(5)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 3-17
WET WEATHER ANALYSIS
DICKEY ROAD BRIDGE LOCATION
B6

Greeley and Hansen
April 19-20, 2000

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	500.00	700.00	500.00	4100.00	2500.00	1600.00	3700.00	3600.00	5600.00	5000.00	4000.00	2139.00	5600.00	500.00	100.00	235.00
Oil and Grease	3.50	3.30	2.10	<2.00	<2.00	<2.00	<2.00	<2.00				1.24	3.50	0.75	2.00	-
Ammonia (NH_3), as N	0.29	0.31	0.36	0.41	0.40	0.47	0.45	0.45	0.42	0.36	0.38	0.39	0.47	0.29	0.01	9.6
Carbonaceous Biochemical Oxygen Demand (CBOD)	<2.00	<2.00	<2.00	2.20	<2.00	<2.00	2.20	2.00	5.10	2.80	5.40	1.90	5.40	1.09	2.00	-
Chemical Oxygen Demand (COD)	<20.00	40.00	100.00	90.00	100.00	100.00	100.00	<20.00				54.77	100.00	15.00	20.00	-
Chloride	52.00	52.00	53.00	56.00	53.00	58.00	58.00	65.00				55.73	65.00	52.00	4.00	860.00
Cyanide, Amenable to Chlorination (ATC)	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.010				0.000	0.000	0.000	0.010	0.022
Fluoride, (F)	0.59	0.64	0.64	0.69	0.66	0.65	0.66	0.65				0.65	0.69	0.59	0.10	12
Hardness, Total as $CaCO_3$	210.00	200.00	190.00	220.00	200.00	220.00	200.00	220.00				207.21	220.00	190.00	2.00	-
Nitrogen, Total Kjeldahl as N (TKN)	1.10	0.86	1.30	1.30	1.40	1.40	1.60	1.30	1.50	1.30	1.40	1.30	1.60	0.86	0.50	-
Phosphorus, Total	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	0.11	<0.10				0.04	0.11	0.03	0.10	-
Solids, Total Dissolved (TDS)	180.00	220.00	300.00	340.00	200.00	310.00	300.00	340.00				266.63	340.00	180.00	10.00	-
Solids, Total Suspended (TSS)	9.80	9.20	14.00	16.00	330.00	17.00	17.00	12.00				19.75	330.00	9.20	1.00	-
Solids, Total Volatile Suspended (TVSS)	3.80	5.00	7.60	2.40	14.00	5.20	5.20	1.40				4.55	14.00	1.40	1.00	-
Sulfate (SO_4)	48.00	54.00	52.00	60.00	66.00	63.00	65.00	62.00				58.41	66.00	48.00	5.00	-
pH (pH units)												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.010
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0098
Chromium (Cr), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	3.3
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01				0.004	0.01	0.00	0.01	1.0
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.028
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	0.02	0.02	<0.01	<0.01				0.004	0.02	0.00	0.01	0.027
Iron (Fe), Total Recoverable	0.96	1.18	1.65	1.01	0.99	2.31	2.62	1.47				1.42	2.62	0.96	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.88
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.88
Zinc (Zn), Total Recoverable	0.03	0.03	0.05	0.05	0.04	0.07	0.08	0.05				0.05	0.08	0.03	0.01	0.22
Zinc (Zn), Dissolved	0.06	0.01	0.02	0.01	0.02	0.02	0.01	0.04				0.02	0.06	0.01	0.01	0.22

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, then the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 3-22
WET WEATHER ANALYSIS
CLINE AVENUE BRIDGE LOCATION
B3

Greeley and Hansen
June 20-21, 2000

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	130.00	60.00	600.00	100.00	37000.00	34000.00	120000.00	11000.00	2000.00	2000.00	5000.00	2405.00	120000.00	60.00	10.00	235.00
Oil and Grease	<2.00	4.60	2.60	6.30	<2.00	<2.00	6.80	<2.00				2.17	6.60	1.00	2.00	-
Ammonia (NH_3), as N	0.27	0.28	0.25	0.32	0.30	0.44	0.54	0.29	0.32	0.36	0.35	0.33	0.54	0.25	0.01	3.7
Carbonaceous Biochemical Oxygen Demand (CBOD)	<2.00	3.00	2.00	4.00	4.20	7.80	12.00	<2.00	3.30	<2.00	3.50	3.18	12.00	1.45	2.00	-
Chemical Oxygen Demand (COD)	20.00	20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00				7.07	20.00	5.00	20.00	-
Chloride	38.00	37.00	50.00	53.00	45.00	53.00	56.00	51.00				47.38	56.00	37.00	1.00	860.00
Cyanide, Amenable to Chlorination (ATC)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010				0.000	0.000	0.000	0.005	0.022
Fluoride, (F)	0.60	0.59	0.63	0.63	0.58	0.52	0.57	0.59				0.59	0.63	0.52	0.10	12
Hardness, Total as $CaCO_3$	200.00	220.00	220.00	230.00	250.00	230.00	220.00	180.00				217.83	250.00	180.00	2.00	-
Nitrogen, Total Kjeldahl as N (TKN)	1.40	1.10	1.30	1.60	1.20	1.50	1.60	1.20	1.50	1.00	1.10	1.30	1.60	1.00	0.50	-
Phosphorus, Total	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	0.14	0.11				0.02	0.14	0.01	0.02	-
Solids, Total Dissolved (TDS)	240.00	260.00	290.00	280.00	210.00	210.00	240.00	290.00				250.60	290.00	210.00	10.00	-
Solids, Total Suspended (TSS)	7.00	6.80	6.80	4.00	7.20	11.00	6.60	5.80				6.90	11.00	4.00	1.00	-
Solids, Total Volatile Suspended (TVSS)	2.00	2.80	3.00	2.40	2.80	5.20	5.00	3.20				3.14	5.20	2.00	2.00	-
Sulfate (SO_4)	32.00	34.00	37.00	38.00	31.00	30.00	34.00	32.00				33.40	38.00	30.00	8.00	-
pH (pH units)												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0093
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0088
Chromium (Cr), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	3.1
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.96
Copper (Cu), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.028
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.025
Iron (Fe), Total Recoverable	2.16	1.36	1.14	1.09	1.89	1.71	1.32	1.02				1.39	2.16	1.02	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.28
Lead (Pb), Dissolved	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.01	0.06	0.01	0.05	0.28
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01				0.004	0.01	0.00	0.01	0.81
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01				0.002	0.01	0.00	0.01	0.81
Zinc (Zn), Total Recoverable	0.05	0.03	0.03	0.04	0.03	0.04	0.03	0.03				0.03	0.05	0.03	0.01	0.21
Zinc (Zn), Dissolved	0.05	<0.01	<0.01	0.03	<0.01	0.07	0.01	<0.01				0.01	0.07	0.01	0.01	0.20

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

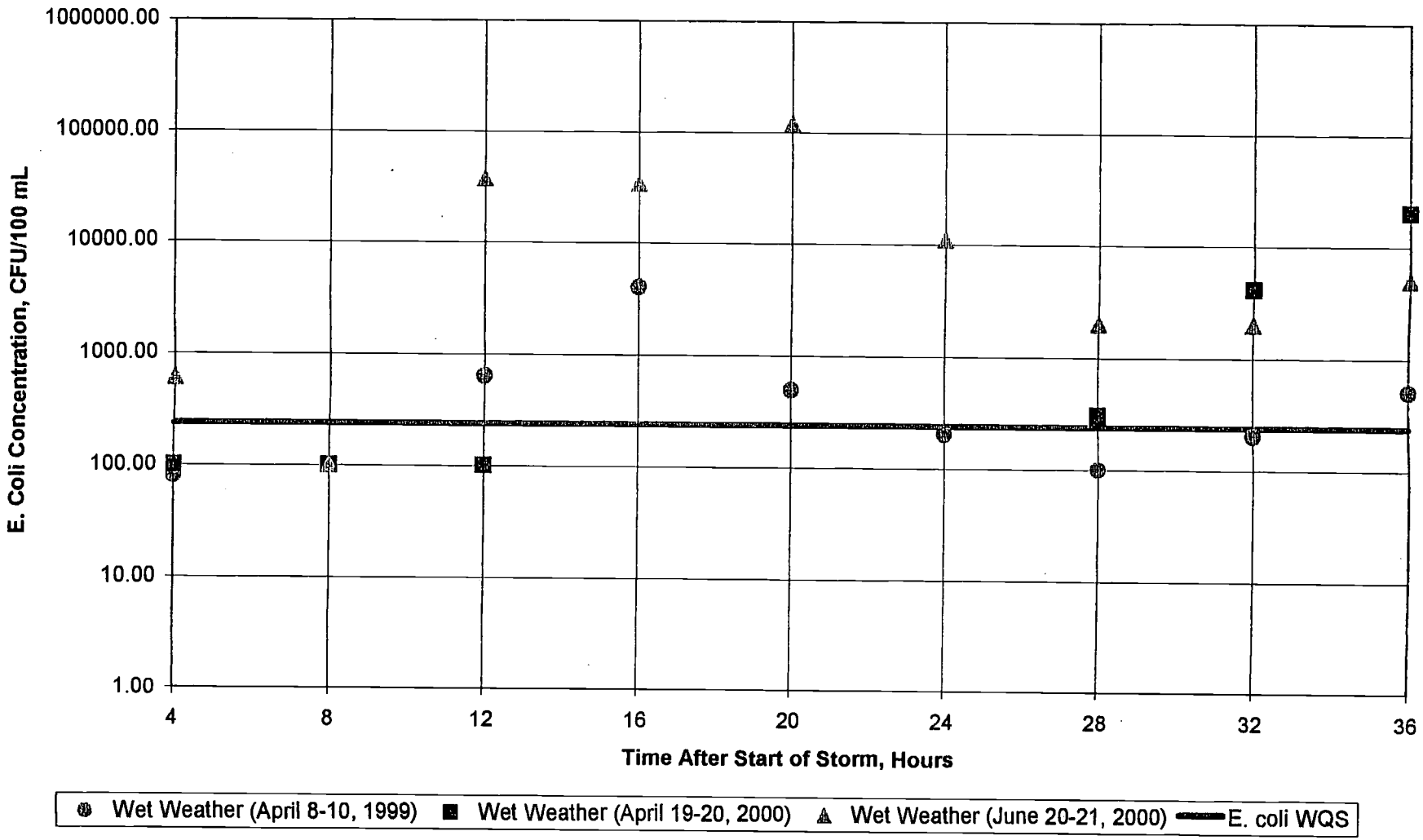
Table 3-25
WET WEATHER ANALYSIS
DICKEY ROAD BRIDGE LOCATION
B6

Greeley and Hansen
June 20-21, 2000

FROM START OF STORM, HOURS	-4	0	4	8	12	16	20	24	28	32	36	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit	GLI Water Quality Acute Limit
SAMPLE NO.	1	2	3	4	5	6	7	8	9	10	11					
PARAMETER																
E-coli (CFU / 100mL)	220.00	1100.00	200.00	<100.00	<1000.00	11000.00	5000.00	4000.00	10000.00	11000.00	18000.00	1028.00	18000.00	8.00	10.00	235.00
Oil and Grease	2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00				0.32	2.00	0.25	2.00	-
Ammonia (NH_3), as N	0.27	0.25	0.26	0.31	0.24	0.34	0.33	0.39	0.22	0.29	0.41	0.30	0.41	0.22	0.01	9.6
Carbonaceous Biochemical Oxygen Demand (CBOD)																
Chemical Oxygen Demand (COD)	2.20	3.20	2.20	7.80	3.30	<2.00	14.00	<2.00	<2.00	<2.00	<2.00	2.28	14.00	1.09	2.00	-
Chloride	50.00	20.00	<20.00	<20.00	<20.00	60.00	<20.00	30.00				19.14	60.00	10.00	20.00	-
Cyanide, Amenable to Chlorination (ATC)	49.00	49.00	49.00	60.00	44.00	61.00	60.00	62.00				53.83	62.00	44.00	1.00	860.00
Fluoride, (F)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010				0.000	0.000	0.000	0.005	0.022
Hardness, Total as $CaCO_3$	0.50	0.49	0.51	0.61	0.45	0.59	0.54	0.56				0.53	0.61	0.45	0.10	12
Nitrogen, Total Kjeldahl as N (TKN)	210.00	200.00	140.00	230.00	190.00	200.00	220.00	220.00				199.28	230.00	140.00	2.00	-
Phosphorus, Total	1.10	1.00	<1.00	1.10	<1.00	1.70	1.20	1.30	1.40	1.40	1.30	1.03	1.70	0.41	0.50	-
Solids, Total Dissolved (TDS)	<0.10	<0.10	0.10	<0.10	<0.10	0.13	<0.10	0.12				0.02	0.13	0.01	0.02	-
Solids, Total Suspended (TSS)	300.00	300.00	390.00	340.00	260.00	380.00	290.00	340.00				320.07	390.00	260.00	10.00	-
Solids, Total Volatile Suspended (TVSS)	3.40	6.60	6.00	4.60	11.00	8.00	6.00	11.00				6.60	11.00	3.40	1.00	-
Sulfate (SO_4)	2.00	2.60	2.80	2.20	3.80	2.80	2.00	4.40				2.72	4.40	2.00	2.00	-
pH (pH units)	55.00	54.00	54.00	67.00	47.00	74.00	65.00	64.00				59.42	74.00	47.00	8.00	-
												0.00	0.00	0.00	0.01	6<=pH<=9
METALS																
Arsenic (As), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Arsenic (As), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.34
Cadmium (Cd), Total Recoverable	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.010
Cadmium (Cd), Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.000	0.000	0.000	0.005	0.0098
Chromium (Cr), Total Recoverable	<0.01	0.01	0.01	<0.01	<0.01	<0.01	0.01	0.02				0.01	0.02	0.01	0.01	3.3
Chromium (Cr), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	1.0
Copper (Cu), Total Recoverable	<0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01				0.01	0.01	0.00	0.01	0.026
Copper (Cu), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.027
Iron (Fe), Total Recoverable	0.90	0.98	0.97	0.73	0.93	1.04	0.79	1.43				0.95	1.43	0.73	0.05	-
Iron (Fe), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	-
Lead (Pb), Total Recoverable	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Lead (Pb), Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.00	0.00	0.00	0.05	0.31
Mercury (Hg), Total Recoverable	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0017
Mercury (Hg), Dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				0.0000	0.0000	0.0000	0.0002	0.0014
Nickel (Ni), Total Recoverable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.88
Nickel (Ni), Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				0.00	0.00	0.00	0.01	0.88
Zinc (Zn), Total Recoverable	0.04	0.05	0.04	0.03	0.07	0.05	0.04	0.05				0.04	0.07	0.03	0.01	0.22
Zinc (Zn), Dissolved	0.03	0.08	<0.01	<0.01	0.01	<0.01	<0.01	<0.01				0.01	0.08	0.00	0.01	0.22

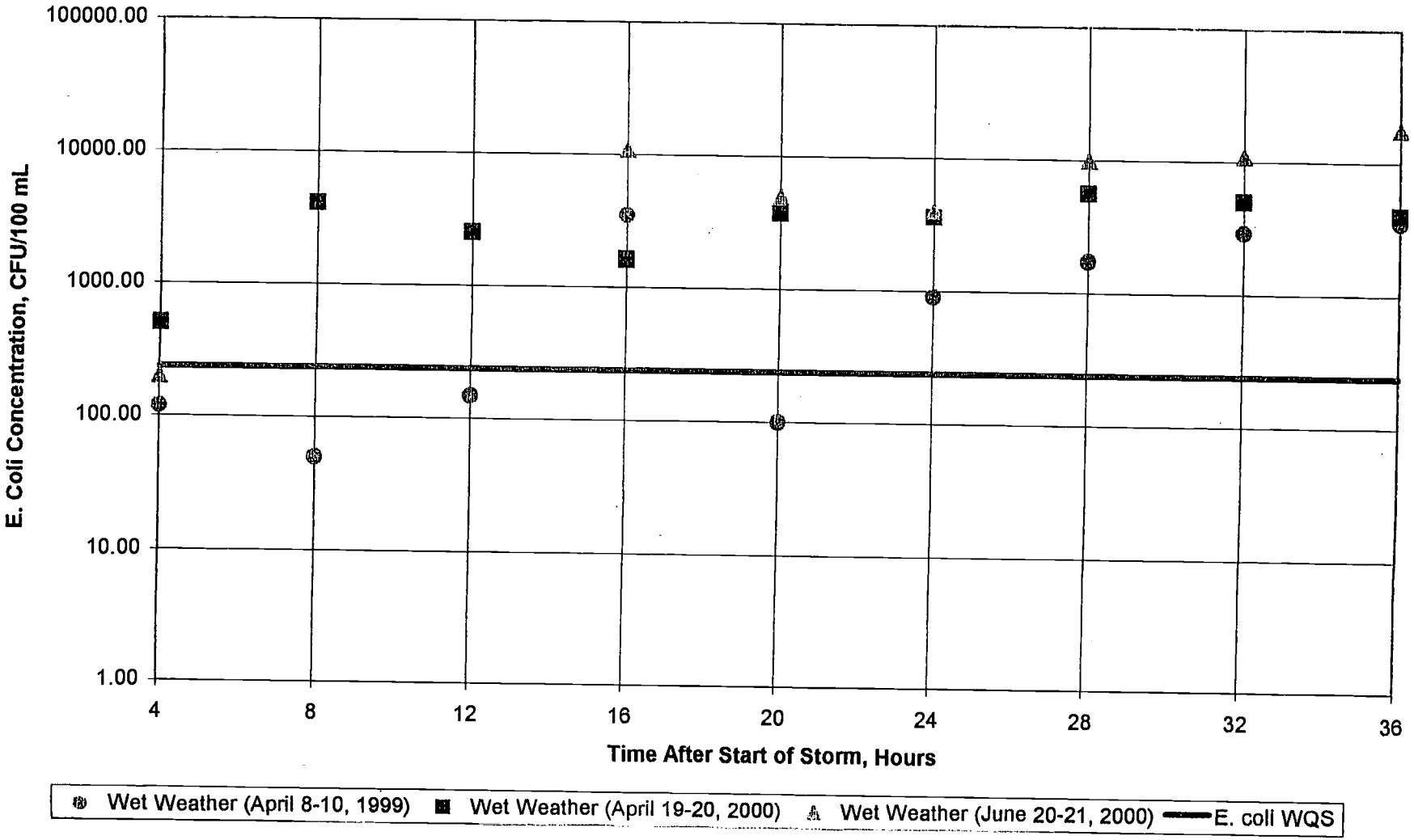
NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value "V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]*The minimum value may be equal to a calculated "V" value.*

FIGURE 3-3.
Comparison of E. Coli Wet Weather Concentrations at the Cline Avenue Bridge to the Water Quality Standard



AcuteBridgeFigures.xls
CL_EC

FIGURE 3-6.
Comparison of E. Coli Wet Weather Concentrations at the Dickey Road Bridge to the Water Quality Standard



AcuteBridgeFigures.xls
DY_EC

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-2
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
MICHIGAN AVENUE LOCATION
002-MAECSD

Greeley and Hansen
April 8-10, 1999

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	120	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	26000.00		20000.00		17000.00		24000.00		21883.00	26000.00	17000.00	10.00
Oil and Grease	140.00		5.30		3.10		5.10		10.41	140.00	3.10	2.00
Ammonia (NH_3), as N	2.50		2.10		3.10		3.20		2.89	3.20	2.10	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	120.00	32.00	52.00	35.00	58.00	39.00	36.00	34.00	45.80	120.00	32.00	2.00
Chemical Oxygen Demand (COD)	230.00		110.00		100.00		80.00		119.28	230.00	80.00	20.00
Chloride	74.00		82.00		68.00		85.00		27.51	74.00	0.80	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.005		0.010		0.009		0.008		0.007	0.010	0.004	0.005
Fluoride, (F)	0.56		0.51		0.54		0.54		0.54	0.56	0.51	0.10
Hardness, Total as $CaCO_3$	160.00		140.00		140.00		120.00		143.44	160.00	120.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	3.90		3.80		4.80		5.00		4.30	5.00	3.80	0.50
Phosphorus, Total	0.82		0.54		0.79		0.54		0.68	0.82	0.54	0.10
Solids, Total Dissolved (TDS)	330.00	320.00	290.00	280.00	10000.00	240.00	430.00	350.00	485.70	10000.00	240.00	10.00
Solids, Total Suspended (TSS)	160.00	66.00	65.00	43.00	34.00	26.00	<1.00	33.00	30.52	160.00	0.88	1.00
Solids, Total Volatile Suspended (TVSS)	40.00	30.00	26.00	18.00	18.00	<1.00	<1.00	1.20	7.11	40.00	0.75	1.00
Sulfate (SO_4)	52.00		53.00		53.00		56.00		53.48	56.00	52.00	8.00
pH (pH units)	7.01		7.07		7.10		7.23		7.10	7.23	7.01	0.01
METALS												
Arsenic (As), Total Recoverable	0.03		0.02		<0.01		<0.01		0.01	0.03	0.01	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	0.02		<0.01		<0.01		0.01		0.01	0.02	0.01	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	0.04		0.03		0.02		0.02		0.03	0.04	0.02	0.01
Copper (Cu), Dissolved	0.01		0.01		<0.01		<0.01		0.01	0.01	0.01	0.01
Iron (Fe), Total Recoverable	4.64		3.07		1.92		1.32		2.45	4.64	1.32	0.05
Iron (Fe), Dissolved	0.22		0.12		0.12		0.13		0.14	0.22	0.12	0.05
Lead (Pb), Total Recoverable	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg)	<0.0002		0.0002		0.0002		0.0002		0.0002	0.0002	0.0002	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.24		0.21		0.15		0.12		0.17	0.24	0.12	0.01
Zinc (Zn), Dissolved	0.03		0.04		0.04		0.04		0.04	0.04	0.03	0.01

NOTES:
All paremeters ere listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(6)(C) in which samples with concentrations below the detection limit are assigned the velue"V".
[2]If all semple concentrations for a parameter are below the detection limit, the geometric mean, maximum value end minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-3
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
ALDER ST. LOCATION
003-ASECSD

Greeley and Hansen
April 8-10, 1999

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	120	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	22000.00		20000.00		13000.00		14000.00		18822.00	22000.00	13000.00	10.00
Oil and Grease	720.00		45.00		7.50		6.70		35.72	720.00	6.70	2.00
Ammonia (NH_3), as N	5.00		2.70		1.80		1.70		2.54	5.00	1.70	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	140.00	150.00	120.00	89.00	51.00	80.00	62.00	42.00	83.85	150.00	42.00	2.00
Chemical Oxygen Demand (COD)	370.00		330.00		110.00		230.00		235.75	370.00	110.00	20.00
Chloride	100.00		48.00		38.00		47.00		54.11	100.00	38.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.005		<0.005		<0.005		0.290		0.005	0.290	0.001	0.005
Fluoride, (F)	0.73		0.45		0.33		0.31		0.43	0.73	0.31	0.10
Hardness, Total as $CaCO_3$	280.00		220.00		150.00		130.00		186.17	280.00	130.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	17.00		5.20		3.80		8.90		7.39	17.00	3.80	0.50
Phosphorus, Total	2.50		2.40		1.60		1.40		1.91	2.50	1.40	0.10
Solids, Total Dissolved (TDS)	6400.00	210.00	220.00	120.00	220.00	140.00	210.00	170.00	281.13	6400.00	120.00	10.00
Solids, Total Suspended (TSS)	310.00	700.00	270.00	260.00	230.00	250.00	120.00	120.00	244.12	700.00	120.00	1.00
Solids, Total Volatile Suspended (TVSS)	170.00	350.00	140.00	58.00	140.00	130.00	68.00	58.00	116.31	350.00	58.00	1.00
Sulfate (SO_4)	76.00		35.00		23.00		22.00		34.08	76.00	22.00	8.00
pH (pH units)	7.19		7.28		7.35		7.37		7.30	7.37	7.19	0.01
METALS												
Arsenic (As), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	0.03		0.03		0.02		0.02		0.02	0.03	0.02	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	0.10		0.07		0.09		0.07		0.08	0.10	0.07	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	10.60		12.10		7.61		6.97		9.08	12.10	6.97	0.05
Iron (Fe), Dissolved	0.18		0.22		0.12		0.11		0.15	0.22	0.11	0.05
Lead (Pb), Total Recoverable	0.10		0.12		0.08		0.08		0.09	0.12	0.08	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg)	0.0003		0.0004		0.0005		0.0002		0.0003	0.0005	0.0002	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		0.02		0.01		<0.01		0.01	0.02	0.01	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.77		0.80		0.46		0.43		0.59	0.80	0.43	0.01
Zinc (Zn), Dissolved	0.01		0.02		0.04		0.03		0.02	0.04	0.01	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(6)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-4
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
EQUALIZATION BASIN OVERFLOW
004-EQECSD

Greeley and Hansen
April 8-10, 1999

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	120	Geometric Mean[1,2]	Maximum Value[2]	Minimum Value[2,3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	3000.00		3500.00		3000.00		2700.00		3037.00	3500.00	2700.00	10.00
Oil and Grease	<2.00		<2.00		<2.00		<2.00		0.00	0.00	0.00	2.00
Ammonia (NH_3), as N	3.40		3.70		3.70		3.40		3.55	3.70	3.40	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	6.50	5.80	<2.00	3.00	2.80	3.60	3.00	3.60	3.48	6.50	1.75	2.00
Chemical Oxygen Demand (COD)	30.00		<20		20.00		60.00		27.11	60.00	15.00	20.00
Chloride	56.00		68.00		55.00		54.00		57.99	68.00	54.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Fluoride, (F)	0.34		0.32		0.32		0.41		0.35	0.41	0.32	0.10
Hardness, Total as $CaCO_3$	95.00		90.00		90.00		95.00		92.47	95.00	90.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	4.40		4.70		4.70		6.20		4.95	6.20	4.40	0.50
Phosphorus, Total	0.21		0.20		0.20		0.20		0.20	0.21	0.20	0.10
Solids, Total Dissolved (TDS)	230.00	240.00	280.00	210.00	240.00	250.00	260.00	270.00	246.59	280.00	210.00	10.00
Solids, Total Suspended (TSS)	120.00	2.00	3.00	3.00	3.80	2.00	<1.00	1.40	3.45	120.00	0.88	1.00
Solids, Total Volatile Suspended (TVSS)	<1.00	2.40	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.18	2.40	0.13	1.00
Sulfate (SO_4)	19.00		22.00		21.00		23.00		21.20	23.00	19.00	8.00
pH (pH units)	7.85		7.93		8.00		8.00		7.94	8.00	7.85	0.01
METALS												
Arsenic (As), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	0.01		<0.01		0.18		<0.01		0.01	0.18	0.01	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	<0.01		0.01		<0.01		<0.01		0.004	0.01	0.00	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	0.36		0.26		0.24		0.24		0.27	0.36	0.24	0.05
Iron (Fe), Dissolved	<0.05		0.60		<0.05		<0.05		0.03	0.60	0.01	0.05
Lead (Pb), Total Recoverable	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg)	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		0.08		<0.01		0.01	0.08	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.01		0.01		0.01		0.01		0.01	0.01	0.01	0.01
Zinc (Zn), Dissolved	<0.01		<0.01		0.01		<0.01		0.004	0.01	0.00	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-17
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
ALDER ST. LOCATION
003-ASECSD

Greeley and Hansen
April 19-20, 2000

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	120	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	1200000.00		1000000.00		2000000.00		1600000.00		1399854.00	2000000.00	1000000.00	10.00
Oil and Grease	220.00		2.00		4.80		19.00		14.15	220.00	2.00	2.00
Ammonia (NH_3), as N	4.70		9.50		2.70		8.80		5.35	9.50	2.70	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	100.00	110.00	56.00	68.00	36.00	25.00	60.00	140.00	64.95	140.00	25.00	2.00
Chemical Oxygen Demand (COD)	340.00		110.00		220.00		80.00		160.18	340.00	80.00	20.00
Chloride	91.00		72.00		71.00		79.00		77.86	91.00	71.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.010		<0.010		<0.010		<0.010		0.000	0.000	0.000	0.005
Fluoride, (F)	0.79		0.64		0.57		0.67		0.66	0.79	0.57	0.10
Hardness, Total as $CaCO_3$	360.00		210.00		240.00		270.00		284.56	360.00	210.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	16.00		20.00		8.60		14.00		14.01	20.00	8.60	0.50
Phosphorus, Total	2.20		2.10		1.20		2.00		1.82	2.20	1.20	0.02
Solids, Total Dissolved (TDS)	400.00	320.00	310.00	350.00	220.00	360.00	350.00	410.00	334.79	410.00	220.00	10.00
Solids, Total Suspended (TSS)	320.00	310.00	210.00	560.00	210.00	320.00	300.00	280.00	300.14	560.00	210.00	1.00
Solids, Total Volatile Suspended (TVSS)	100.00	150.00	110.00	240.00	88.00	140.00	100.00	440.00	146.71	440.00	88.00	2.00
Sulfate (SO_4)	100.00		60.00		47.00		72.00		67.13	100.00	47.00	8.00
pH (pH units)	7.13		7.33		7.37		7.29		7.28	7.37	7.13	0.01
METALS												
Arsenic (As), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	0.02		<0.01		0.02		0.01		0.01	0.02	0.01	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	0.08		0.06		0.08		0.08		0.07	0.08	0.06	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	14.90		6.73		11.40		11.80		10.78	14.90	6.73	0.05
Iron (Fe), Dissolved	0.49		0.40		0.10		0.45		0.31	0.49	0.10	0.05
Lead (Pb), Total Recoverable	0.1		0.05		0.09		0.07		0.07	0.10	0.05	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg), Total Recoverable	<0.0002		<0.0002		0.0004		<0.0002		0.0001	0.0004	0.0001	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.61		0.36		0.50		0.45		0.47	0.61	0.36	0.01
Zinc (Zn), Dissolved	<0.01		0.01		0.03		0.01		0.01	0.03	0.01	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (e)(8)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-18
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
EQUALIZATION BASIN OVERFLOW
004-EQECSD

Greeley and Hansen
April 19-20, 2000

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	120	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	8	7	8				
PARAMETER												
E-coli (CFU / 100mL)	1000.00		4000.00		2000.00		4000.00		2378.00	4000.00	1000.00	10.00
Oil and Grease	<2.00		2.00		<2.00		<2.00		0.71	2.00	0.50	2.00
Ammonia (NH_3), as N	1.90		2.00		2.10		2.10		2.02	2.10	1.90	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	20.00	20.00	24.00	22.00	27.00	29.00	21.00	14.00	21.67	29.00	14.00	2.00
Chemical Oxygen Demand (COD)	50.00		70.00		60.00		40.00		53.84	70.00	40.00	20.00
Chloride	46.00		47.00		48.00		48.00		47.24	48.00	46.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.010		<0.005		<0.010		<0.010		0.000	0.000	0.000	0.005
Fluoride, (F)	0.36		0.36		0.36		0.36		0.36	0.36	0.36	0.10
Hardness, Total as $CaCO_3$	130.00		130.00		120.00		130.00		127.42	130.00	120.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	6.50		5.20		6.80		4.70		5.73	6.80	4.70	0.50
Phosphorus, Total	0.35		0.36		0.35		0.30		0.34	0.36	0.30	0.02
Solids, Total Dissolved (TDS)	230.00	240.00	240.00	230.00	220.00	210.00	230.00	230.00	228.56	240.00	210.00	10.00
Solids, Total Suspended (TSS)	20.00	20.00	24.00	20.00	12.00	18.00	13.00	11.00	16.66	24.00	11.00	1.00
Solids, Total Volatile Suspended (TVSS)	16.00	19.00	20.00	19.00	14.00	17.00	14.00	10.00	15.78	20.00	10.00	2.00
Sulfate (SO_4)	33.00		31.00		28.00		27.00		29.66	33.00	27.00	8.00
pH (pH units)	7.50		8.10		8.18		8.31		8.02	8.31	7.50	0.01
METALS												
Arsenic (As), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	0.66		0.38		0.25		0.22		0.34	0.66	0.22	0.05
Iron (Fe), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Lead (Pb), Total Recoverable	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg), Total Recoverable	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002		<0.0002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.05		0.03		0.02		0.02		0.03	0.05	0.02	0.01
Zinc (Zn), Dissolved	<0.01		<0.01		0.01		<0.01		0.004	0.01	0.00	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-31
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
ALDER ST. LOCATION
003-ASECSD

Greeley and Hansen
June 20-21, 2000

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	Remaining	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	1200000.00		7500000.00		8000000.00		1500000.00		3223710.00	8000000.00	1200000.00	10.00
Oil and Grease			39.00				5.60		14.76	39.00	5.60	2.00
Ammonia (NH_3), as N	4.40		3.40		1.50				2.62	4.40	1.50	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	30.00	33.00	24.00	18.00	19.00				23.54	33.00	18.00	2.00
Chemical Oxygen Demand (COD)	270.00		230.00		120.00				195.32	270.00	120.00	20.00
Chloride	70.00		72.00		58.00				66.37	72.00	58.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.010		<0.010		<0.010				0.000	0.000	0.000	0.005
Fluoride, (F)	0.84		0.81		0.54				0.80	0.84	0.54	0.10
Hardness, Total as $CaCO_3$	300.00		240.00		160.00				225.85	300.00	160.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	11.00		9.20		5.90				8.42	11.00	5.90	0.50
Phosphorus, Total	2.10		1.80		0.93				1.52	2.10	0.93	0.02
Solids, Total Dissolved (TDS)	390.00	350.00	530.00	260.00	240.00				339.56	530.00	240.00	10.00
Solids, Total Suspended (TSS)	160.00	170.00	150.00	91.00	92.00				127.85	170.00	91.00	1.00
Solids, Total Volatile Suspended (TVSS)	96.00	100.00	87.00	54.00	51.00				74.53	100.00	51.00	2.00
Sulfate (SO_4)	86.00		74.00		61.00				72.95	86.00	61.00	8.00
pH (pH units)									0.00	0.00	0.00	0.01
METALS												
Arsenic (As), Total Recoverable	0.01		<0.01		<0.01				0.005	0.01	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01				0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005				0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005				0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	0.01		0.02		0.01				0.01	0.02	0.01	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01				0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	0.07		0.05		0.03				0.05	0.07	0.03	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01				0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	6.56		5.96		3.26				5.04	6.56	3.26	0.05
Iron (Fe), Dissolved	0.42		0.21		0.15				0.24	0.42	0.15	0.05
Lead (Pb), Total Recoverable	<0.05		<0.05		<0.05				0.00	0.00	0.00	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05				0.00	0.00	0.00	0.05
Mercury (Hg), Total Recoverable	<0.0002		<0.0002		<0.0002				0.0000	0.0000	0.0000	0.0002
Mercury (Hg), Dissolved	<0.0002		<0.0002		<0.0002				0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		<0.01				0.00	0.00	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01				0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.26		0.31		0.17				0.24	0.31	0.17	0.01
Zinc (Zn), Dissolved	0.03		0.04		0.04				0.04	0.04	0.03	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(6)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a parameter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

Grand Calumet River and Indiana Harbor Ship Canal CSO Discharge Impact Initial Assessment Study

Table 4-32
CSO DISCHARGE ANALYSIS
EAST CHICAGO SANITARY DISTRICT
EQUALIZATION BASIN OVERFLOW
004-EQECSD

Greeley and Hansen
June 20-21, 2000

FROM START OF OVERFLOW, MINUTES	15	30	45	60	75	90	105	Remaining	Geometric Mean[1, 2]	Maximum Value[2]	Minimum Value[2, 3]	Detection Limit
SAMPLE NO.	1	2	3	4	5	6	7	8				
PARAMETER												
E-coli (CFU / 100mL)	87000.00		61000.00		40000.00		70000.00		62087.00	87000.00	40000.00	10.00
Oil and Grease	2.00		<2.00		<2.00		<2.00		0.71	2.00	0.50	2.00
Ammonia (NH_3), as N	0.53		0.36		0.44		0.36		0.42	0.53	0.36	0.01
Carbonaceous Biochemical Oxygen Demand (CBOD)	14.00	36.00	7.70	40.00	10.00	40.00	16.00	8.30	17.36	40.00	7.70	2.00
Chemical Oxygen Demand (COD)	<20.00		20.00		<20.00		90.00		20.60	90.00	10.00	20.00
Chloride	42.00		43.00		40.00		39.00		40.97	43.00	39.00	1.00
Cyanide, Amenable to Chlorination (ATC)	<0.010		<0.010		<0.010		<0.010		0.000	0.000	0.000	0.005
Fluoride, (F)	0.41		0.39		0.39		0.39		0.39	0.41	0.39	0.10
Herdness, Total as $CaCO_3$	100.00		100.00		90.00		90.00		94.87	100.00	90.00	2.00
Nitrogen, Total Kjeldahl as N (TKN)	2.00		2.30		2.00		2.10		2.10	2.30	2.00	0.50
Phosphorus, Total	0.10		<0.10		<0.10		0.13		0.03	0.13	0.01	0.02
Solids, Total Dissolved (TDS)	200.00	3200.00	200.00	260.00	220.00	190.00	270.00	220.00	308.78	3200.00	190.00	10.00
Solids, Total Suspended (TSS)	2.40	3.80	<2.00	2.40	2.80	1.80	2.00	2.80	2.20	3.80	0.88	1.00
Solids, Total Voletile Suspended (TVSS)	3.20	4.20	3.20	3.20	4.00	3.20	3.20	3.40	3.43	4.20	3.20	2.00
Sulfate (SO_4)	25.00		24.00		24.00		23.00		23.99	25.00	23.00	8.00
pH (pH units)									0.00	0.00	0.00	0.01
METALS												
Arsenic (As), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Arsenic (As), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Cadmium (Cd), Total Recoverable	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Cadmium (Cd), Dissolved	<0.005		<0.005		<0.005		<0.005		0.000	0.000	0.000	0.005
Chromium (Cr), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Chromium (Cr), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Copper (Cu), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Iron (Fe), Total Recoverable	0.45		0.37		0.35		0.30		0.36	0.45	0.30	0.05
Iron (Fe), Dissolved	0.13		0.13		0.11		0.13		0.12	0.13	0.11	0.05
Lead (Pb), Total Recoverable	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Lead (Pb), Dissolved	<0.05		<0.05		<0.05		<0.05		0.00	0.00	0.00	0.05
Mercury (Hg), Total Recoverable	<0.002		<0.002		<0.002		<0.002		0.0000	0.0000	0.0000	0.0002
Mercury (Hg), Dissolved	<0.002		<0.002		<0.002		<0.002		0.0000	0.0000	0.0000	0.0002
Nickel (Ni), Total Recoverable	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Nickel (Ni), Dissolved	<0.01		<0.01		<0.01		<0.01		0.00	0.00	0.00	0.01
Zinc (Zn), Total Recoverable	0.01		<0.01		<0.01		<0.01		0.004	0.01	0.00	0.01
Zinc (Zn), Dissolved	0.06		0.01		<0.01		0.08		0.02	0.06	0.01	0.01

NOTES:
All parameters are listed in milligrams per liter unless otherwise noted.
[1]Geometric mean calculated using method identified in 327 IAC 5-2-11.4 (a)(8)(C) in which samples with concentrations below the detection limit are assigned the value"V".
[2]If all sample concentrations for a paremeter are below the detection limit, the geometric mean, maximum value and minimum value are equal to zero.
[3]The minimum value may be equal to a calculated "V" value.

GARY SANITARY DISTRICT
Gary, Indiana

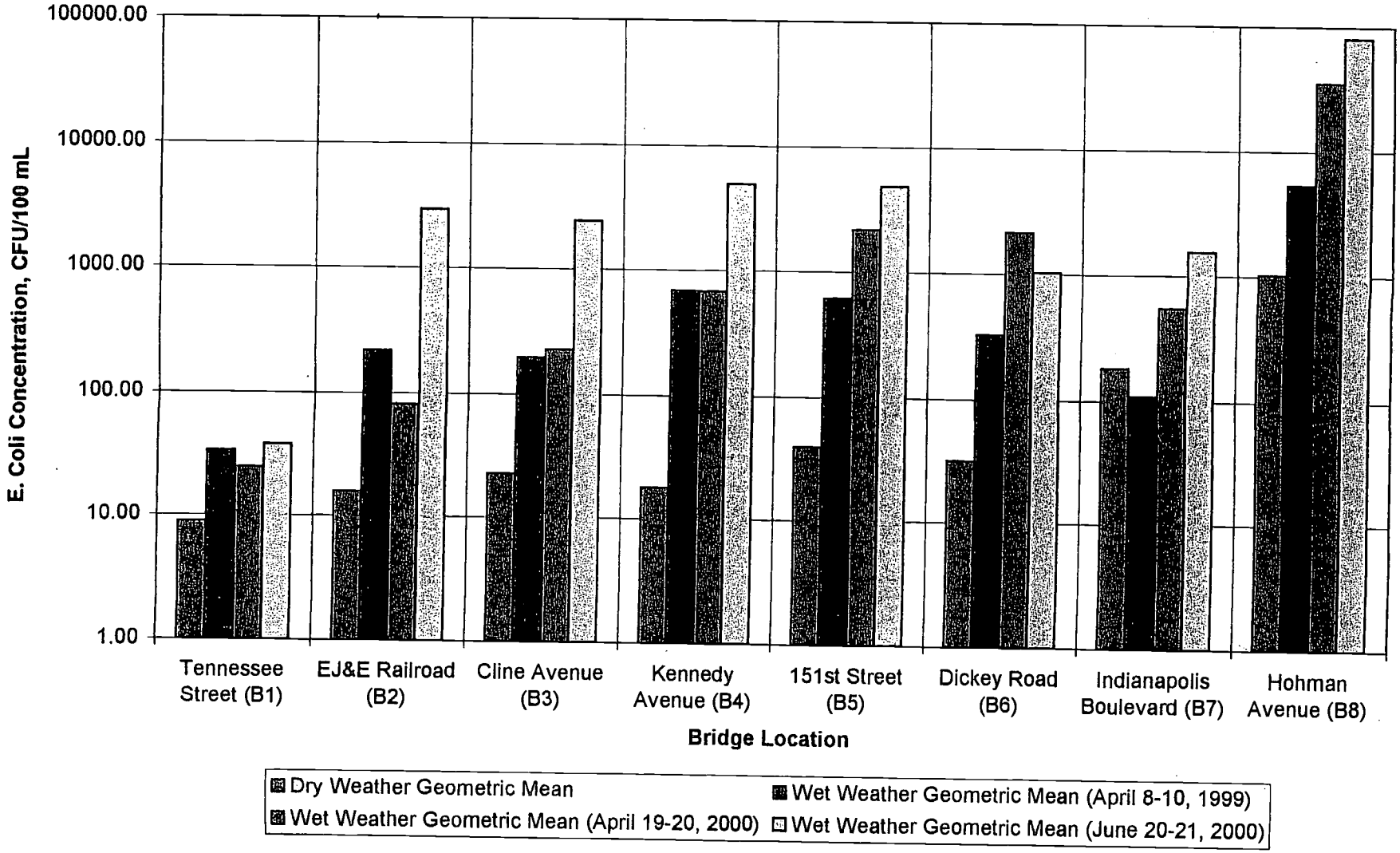
Grand Calumet River and Indiana Harbor Ship Canal
CSO Discharge Impact Initial Assessment Study

TABLE 4-44
Estimated Combined Sewer Overflow Volumes During Wet Weather Events

Date[1]	GSD							HSD[2]				ECSD		
	Rhode Island	Alley Nine	Polk Street	Pierce Street	Bridge Street	Chase Street	Colfax Island	Johnson Avenue	Sohl Avenue	Kennedy Avenue	Columbia Avenue	Michigan Avenue	Alder Street	Eq. Basin
April 7, 1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.00
April 8, 1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	1.07	0.00
April 9, 1999	0.00	0.00	0.37	0.36	1.63	0.05	0.92	-	-	-	-	8.47	25.64	0.51
April 10, 1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.57
April 11, 1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.69
April 18, 2000	0.00	0.00	0.00	19.28	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.00
April 19, 2000	0.00	0.00	4.57	13.28	0.00	0.00	0.00	0.00	0.00	1.68	7.64	0.71	0.22	0.00
April 20, 2000	1.92	0.00	17.68	8.72	0.00	0.00	1.16	0.58	1.34	5.71	45.85	3.38	5.00	0.52
April 21, 2000	1.37	0.00	15.20	0.00	0.00	0.00	0.29	-	-	-	-	0.00	0.33	1.56
April 22, 2000	0.00	0.00	0.29	8.13	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.59
June 19, 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.00	0.00	0.05
June 20, 2000	0.00	0.19	1.55	1.16	3.23	0.00	0.00	0.00	0.00	16.71	15.54	4.01	1.23	0.74
June 21, 2000	3.74	0.00	1.71	1.84	12.10	0.00	0.00	5.76	14.11	3.53	9.59	0.13	0.53	3.79
June 22, 2000	0.25	0.00	0.81	0.00	9.86	0.00	0.00	-	-	-	-	0.00	0.00	1.25
June 23, 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-	-	-	-	0.00	0.00	0.45

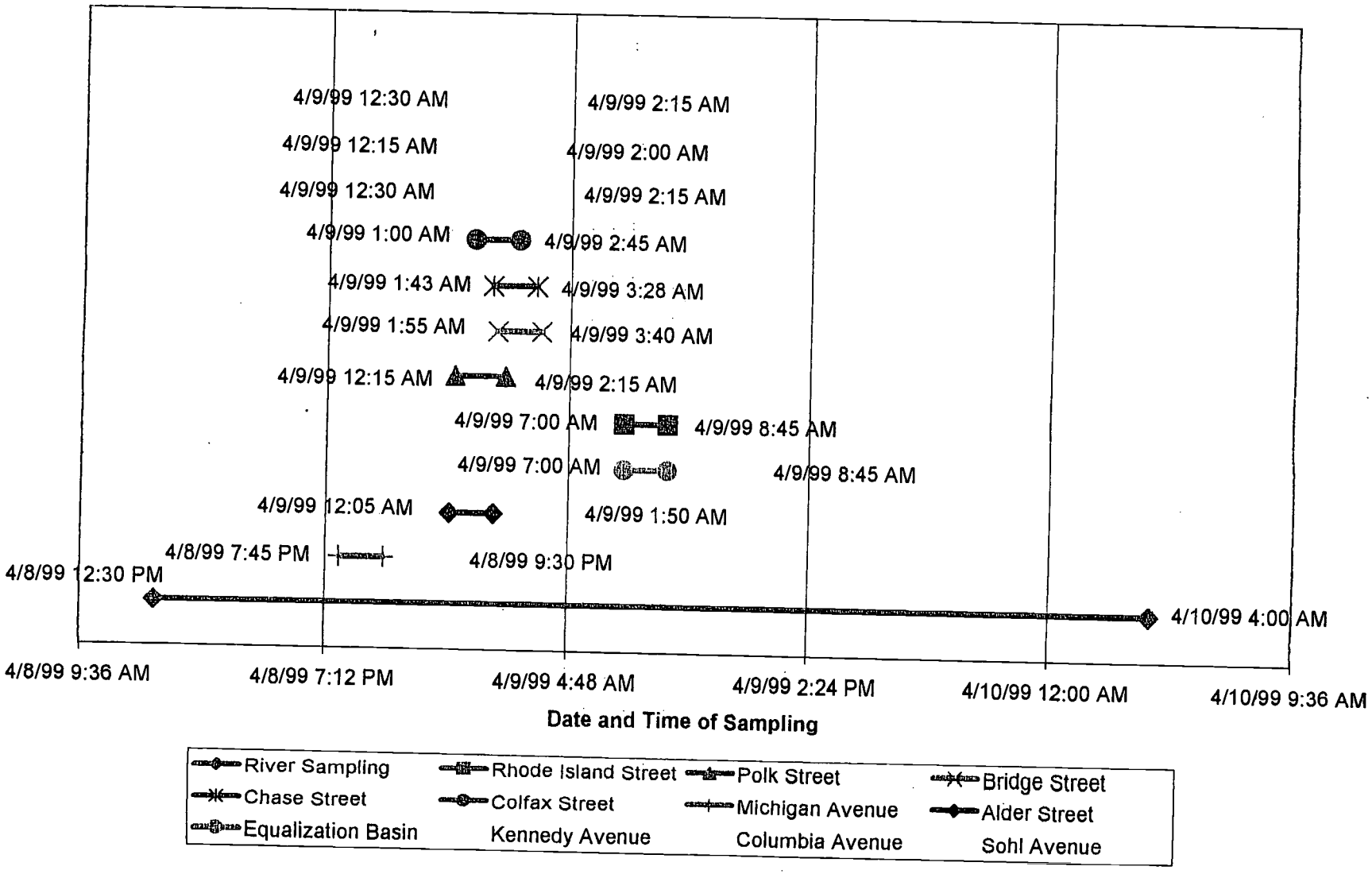
NOTES:
[1]Dates in bold are days in which wet weather bridge sampling occurred.
[2]CSO discharge information was provided by Hammond Sanitary District for April 8, 1999, April 19-20, 2000 and June 20-21, 2000.
All values are in million gallons.

FIGURE 5-1.
Comparison of E. Coli Concentrations During Dry and Wet Weather Events



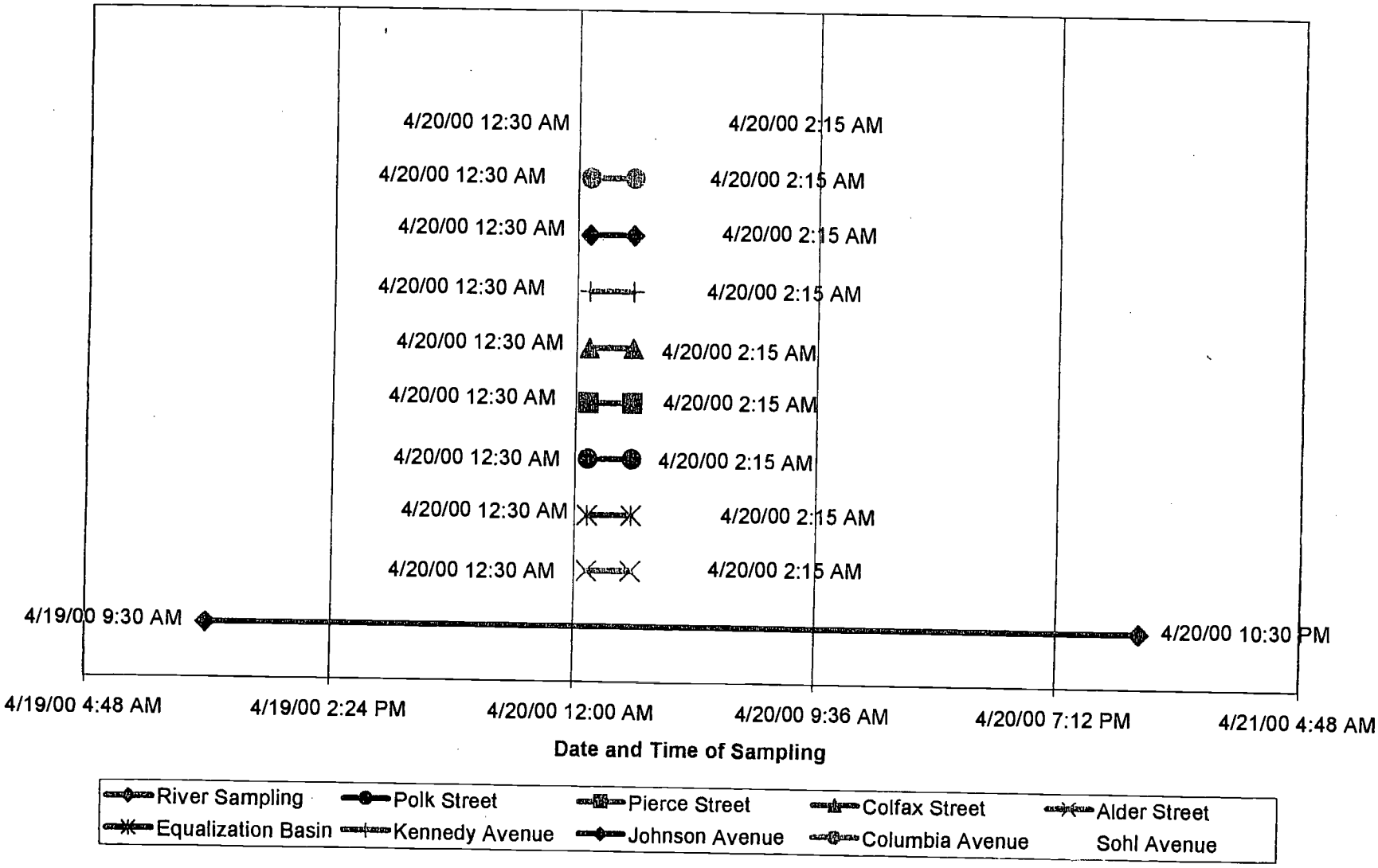
ParameterFigures.xls
EC

FIGURE 1-3
GCR / IHSC and CSO Sampling Range During the First Wet Weather Event



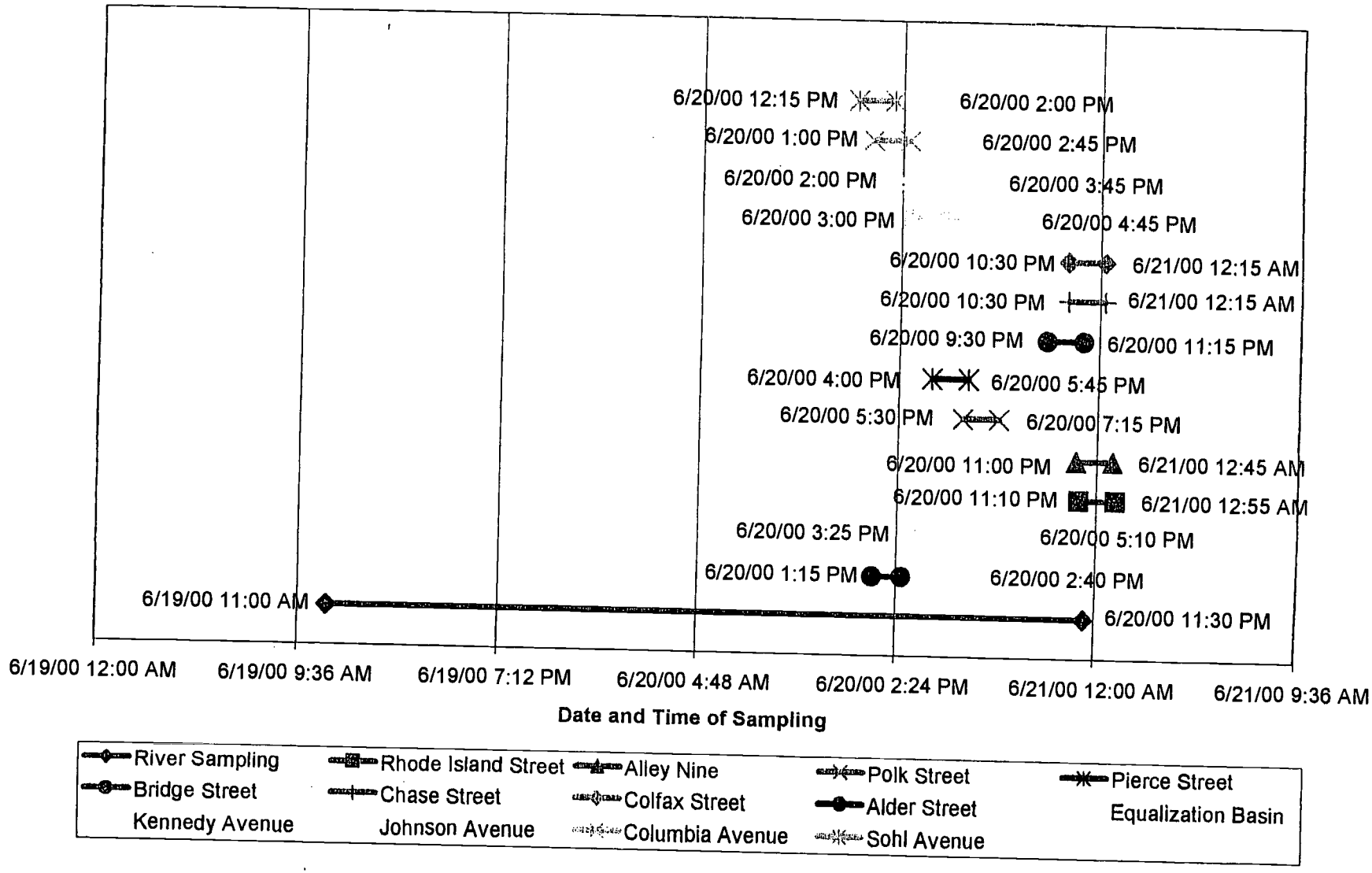
SamplingTime.xls
WW1

FIGURE 1-4
GCR / IHSC and CSO Sampling Range During the Second Wet Weather Event



SamplingTime.xls
WW2

FIGURE 1-5
GCR / IHSC and CSO Sampling Range During the Third Wet Weather Event



SamplingTime.xls
WW3

Click here for beach rating map

INDIANA

Indiana passed a state rule in 1990 designating a water quality standard for monitoring Great Lakes waters, but it does not mandate that each county monitor beachwater quality. Local health departments, however, do have a statutory obligation to notify the public of a condition that may cause, transmit, or generate disease.

Health agencies in all three counties bordering Lake Michigan monitor beaches at least once a week. The EPA-recommended *E. coli* standards are used by Lake and La Porte Counties but are only partially implemented by Porter County and the Indiana Dunes National Lakeshore. The Hammond City Health Department in Lake County uses a fecal coliform standard. Closures or advisories are issued for 98 percent of all beaches when standards are exceeded. All agencies notify the public generally within 24 hours.

The Indiana Department of Natural Resources organized an interagency *E. coli* task force in the mid-1990s to coordinate and evaluate beach testing methods using *E. coli* as the indicator bacteria, examine the source of bacterial contamination to Lake Michigan beaches, and discuss remediation strategies. In 1997, the Technical Task Force created a list of potential contamination sources and possible actions that might be taken to further define or eliminate a source in three main categories: 1) point source discharges and sewerage overflows and bypasses, 2) nonpoint source and septic systems, and 3) marine (i.e., commercial and recreational vessels) and other sources. Details are listed on the Indiana Lake Michigan Coastal Program website, but no information is provided on actions taken to implement the recommendations.[70] Monitoring results from beachwater testing in 2002 suggest further examination is still warranted: 78 beach closing/advisory days were due to monitoring that revealed elevated bacteria, 45 percent of which were from unknown sources of contamination.

According to Indiana's 2002 305(b) report, 65 percent of stream miles assessed fully support both aquatic life and primary recreation. The primary causes of nonsupport are PCBs, pathogens, and mercury. The sources of the contamination are primarily urban runoff, agriculture, and other nonpoint sources, as well as industrial point sources. Fifty-eight miles of Great Lakes shoreline (out of 59 assessed) fully support aquatic life but do not support primary recreation. PCBs, pathogens, and mercury are also the primary causes of impairment along the Great Lakes shoreline; pollution sources are urban runoff and land disposal. All of the assessed lake acreage outside of the Great Lakes fully supports swimming, and 42 percent fully supports aquatic life. As with the Great Lakes and streams, PCBs and mercury are among the leading causes of impairment. Pollution sources are largely unknown but include industrial point sources.

Standards and Testing

Indicator Organisms: *E. coli,* fecal coliform.

Standards: The health departments in Lake and La Porte Counties use the EPA's recommended *E. coli* standard for both multiple- and single-sample testing methods. The Indiana Dunes National Lakeshore, National Park Service, and Porter County Health Department use the EPA's single sample standard only. The Hammond Park Department in Lake County does not use the EPA-recommended standard (see table below).

Standards Used by Indiana Agencies in 2001

Agency	Indicator Used	Density/ 100 ml	Statistical Measure
La Porte County Health Dept	*E. coli*	235	Single sample
		125	Geometric mean of five samples within 30 days
Lake County Health Dept	*E. coli*	235	Single sample
		125	Geometric mean of five samples within 30 days

Agency	Indicator Used	Density/ 100 ml	Statistical Measure
Indiana Dunes National Lakeshore, National Park Service	*E. coli*	235	Single sample
Porter County Health Dept	*E. coli*	235	Single sample
Hammond Park Dept; Hammond Marina (Lake County)	Fecal coliform	200	Single sample
		200	Arithmetic mean of five samples within 30 days

La Porte County issues a preemptive rain advisory if excessive debris such as oil globules or algae are found in lakes or on the beach. Reports of swimmer's itch in inland lakes will result in an advisory. Park departments will close the beach for weather and current (rip current) conditions.

Monitoring

All three Lake Michigan counties in Indiana provided information on a total of 45 beaches. All 45 beaches are monitored at least once a week: La Porte County monitors 15 beaches twice a week, Lake County monitors 12 beaches once a week, Porter County monitors 8 beaches once a week, and the Indiana Dunes National Lakeshore and National Park Service monitor 10 beaches in all three counties once a week (see table below).

Miles of Ocean and Bay or Great Lakes Beach/Miles Monitored: La Porte County: 6.85 miles and all were sampled. Lake County: 2 miles and all were sampled. Indiana Dunes National Lakeshore: 13.2 miles and 12.6 miles were sampled; 7.7 miles (private) and 1.7 miles were sampled.

Monitoring Frequency and Reported Pollution Sources in Indiana

County	Nearest Town	Beach	Monitoring Frequency	Known Stormwater or Sewage Pollution Source
La Porte	Fish Lake	Southtown (Lower Fish Lake) Beach	Twice a week	Yes
La Porte	Fish Lake	Upper Fish Lake	Twice a week	Yes
La Porte	Hudson Lake	Bluebird Beach	Twice a week	Yes
La Porte	La Porte	Pine Lake Assembly	Twice a week	Yes
La Porte	La Porte	Old Stone Lake Beach	Twice a week	Yes
La Porte	La Porte	Pine Lake-Kiwanis Teledyne Park	Twice a week	Yes
La Porte	La Porte	Pine Lake-Waverly Road	Twice a week	Yes
La Porte	La Porte	Stone Lake Beach	Twice a week	Yes
La Porte	La Porte	Stone Lake Launch	Twice a week	Yes
La Porte	Long Beach	Stop 24	Twice a week	Yes
La Porte	Long Beach/ Shoreland Hills	Stop 31	Twice a week	Yes
La Porte	Michiana Shores	Stop 37	Twice a week	Yes
La Porte	Michigan City	California Avenue-Stop 2	Twice a week	Yes
La Porte	Michigan City	Mount Baldy	Once a week	Yes
La Porte	Michigan City	Washington Park	Twice a week	Yes
La Porte	Westville	Clear Lake	Twice a week	Yes
Lake	Cedar Lake	Conference South	Once a week	No
Lake	Cedar Lake	Fish and Game Club	Once a week	No
Lake	Cedar Lake	John's Pharmacy	Once a week	No
Lake	Cedar Lake	La Tulip Harbor	Once a week	No
Lake	Cedar Lake	Pine Crest Marina	Once a week	No
Lake	Hammond	Lake Michigan-Beachfront	Once a week	No
Lake	Hammond	Lake Michigan-Marina	Once a week	No
Lake	Hammond	Wolf Lake	Once a week	No
Lake	Lowell	P.O.A. Beach	Once a week	No
Lake	Merrillville	Hidden Lake-North	Once a week	No

County	Nearest Town	Beach	Monitoring Frequency	Known Stormwater or Sewage Pollution Source
Lake	Merrillville	Hidden Lake-South	Once a week	No
Lake	Miller	Indiana Dunes National Lakeshore-West Beach	Once a week	Yes
Lake	Whiting	Whihala Beach-East Beach	Once a week	No
Lake	Whiting	Whihala Beach-West Beach	Once a week	No
Lake	Winfield	Club House	Once a week	No
Lake	Winfield	Sandy Beach	Once a week	No
Porter	Beverly Shores	Dunbar	Once a week	Yes
Porter	Beverly Shores	Indiana Dunes National Lakeshore-Central Avenue Beach	Once a week	Yes
Porter	Beverly Shores	Indiana Dunes National Lakeshore-State Park Road/Kemil Avenue Beach	Once a week	Yes
Porter	Beverly Shores	Lakeview	Once a week	Yes
Porter	Burns Harbor	Lakeland Park	Once a week	Yes
Porter	Ogden Dunes	Ogden Dunes Beach	Once a week	Yes
Porter	Porter	Dune Acres Beach	Once a week	Yes
Porter	Porter	Indiana Dunes National Lakeshore-Porter Beach	Once a week	Yes
Porter	Porter	Indiana Dunes State Park	Once a week	Yes
Porter	Valparaiso	Bradley Beach	Once a week	Yes
Porter	Valparaiso	Burlington Beach (Flint Beach)	Once a week	Yes
Porter	Valparaiso	Edgewater Beach	Once a week	Yes
Porter	Valparaiso	Hillcrest Beach	Once a week	Yes
Porter	Valparaiso	Long Lake Beach	Once a week	Yes
Porter	Valparaiso	Spectacle Beach	Once a week	Yes
Porter	Valparaiso	Wauhob Lake	Once a week	Yes

Cost of Indiana's Annual Monitoring and Public Notification Programs in 2002*

Agency	Combined Program	Monitoring	Advisory/Closing
La Porte County Health Dept	$2,500–$9,999		
Lake County Health Dept-Indiana	Not known		
Hammond City Health Dept		Not known	Not known
Porter County Health Dept	$10,000–$49,999		
Indiana Dunes National Lakeshore, National Park Service		$10,000–$49,999	Less than $2,500

*Ranges specified by the EPA.

Closings and Advisories

The number of closings/advisories in 2002 in Indiana decreased 49 percent to 176 from 347 in 2001.

Closings/Advisory Issuance: Closures or advisories are issued at 44 of 45 beaches when standards are exceeded. They are sometimes issued at Stone Lake Launch in La Porte County, depending on circumstances. Porter and La Porte Counties report notifying the public within one hour, while Indiana Dunes, Hammond City, and Lake County notify the public generally within 24 hours.

Causes of Closings/Advisories: Forty-four percent (78) of closings/advisories in 2002 were due to monitoring that revealed elevated bacteria levels. Of these, 45 percent (35) were from stormwater runoff, 45 percent (35) were from unknown sources of contamination, 36 percent (28) were from other sources including wildlife, and 10 percent (8) were from sewage leaks or spills. Sixty-four percent of closings/advisories (113) were preemptive rain advisories, and 16 percent (29) were in response to known sewage or chemical spills. The sum of closings/advisories listed here may exceed the state total and may exceed 100 percent because more than one cause or pollution source may apply to each closing/advisory.

Beach Closings and Advisories by County: Year-to-Year Comparison

County	2002 Closings/Advisories	2001 Closings/Advisories	2000 Closings/Advisories
La Porte	138	117	181
Lake	0	186	134
Porter	38	44	26
Total	176	347	341

2002 Indiana Closings and Advisories by Beach

County	Nearest Town	Beach	Start Date	End Date	Cause	Source	Water Body
La Porte	Fish Lake	Southtown (Lower Fish Lake) Beach	5/23	5/24	Bacteria	(?)	Lower Fish Lake
La Porte	Fish Lake	Southtown (Lower Fish Lake) Beach	6/11	6/12	Bacteria	(?)	Lower Fish Lake
La Porte	Fish Lake	Southtown (Lower Fish Lake) Beach	8/22	8/28	PRain	SW,(?)	Lower Fish Lake
La Porte	Fish Lake	Upper Fish Lake	7/23	7/26	Bacteria, PRain	SW,(?)	Upper Fish Lake
La Porte	Fish Lake	Upper Fish Lake	8/15	8/16	Bacteria	(?)	Upper Fish Lake
La Porte	Fish Lake	Upper Fish Lake	8/22	8/28	PRain	SW,(?)	Upper Fish Lake
La Porte	La Porte	Pine Lake Assembly	7/23	7/26	Bacteria, PRain	SW,(?)	Pine Lake
La Porte	La Porte	Pine Lake Assembly	8/22	8/28	PRain	SW,(?)	Pine Lake
La Porte	LaPorte	Old Stone Lake Beach	7/23	7/25	Bacteria, PRain	SW,(?)	Stone Lake
La Porte	LaPorte	Old Stone Lake Beach	8/22	8/28	PRain	(?)	Stone Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	6/11	6/12	Bacteria	(?)	Pine Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	7/11	7/12	Bacteria	(?)	Pine Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	7/23	7/24	Bacteria	(?)	Pine Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	7/23	7/27	Bacteria, PRain	SW,(?)	Pine Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	7/25	7/26	Bacteria	(?)	Pine Lake
La Porte	LaPorte	Pine Lake-Kiwanis Teledyne Park	8/22	8/28	PRain	SW,(?)	Pine Lake
La Porte	LaPorte	Pine Lake Waverly Road	7/25	7/30	Bacteria	(?)	Pine Lake
La Porte	LaPorte	Pine Lake Waverly Road	8/22	8/28	PRain	SW,(?)	Pine Lake
La Porte	LaPorte	Stone Lake Beach	5/23	5/24	Bacteria	(?)	Stone Lake
La Porte	LaPorte	Stone Lake Beach	6/11	6/12	Bacteria	(?)	Stone Lake
La Porte	LaPorte	Stone Lake Beach	7/23	7/25	Bacteria, PRain	SW,(?)	Stone Lake
La Porte	LaPorte	Stone Lake Beach	8/22	8/28	PRain	SW,(?)	Stone Lake
La Porte	LaPorte	Stone Lake Beach	9/3	9/5	Bacteria	(?)	Stone Lake
La Porte	LaPorte	Stone Lake Launch	6/18	6/19	Bacteria	(?)	Stone Lake
La Porte	LaPorte	Stone Lake Launch	8/22	8/28	PRain	SW,(?)	Stone Lake
La Porte	Long Beach	Stop 24	6/27	6/28	Bacteria	(?)	Lake Michigan
La Porte	Long Beach	Stop 24	7/23	7/26	PRain	SW,(?)	Lake Michigan
La Porte	Long Beach	Stop 24	8/22	8/28	PRain,P Sewage	SewBrk,SW,(?)	Lake Michigan
La Porte	Long Beach/ Shoreland Hills	Stop 31	6/27	6/28	Bacteria	(?)	Lake Michigan
La Porte	Long Beach/ Shoreland Hills	Stop 31	7/23	7/26	PRain	SW,(?)	Lake Michigan
La Porte	Long Beach/ Shoreland Hills	Stop 31	8/22	8/28	PRain, PSewage	SewBrk,SW,(?)	Lake Michigan
La Porte	Michiana Shores	Stop 37	6/11	6/12	Bacteria	(?)	Lake Michigan

County	Nearest Town	Beach	Start Date	End Date	Cause	Source	Water Body
La Porte	Michiana Shores	Stop 37	7/23	7/26	PRain	SW,(?)	Lake Michigan
La Porte	Michiana Shores	Stop 37	8/22	8/28	PRain, PSewage	SewBrk,SW,(?)	Lake Michigan
La Porte	Michigan City	California Avenue-Stop 2	6/11	6/12	Bacteria	(?)	Lake Michigan
La Porte	Michigan City	California Avenue-Stop 2	6/27	6/28	Bacteria	(?)	Lake Michigan
La Porte	Michigan City	California Avenue-Stop 2	7/23	7/26	PRain	SW,(?)	Lake Michigan
La Porte	Michigan City	California Avenue-Stop 2	8/22	8/28	PRain, PSewage	SewBrk,SW	Lake Michigan
La Porte	Michigan City	Mount Baldy	6/28	6/29	Bacteria	(?)	Lake Michigan
La Porte	Michigan City	Washington Park	7/23	7/26	PRain	SW,(?)	Lake Michigan
La Porte	Michigan City	Washington Park	8/13	8/14	Bacteria	(?)	Lake Michigan
La Porte	Michigan City	Washington Park	8/22	8/27	PRain, PSewage	SewBrk,SW,(?)	Lake Michigan
La Porte	Michigan City	Washington Park	8/27	8/28	Bacteria	(?)	Lake Michigan
La Porte	Westville	Clear Lake	7/23	7/24	Bacteria, PRain	SW,(?)	Clear Lake
La Porte	Westville	Clear Lake	8/22	8/28	PRain	SW,(?)	Clear Lake
Porter	Beverly Shores	Dunbar	6/14	6/15	Bacteria	(?)	Lake Michigan
Porter	Beverly Shores	Dunbar	6/28	6/29	Bacteria	(?)	Lake Michigan
Porter	Beverly Shores	Indiana Dunes National Lakeshore-State Park Road/ Kemil Avenue Beach	6/28	6/29	Bacteria	(?)	Lake Michigan
Porter	Beverly Shores	Lakeview	6/28	6/29	Bacteria	(?)	Lake Michigan
Porter	Beverly Shores	Lakeview	7/19	7/20	Bacteria	(?)	Lake Michigan
Porter	Porter	Dune Acres Beach	6/14	6/15	Bacteria	(?)	Lake Michigan
Porter	Porter	Dune Acres Beach	6/28	6/29	Bacteria	(?)	Lake Michigan
Porter	Porter	Indiana Dunes National Lakeshore-Porter Beach	6/14	6/15	Bacteria	(?)	Lake Michigan
Porter	Porter	Indiana Dunes National Lakeshore-Porter Beach	6/28	6/29	Bacteria	(?)	Lake Michigan
Porter	Porter	Indiana Dunes National Lakeshore-Porter Beach	7/19	7/20	Bacteria	(?)	Lake Michigan
Porter	Porter	Indiana Dunes State Park	6/14	6/15	Bacteria	Other	Lake Michigan
Porter	Porter	Indiana Dunes State Park	6/28	7/3	Bacteria	Other	Lake Michigan
Porter	Porter	Indiana Dunes State Park	7/3	7/4	Bacteria	Other	Lake Michigan
Porter	Porter	Indiana Dunes State Park	8/23	8/24	Bacteria	Other	Lake Michigan
Porter	Valparaiso	Hillcrest Beach	7/11	7/15	Bacteria	SW,Wild	Flint Lake
Porter	Valparaiso	Hillcrest Beach	7/25	8/2	Bacteria	SW,Wild	Flint Lake
Porter	Valparaiso	Long Lake Beach	7/18	7/25	Bacteria	Septic,SW,Wild	Long Lake
Porter	Valparaiso	Wauhob Lake	8/1	8/2	Bacteria	Septic,SW,Wild	Wauhob Lake

Abbreviations used: Bacteria, Elevated bacteria levels; PChem, Preemptive—Chem. or oil discharge/spill; PRain, Preemptive—Rainfall; PSewage, Preemptive—Sewage discharge or spill; Boat, Boat discharge; CSO, Combined sewer overflow; POTW, Publicly owned treatment works; Septic, Septic systems; SewBrk, Sewer line blockage/break; SSO, Sanitary sewer overflow; SW, Stormwater runoff; Wild, Wildlife; (?), Unknown.

Total 2002 Indiana Great Lakes and Other Lakes Beach Closings/Advisories (C/A): 176

Year	Beach Days Affected by C/A (lasting less than 7 weeks)	Number of Permanent C/A (lasting more than 13 weeks)
2002	176	0
2001	347	0
2000	341	1
1999	269	0
1998	154	1
1997	30	0
1996	34	0
1995	14	0
1994	36	0
1993	30	0

Note

[70] Indiana Lake Michigan Coastal Program, www.in.gov/dnr/lakemich/issues/sources.html.

Table III-1
Estimate of Probable Costs for CSO Retention/Primary Treatment and Disinfection at the Michigan Avenue CSO Pump Station (132 MGD Design Flow; 2.8 MG Tank Volume)

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	22,000	CY	$ 12	$ 264,000
Cast-In -Place Reinforced Concrete Base Slab	5,200	CY	$ 400	$ 2,080,000
Cast-In -Place Reinforced Concrete Formed Walls and Floors	1,500	CY	$ 600	$ 900,000
Granular Fill	1,000	CY	$ 30	$ 30,000
Sediment Flushing w/Tipping Buckets	2.8	MG	$ 250,000	$ 700,000
Control Gates and Valves	1	Lump Sum	$ 250,000	$ 250,000
Overflow Weir Troughs and Baffles	2,200	LF	$ 70	$ 154,000
Influent and Effluent Piping	1	Lump Sum	$ 1,000,000	$ 1,000,000
Disinfection Equipment	1	Lump Sum	$ 200,000	$ 200,000
Building	2,000	SF	$ 300	$ 600,000
Electrical, Instrumentation and Control	1	Lump Sum	$ 500,000	$ 500,000
Sitework	1	Lump Sum	$ 200,000	$ 200,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 7,378,000
Contingency @ 15%				$ 1,106,700
Probable Construction Cost				$ 8,484,700
Engineering, Legal and Administrative Costs @ 25%				$ 2,121,175
Land Acquisition	4	Acre	$ 50,000	$ 200,000
Probable Project Cost				**$ 10,810,000**
Annual Operation and Maintenance Costs				
Chemicals	1	Lump Sum	$ 8,000	$ 8,000
Labor	1,000	Hour	$ 60	$ 60,000
Miscellaneous	1	Lump Sum	$ 25,000	$ 25,000
Equipment Maintenance	1	Lump Sum	$ 20,000	$ 20,000
Probable Annual O&M Cost				**$113,000**

Table III-2
Estimate of Probable Costs for 6.4 MG Lagoon Storage at the Michigan Avenue CSO Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	20,000	CY	$ 12	$ 240,000
Berm Construction	6,200	CY	$ 10	$ 62,000
Lagoon Lining Excavation and Clay Backfill	8,000	CY	$ 16	$ 128,000
Synthetic Liner	23,300	SY	$ 10	$ 233,000
Diversion and Overflow Structure	1	Lump Sum	$ 1,000,000	$ 1,000,000
Influent and Effluent Piping	1	Lump Sum	$ 1,000,000	$ 1,000,000
Water Piping and Appurtenances for Lagoon Washdown	1	Lump Sum	$ 150,000	$ 150,000
Fine Screens	1	Lump Sum	$ 4,000,000	$ 4,000,000
Site Work	1	Lump Sum	$ 500,000	$ 500,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 7,813,000
Contingency @ 15%				$ 1,171,950
Probable Construction Cost				$ 8,984,950
Engineering, Legal and Administrative Costs @ 25%				$ 2,246,238
Land Acquisition	10	Acre	$ 50,000	$ 500,000
Probable Project Cost				**$ 11,730,000**
Annual Operation and Maintenance Costs				
Labor	1,800	Hour	$ 60	$ 108,000
Miscellaneous	1	Lump Sum	$ 10,000	$ 10,000
Equipment Maintenance	1	Lump Sum	$ 17,000	$ 17,000
Probable Annual O&M Cost				**$135,000**

Table III-3
Estimate of Probable Costs for 6.4 MG Tank Storage at the Michigan Avenue CSO Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	41,000	CY	$ 12	$ 492,000
Cast-In -Place Reinforced Concrete Base Slab	11,200	CY	$ 400	$ 4,480,000
Cast-In -Place Reinforced Concrete Formed Walls and Floors	2,100	CY	$ 600	$ 1,260,000
Granular Fill	2,000	CY	$ 30	$ 60,000
Influent and Effluent Piping	1	Lump Sum	$ 1,000,000	$ 1,000,000
Control Gates and Valves	1	Lump Sum	$ 350,000	$ 350,000
Sediment Flushing w/ Tipping Buckets	6.4	MG	$ 200,000	$ 1,280,000
Sitework	1	Lump Sum	$ 300,000	$ 300,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 9,722,000
Contingency @ 15%				$ 1,458,300
Probable Construction Cost				$ 11,180,300
Engineering, Legal and Administrative Costs @ 25%				$ 2,795,075
Land Acquisition	6	Acre	$ 50,000	$ 300,000
Probable Project Cost				**$ 14,280,000**
Annual Operation and Maintenance Costs				
Labor	800	Hour	$ 60	$ 48,000
Miscellaneous	1	Lump Sum	$ 10,000	$ 10,000
Equipment Maintenance	1	Lump Sum	$ 7,000	$ 7,000
Probable Annual O&M Cost				**$65,000**

Table III-4
Estimate of Probable Costs for the Rehabilitation of CSO Weir Structures

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Structure Number/Rehabilitation Type/Address				
100/Install Weir Trough/138th St. & Drummond Ave.	1	Each	$ 3,000	$ 3,000
101/Clean Out/138th St. & Euclid Ave.	1	Each	$ 200	$ 200
102/Install Weir Trough/138th St. & Euclid Ave.	1	Each	$ 3,000	$ 3,000
103/Clean Out and Replace Weir Trough/138th St. & Ivy Ave.	1	Each	$ 3,200	$ 3,200
104/No Rehab/138th St. & Parrish Ave.	-	-	-	-
105/Clean Out and Install Weir Trough/138th St. & Parrish Ave.	1	Each	$ 3,200	$ 3,200
106/Replace Weir Trough/138th St. & Hemlock Ave.	1	Each	$ 3,000	$ 3,000
107/Install Weir Trough/138th St. & Grand Ave.	1	Each	$ 3,000	$ 3,000
108/No Rehab/138th St. & Fir Ave.	-	-	-	-
109/Clean Out and Replace Weir Trough/138th St. & Elm Ave.	1	Each	$ 3,200	$ 3,200
110/Install Weir Trough/138th St. & Doedar Ave.	1	Each	$ 3,000	$ 3,000
111/Replace Weir Trough/138th St. & Main Ave.	1	Each	$ 3,000	$ 3,000
112/Replace Weir Trough/138th St. & Main Ave.	1	Each	$ 3,000	$ 3,000
113/Clean Out and Install Weir Trough/138th St. & Alder Ave.	1	Each	$ 3,200	$ 3,200
114/Gunite Manhole/139th St. & Alder Ave.	1	Each	$ 2,000	$ 2,000
115/No Rehab/Broadway Ave. & Alder Ave.	-	-	-	-
116/Replace Manhole/Broadway Ave. & Alder Ave.	1	Each	$ 5,000	$ 5,000
117/No Rehab/Broadway Ave. & Pulaski Ave.	-	-	-	-
118/No Rehab/Broadway Ave. & Main Ave.	-	-	-	-
119/Replace Manhole/Pennsylvania Ave. & Washington Ave.	1	Each	$ 5,000	$ 5,000
120/Replace Weir Trough/135th St. & Fir Ave.	1	Each	$ 3,000	$ 3,000
121//135th St. & Fir Ave.	-	-	-	-
122/Replace Weir Trough/135th St. & Doeder Ave.	1	Each	$ 3,000	$ 3,000
123/No rehab/135th St. & Doeder Ave.	-	-	-	-
124/No Rehab/151st St. & Magoun Ave.	-	-	-	-
125/Gunite Manhole/150th St. & Magoun Ave.	1	Each	$ 2,000	$ 2,000
126/Replace Manhole/148th St. & Magoun Ave.	1	Each	$ 5,000	$ 5,000
127/Gunite Manhole/145th St. & Magoun Ave.	1	Each	$ 2,000	$ 2,000
128/No Rehab/Columbus Dr. & Baring Ave.	-	-	-	-
129/No Rehab/142nd St. & Baring Ave.	-	-	-	-
130/Replace Weir Trough/142nd St. & Baring Ave.	1	Each	$ 3,000	$ 3,000
131/Replace Weir Trough/143rd St. & Baring Ave.	1	Each	$ 3,000	$ 3,000
132/Replace Weir Trough/142nd St. & Northcote Ave.	1	Each	$ 3,000	$ 3,000
133/Replace Weir Trough/142nd St. & Homerlee Ave.	1	Each	$ 3,000	$ 3,000
134/Clean Out/142nd St. & Wegg Ave.	1	Each	$ 200	$ 200
135/Replace Weir Trough/144th St. & Baring Ave.	1	Each	$ 3,000	$ 3,000
136/Replace Weir Trough/Chicago Ave. & Baring Ave.	1	Each	$ 3,000	$ 3,000
137/Clean Out/149th St. & Baring Ave.	1	Each	$ 200	$ 200
138/No Rehab/150th St. & Walsh Ave.	-	-	-	-
139/Replace Weir Trough/150th St. & Reading Ave.	1	Each	$ 3,000	$ 3,000
140/Replace Weir Trough/150th St. & Wegg Ave.	1	Each	$ 3,000	$ 3,000
141/No Rehab/150th St. & Homerlee Ave.	-	-	-	-
142/Replace Weir Trough/150th St. & Indianapolis Blvd.	1	Each	$ 3,000	$ 3,000
143/Replace Manhole/150th St. & Olcott Ave.	1	Each	$ 5,000	$ 5,000
144/Clean Out and Replace Weir Trough/150th St. Tod Ave.	1	Each	$ 3,200	$ 3,200
145/No Rehab/143rd St. & Indianapolis Blvd.	-	-	-	-
145/Replace Weir Trough/142nd St. & Indianapolis Blvd.	1	Each	$ 3,000	$ 3,000
Miscellaneous	1	Lump Sum	$ 20,000	$ 20,000
Subtotal				$ 119,600
Contingency @ 15%				$ 17,940
Probable Construction Cost				$ 137,540
Engineering, Legal and Administrative Costs @ 25%				$ 34,385
Probable Project Cost				**$ 170,000**

Note: No additional annual operation and maintenance costs would result from rehabilitating the existing overflow weirs.

Table III-5

Estimate of Probable Costs for Sewer Separation in the Area Tributary to the Michigan Avenue CSO Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Streets Requiring New Sewers and Modifications to Stormwater and/or Sanitary Sewage Connections	42,400	LF	$ 140	$ 5,936,000
Streets Requiring Modifications to Stormwater and/or Sanitary Sewage Connections to Existing Sewers	23,300	LF	$ 30	$ 699,000
Sewer Inspection/Verification	15,000	LF	$ 5	$ 75,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 7,210,000
Contingency @ 15%				$ 1,081,500
Probable Construction Cost				$ 8,291,500
Engineering, Legal and Administrative Costs @ 25%				$ 2,072,875
Probable Project Cost				**$ 10,360,000**

Note: No additional annual operation and maintence costs would result from separating the existing sewers.

Table III-6

Estimate of Probable Costs for CSO Retention/Primary Treatment and Disinfection at the Alder Street CSO Pump Station (122 MGD Design Flow; 2.5 MG Tank Volume)

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	29,000	CY	$ 12	$ 348,000
Cast-In -Place Reinforced Concrete Base Slab	4,700	CY	$ 400	$ 1,880,000
Cast-In -Place Reinforced Concrete Formed Walls and Floors	1,500	CY	$ 600	$ 900,000
Granular Fill	800	CY	$ 30	$ 24,000
Sediment Flushing w/Tipping Buckets	2.5	MG	$ 250,000	$ 625,000
Control Gates and Valves	1	Lump Sum	$ 250,000	$ 250,000
Overflow Weir Troughs and Baffles	2,000	LF	$ 70	$ 140,000
Influent and Effluent Piping	1	Lump Sum	$ 600,000	$ 600,000
Disinfection Equipment	1	Lump Sum	$ 200,000	$ 200,000
Building	2,000	SF	$ 300	$ 600,000
Electrical, Instrumentation and Control	1	Lump Sum	$ 500,000	$ 500,000
Sitework	1	Lump Sum	$ 200,000	$ 200,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 6,767,000
Contingency @ 15%				$ 1,015,050
Probable Construction Cost				$ 7,782,050
Engineering, Legal and Administrative Costs @ 25%				$ 1,945,513
Land Acquisition	4	Acre	$ 20,000	$ 80,000
Probable Project Cost				**$ 9,810,000**
Annual Operation and Maintenance Costs				
Chemicals	1	Lump Sum	$ 10,000	$ 10,000
Labor	1,000	Hour	$ 60	$ 60,000
Miscellaneous	1	Lump Sum	$ 25,000	$ 25,000
Equipment Maintenance	1	Lump Sum	$ 17,000	$ 17,000
Probable Annual O&M Cost				**$112,000**

Table III-7
Estimate of Probable Costs for 7.5 MG Lagoon Storage at the Alder Street CSO Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	57,000	CY	$ 12	$ 684,000
Lagoon Lining Excavation and Clay Backfill	9,500	CY	$ 16	$ 152,000
Synthetic Liner	23,300	SY	$ 10	$ 233,000
Diversion and Overflow Structure	1	Lump Sum	$ 1,000,000	$ 1,000,000
Influent and Effluent Piping	1	Lump Sum	$ 500,000	$ 500,000
Water Piping and Appurtenances for Lagoon Washdown	1	Lump Sum	$ 150,000	$ 150,000
Fine Screens	1	Lump Sum	$ 4,000,000	$ 4,000,000
Site Work	1	Lump Sum	$ 500,000	$ 500,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 7,719,000
Contingency @ 15%				$ 1,157,850
Probable Construction Cost				$ 8,876,850
Engineering, Legal and Administrative Costs @ 25%				$ 2,219,213
Land Acquisition	11	Acre	$ 20,000	$ 220,000
Probable Project Cost				**$ 11,320,000**
Annual Operation and Maintenance Costs				
Labor	1,800	Hour	$ 60	$ 108,000
Miscellaneous	1	Lump Sum	$ 10,000	$ 10,000
Equipment Maintenance	1	Lump Sum	$ 17,000	$ 17,000
Probable Annual O&M Cost				**$135,000**

Table III-8
Estimate of Probable Costs for 7.5 MG Tank Storage at the Alder Street Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Earth Excavation and Disposal	72,000	CY	$ 12	$ 864,000
Cast-In -Place Reinforced Concrete Base Slab	13,000	CY	$ 400	$ 5,200,000
Cast-In -Place Reinforced Concrete Formed Walls and Floors	2,500	CY	$ 600	$ 1,500,000
Granular Fill	2,200	CY	$ 30	$ 66,000
Influent and Effluent Piping	1	Lump Sum	$ 500,000	$ 500,000
Control Gates and Valves	1	Lump Sum	$ 350,000	$ 350,000
Sediment Flushing w/Tipping Buckets	8	MG	$ 200,000	$ 1,500,000
Sitework	1	Lump Sum	$ 300,000	$ 300,000
Miscellaneous	1	Lump Sum	$ 500,000	$ 500,000
Subtotal				$ 10,780,000
Contingency @ 15%				$ 1,617,000
Probable Construction Cost				$ 12,397,000
Engineering, Legal and Administrative Costs @ 25%				$ 3,099,250
Land Acquisition	7	Acre	$ 20,000	$ 140,000
Probable Project Cost				**$ 15,640,000**
Annual Operation and Maintenance Costs				
Labor	800	Hour	$ 60	$ 48,000
Miscellaneous	1	Lump Sum	$ 10,000	$ 10,000
Equipment Maintenance	1	Lump Sum	$ 8,000	$ 8,000
Probable Annual O&M Cost				**$66,000**

Table III-9

Estimate of Probable Costs for Replacement of the Sanitary Pumps (25 MGD Capacity) at the Alder Street Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Replace Sanitary Pumps (12.5 MGD Capacity for each pump)	3	Each	$ 75,000	$ 225,000
Electrical Instrumentation and Control	1	Lump Sum	$ 90,000	$ 90,000
Miscellaneous	1	Lump Sum	$ 60,000	$ 60,000
Subtotal				$ 375,000
Contingency @ 15%				$ 56,250
Probable Construction Cost				$ 431,250
Engineering, Legal and Administrative Costs @ 25%				$ 107,813
Probable Project Cost				**$ 540,000**
Annual Operation and Maintenance Costs				
Miscellaneous Additional Cost	1	Lump Sum	$ 5,000	$ 5,000
Probable Annual O&M Cost				**$5,000**

Table III-10

Estimate of Probable Costs for Replacement of the Sanitary Pumps (30 MGD Capacity) at the Alder Street Pump Station

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Replace Sanitary Pumps (15 MGD Capacity for each pump)	3	Each	$ 85,000	$ 255,000
Electrical Instrumentation and Control	1	Lump Sum	$ 120,000	$ 120,000
Miscellaneous	1	Lump Sum	$ 65,000	$ 65,000
Subtotal				$ 440,000
Contingency @ 15%				$ 66,000
Probable Construction Cost				$ 506,000
Engineering, Legal and Administrative Costs @ 25%				$ 126,500
Probable Project Cost				**$ 630,000**
Annual Operation and Maintenance Costs				
Miscellaneous Addition Cost	1	Lump Sum	$ 8,000	$ 8,000
Probable Annual O&M Cost				**$8,000**

Table III-11

Estimate of Probable Costs for 145th Street Pump Station Rehabilitation with Plugging Storm Sewer to Combined Sewer Connection

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Pump Station Improvements and Plugging Connection to Combined Sewer	1	Lump Sum	$ 1,000,000	$ 1,000,000
Subtotal				$ 1,000,000
Contingency @ 15%				$ 150,000
Probable Construction Cost				$ 1,150,000
Engineering, Legal and Administrative Costs @ 25%				$ 287,500
Probable Project Cost				**$ 1,440,000**

Note: Additional annual operation and maintenance costs associated with retuning this pump station to normal operation would be offset by reduced O&M costs at the WWTP and Alder Street Pump Station.

Table III-12

Estimate of Probable Costs for Mechanical Bar Screen Replacement at the WWTP

Item	*Quantity*	*Unit*	*Unit Price*	*Total*
Project Costs				
Mechanical Bar Screen Replacement	2	Each	$ 350,000	$ 700,000
Miscellaneous	1	Lump Sum	$ 75,000	$ 75,000
Subtotal				$ 775,000
Contingency @ 15%				$ 116,250
Probable Construction Cost				$ 891,250
Engineering, Legal and Administrative Costs @ 25%				$ 222,813
Probable Project Cost				**$ 1,110,000**

Note: No additional annual operation and maintenance costs would result from replacing the existing mechanical bar screens