

FACILITY-SPECIFIC COMPLIANCE COSTS

This appendix presents EPA's estimate of costs to individual CWT facilities to comply with the applicable proposed limitations and standards. Chapter 11 of this document details the procedures that EPA used to derive these cost estimates.

Metals Subcategory Options 2 and 3 Costs

Plant #	Discharge (Dir/ind)	Flow (Mgd)	BAT2 Total Capital Cost (1989 \$)	BAT2 Total O&M Cost (1989 \$/year)	BAT2 Total Land Cost (1989 \$)	BAT3 Total Capital Cost (1989 \$)	BAT3 Total O&M Cost (1989 \$/year)	BAT3 Total Land Cost (1989 \$)	Total Monitoring Cost (1989\$/yr)
11	INDIRECT	0.001	91,995	205,225	12,579	116,131	219,961	17,079	9,600
22	INDIRECT	0.0036	148,948	240,026	62,087	184,811	256,967	96,995	74,880
49	DIRECT	0.0003	71,140	196,702	4,278	89,409	210,424	5,606	102,480
59	INDIRECT	0.0041	152,598	246,561	24,350	190,188	263,807	36,629	90,940
60	INDIRECT	0.00003	51,471	173,322	4,545	65,513	186,786	6,236	74,880
64	INDIRECT	0.0148	565,285	517,883	20,192	626,855	539,203	26,606	75,360
67	INDIRECT	0.0512	618,178	489,509	11,632	723,933	517,371	16,629	0
71	INDIRECT	0.0023	140,815	236,965	72,071	171,679	252,980	106,979	4,800
72	INDIRECT	0.01155	273,106	312,993	26,618	328,743	333,353	39,492	83,640
75	INDIRECT	0.0024	121,586	221,579	12,577	152,878	237,674	19,962	4,800
76	INDIRECT	0.0109	264,812	308,090	15,265	264,812	328,239	15,265	0
80	INDIRECT	0.0336	488,318	424,630	26,229	575,833	449,898	37,744	74,880
81	DIRECT	0.8671	4,118,813	2,057,745	20,671	4,537,922	2,122,277	126,050	102,053
89	INDIRECT	0.1282	1,048,350	705,177	5,820	1,152,475	740,505	8,273	0
90	INDIRECT	0.0187	353,946	356,047	29,527	421,844	378,365	43,103	74,880
98	INDIRECT	0.0096	247,558	298,874	70,749	299,231	318,577	105,657	12,000
99	DIRECT	0.15	1,149,884	752,964	37,215	1,149,884	789,881	37,215	97,500
100	INDIRECT	0.0235	400,924	379,596	5,826	400,924	402,983	5,826	88,380
103	INDIRECT	0.0006	84,769	205,995	68,630	105,929	220,191	103,538	88,020
104	INDIRECT	0.0165	330,739	343,369	16,344	330,739	365,142	16,344	4,800
105	INDIRECT	0.0447	572,692	465,534	4,247	572,692	492,511	4,247	4,800
118	DIRECT	0.1555	1,123,239	769,926	12,691	1,301,510	807,223	27,968	81,984
119	INDIRECT	0.0172	338,257	347,841	3,529	403,805	369,791	5,163	91,060
129	DIRECT	0.1503	1,151,244	753,655	19,847	1,151,244	790,593	19,847	95,568
130	DIRECT	0.2945	0	0	0	0	0	0	16,800
132	INDIRECT	0.0377	520,631	440,843	10,898	612,745	466,776	15,643	0

Metals Subcategory Options 2 and 3 Costs

Plant #	Discharge (Dir/ind)	Flow (Mgd)	BAT2 Total Capital Cost (1989 \$)	BAT2 Total O&M Cost (1989 \$/year)	BAT2 Total Land Cost (1989 \$)	BAT3 Total Capital Cost (1989 \$)	BAT3 Total O&M Cost (1989 \$/year)	BAT3 Total Land Cost (1989 \$)	Total Monitoring Cost (1989\$/yr)
133	INDIRECT	0.0437	565,466	463,248	4,514	663,893	490,082	6,460	24,000
134	INDIRECT	0.0212	378,970	369,025	14,556	450,646	391,918	20,813	74,880
135	INDIRECT	0.0409	544,873	452,968	9,865	640,410	479,392	14,136	88,380
138	INDIRECT	0.0199	366,121	362,377	3,622	435,833	384,977	5,278	90,940
144	INDIRECT	0.112	968,566	661,577	23,067	968,566	695,621	23,067	4,800
184	INDIRECT	0.0022	116,474	217,963	6,635	146,901	233,896	10,565	91,060
203	DIRECT	0.0536	881,971	1,224,691	20,544	989,960	1,252,862	27,163	63,408
216	INDIRECT	0.0088	194,881	292,622	978	245,050	312,033	1,808	0
231	INDIRECT	0.1027	920,891	640,693	5,500	1,067,054	673,949	7,822	0
255	INDIRECT	0.0277	438,840	398,806	5,943	438,840	423,025	5,943	88,020
256	DIRECT	0.1135	813,430	1,512,589	12,500	813,430	1,546,755	12,500	92,712
257	DIRECT	0.12196	848,352	1,600,193	12,732	1,007,007	1,635,038	18,025	91,704
279	INDIRECT	0.0201	311,326	362,792	34,658	381,397	385,437	66,179	88,020
284	INDIRECT	0.0037	151,029	241,376	13,178	187,236	258,380	20,564	88,020
288	INDIRECT	0.004	157,128	245,295	62,856	194,339	262,482	97,764	92,400
294	INDIRECT	0.1122	969,575	665,260	8,055	1,122,051	699,320	11,434	87,780
296	INDIRECT	0.001374	92,705	200,198	204,591	119,054	215,360	330,915	1,293,600
298	INDIRECT	0.01757	342,179	349,897	9,421	408,316	371,940	13,775	92,400
367	INDIRECT	0.0262	425,590	392,115	84,035	425,590	392,115	84,035	11,640
378	INDIRECT	0.0013	90,293	198,240	9,506	90,293	198,240	9,506	12,000
398	INDIRECT	0.0482	597,489	479,209	6,601	700,379	506,671	9,443	0
449	INDIRECT	0.0413	547,849	454,454	16,594	643,805	480,938	23,773	73,920
450	INDIRECT	0.0331	484,270	421,602	6,163	571,207	446,785	8,871	76,320
452	INDIRECT	0.6049	2,710,384	1,622,754	20,434	3,059,432	1,679,723	29,316	184,800
TOTAL	All Facilities		28,347,952	25,280,991	1,194,968	31,702,419	26,478,418	1,803,250	4,164,909

Metals Subcategory Option 4 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total. Monitoring Cost(89\$/yr)
11	INDIRECT	0.001	103,626	54,357	10,411	9,600
22	INDIRECT	0.0036	119,794	43,068	48,537	74,880
49	DIRECT	0.0003	118,911	99,055	4,590	102,480
59	INDIRECT	0.0041	76,824	18,694	12,603	90,940
60	INDIRECT	0.00003	29,779	46,316	3,207	74,880
64	INDIRECT	0.0148	274,188	212,974	15,308	75,360
67	INDIRECT	0.0512	287,977	78,101	7,587	0
71	INDIRECT	0.0023	124,602	57,622	59,802	4,800
72	INDIRECT	0.01155	165,308	51,149	19,287	83,640
75	INDIRECT	0.0024	107,626	41,644	10,004	4,800
76	INDIRECT	0.0109	75,600	29,256	6,507	0
80	INDIRECT	0.0336	242,285	66,662	17,588	74,880
81	DIRECT	0.8671	1,063,298	424,781	56,013	102,053
89	INDIRECT	0.1282	433,492	121,209	3,607	0
90	INDIRECT	0.0187	194,288	56,969	20,653	74,880
98	INDIRECT	0.0095	155,727	49,659	51,903	12,000
99	DIRECT	0.15	27,240	31,871	4,830	97,500
100	INDIRECT	0.0235	79,379	32,096	2,176	88,380
103	INDIRECT	0.0006	47,112	33,638	42,041	88,020
104	INDIRECT	0.0165	77,264	30,557	6,507	4,800
105	INDIRECT	0.0447	0	0	0	4,800
118	DIRECT	0.1555	526,704	164,078	29,941	81,984
119	INDIRECT	0.0172	188,656	55,573	2,484	91,060
129	DIRECT	0.1503	105,556	67,544	5,109	95,568
130	DIRECT	0.2945	0	0	0	16,800
132	INDIRECT	0.0377	253,728	69,318	7,251	0

Metals Subcategory Option 4 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total. Monitoring Cost(89\$/yr)
133	INDIRECT	0.0437	269,526	73,132	2,974	24,000
134	INDIRECT	0.0212	203,264	58,404	10,087	74,880
135	INDIRECT	0.0409	262,281	71,362	6,528	88,380
138	INDIRECT	0.0199	198,656	57,505	2,522	90,940
144	INDIRECT	0.112	27,240	24,386	3,230	4,800
184	INDIRECT	0.0022	105,283	41,042	5,296	91,060
203	DIRECT	0.0536	595,875	381,069	18,295	63,408
216	INDIRECT	0.00888	152,675	49,089	1,536	0
231	INDIRECT	0.1027	321,116	76,094	2,698	0
255	INDIRECT	0.0277	27,240	8,693	1,137	88,020
256	DIRECT	0.1135	99,389	57,135	3,418	92,712
257	DIRECT	0.12196	471,596	145,639	10,196	91,704
279	INDIRECT	0.0201	27,240	7,137	16,250	88,020
284	INDIRECT	0.0037	120,696	43,199	10,289	88,020
288	INDIRECT	0.004	75,972	18,858	34,389	92,400
294	INDIRECT	0.1122	407,523	112,441	5,024	87,780
296	INDIRECT	0.001374	94,024	39,889	165,862	1,293,600
298	INDIRECT	0.01757	190,064	56,154	6,620	92,400
367	INDIRECT	0.0262	27,240	0	16,250	11,640
378	INDIRECT	0.0013	18,204	0	2,586	12,000
398	INDIRECT	0.0482	280,751	75,938	4,322	0
449	INDIRECT	0.0413	206,283	46,004	8,329	73,920
450	INDIRECT	0.0331	82,115	34,154	2,159	76,320
452	INDIRECT	0.6049	929,300	349,313	12,033	184,800
TOTAL	ALL FACILITIES		10,072,514	3,762,825	799,980	4,164,909

Oils Subcategory Option 8 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total. Monitoring Cost(89\$/yr)
9	INDIRECT	0.0021	0	0	0	45,600
16	INDIRECT	0.0282	214,418	66,207	2,238	91,200
17	INDIRECT	0.0081	164,803	17,193	2,024	45,600
36	INDIRECT	0.0065	142,030	13,492	5,310	45,600
37	INDIRECT	0.00197	137,390	16,994	5,425	45,600
60	INDIRECT	0.00008	124,944	16,994	1,924	29,520
67	INDIRECT	0.00067	103,441	14,433	4,854	29,520
71	INDIRECT	0.0203	84,221	10,447	20,784	0
72	INDIRECT	0.0016	0	0	0	37,560
75	INDIRECT	0.0268	205,183	58,709	10,390	29,520
88	INDIRECT	0.02	187,882	45,368	2,316	35,100
89	INDIRECT	0.00177	114,444	13,492	2,004	0
103	INDIRECT	0.0021	0	0	0	34,200
104	INDIRECT	0.0126	165,603	21,808	9,741	22,140
125	INDIRECT	0.0502	124,476	126,585	1,494	44,260
129	DIRECT	0.0155	0	0	0	51,648
138	INDIRECT	0.039	0	0	0	44,260
173	INDIRECT	0.017	179,400	36,064	47,146	45,600
184	INDIRECT	0.0128	166,274	22,174	5,190	41,800
216	INDIRECT	0.00857	0	0	0	29,520
231	INDIRECT	0.0043	131,081	14,433	2,084	29,520
284	INDIRECT	0.0807	0	46,006	0	34,200
294	INDIRECT	0.0228	195,288	45,941	3,355	34,200
302	INDIRECT	0.0061	140,182	14,433	9,279	29,520
323	INDIRECT	0.0094	169,112	20,697	13,398	38,220
398	INDIRECT	0.0109	159,692	18,862	3,159	29,520
409	INDIRECT	0.0150	185,122	29,005	8,410	29,520
449	INDIRECT	0.0131	167,271	22,730	8,322	29,520

Oils Subcategory Option 8 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total. Monitoring Cost(89\$/yr)
450	INDIRECT	0.0269	205,422	59,054	3,441	29,520
451	INDIRECT	0.137	0	0	0	0
452	INDIRECT	0.0646	159,580	158,564	4,135	91,200
700	INDIRECT	0.0069	46,913	2,226	1,295	29,520
707	INDIRECT	0.0006	125,580	16,055	5,803	29,520
708	INDIRECT	0.046	113,803	117,132	7,522	29,520
724	INDIRECT	0.0058	156,192	16,055	12,992	29,520
731	INDIRECT	0.0042	35,676	2,226	769	29,520
733	INDIRECT	0.0030	0	0	0	29,520
738	INDIRECT	0.0296	113,708	96,779	1,764	29,520
740	INDIRECT	0.0171	76,607	6,584	4,221	29,520
744	INDIRECT	0.0027	142,088	16,055	985	29,520
746	INDIRECT	0.0423	0	25,890	0	29,520
753	INDIRECT	0.1423	0	77,253	0	34,200
754	INDIRECT	0.0065	159,185	16,055	6,374	29,520
764	INDIRECT	0.0162	188,086	31,497	9,344	29,520
776	INDIRECT	0.0054	136,809	13,492	3,519	29,520
777	INDIRECT	0.03346	87,632	94,327	5,695	29,520
787	INDIRECT	0.00125	132,200	16,055	40,898	29,520
789	INDIRECT	0.0023	139,518	16,055	7,058	29,520
793	INDIRECT	0.0896	279,459	218,977	2,133	29,520
795	INDIRECT	0.02649	211,049	72,951	2,840	29,520
803	INDIRECT	0.0049	38,963	2,226	1,126	29,520
804	INDIRECT	0.039	124,034	103,882	5,906	29,520
805	INDIRECT	0.0552	0	0	0	29,520
814	INDIRECT	0.00096	129,728	16,055	950	29,520
815	INDIRECT	0.0250	94,323	12,030	1,642	29,520
816	INDIRECT	0.1231	0	67,565	0	29,520
817	INDIRECT	0.069	169,852	168,227	2,809	29,520

Oils Subcategory Option 8 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total. Monitoring Cost(89\$/yr)
818	INDIRECT	0.0527	0	31,450	0	41,580
819	INDIRECT	0.0239	92,026	11,157	4,519	29,520
821	INDIRECT	0.0196	82,616	8,124	3,883	29,520
839	INDIRECT	0.0111	174,286	21,667	9,588	29,520
840	INDIRECT	0.0124	64,282	4,198	3,996	29,520
843	INDIRECT	0.033	0	0	0	29,520
848	INDIRECT	0.0000	124,944	16,055	5,271	29,520
850	INDIRECT	0.0266	97,655	13,399	3,484	12,060
851	INDIRECT	0.0654	0	0	0	34,200
852	INDIRECT	0.0082	165,145	17,326	7,076	29,520
869	INDIRECT	0.0281	214,224	65,847	3,733	29,520
875	INDIRECT	0.0023	139,518	16,994	2,924	29,520
876	INDIRECT	0.0039	148,147	16,055	9,001	29,520
883	INDIRECT	0.0017	0	0	0	29,520
902	INDIRECT	0.0001	124,944	16,055	2,300	29,520
907	INDIRECT	0.0106	172,982	20,952	45,472	29,520
912	INDIRECT	0.0577	185,586	147,230	1,629	29,520
924	DIRECT	0.0183	183,175	33,897	2,298	29,520
928	INDIRECT	0.0025	0	0	0	29,520
930	INDIRECT	0.0252	208,441	55,953	2,365	29,520
933	INDIRECT	0.0047	133,318	14,433	43,223	29,520
936	INDIRECT	0.0019	115,255	13,492	1,800	29,520
937	INDIRECT	0.0385	122,321	102,702	1,264	29,520
945	DIRECT	0.0193	185,873	36,280	2,308	29,520
950	INDIRECT	0.0745	236,542	185,150	15,361	29,520
951	INDIRECT	0.1154	266,634	268,097	8,381	29,520
TOTAL	ALL FACILITIES		9,566,578	3,251,849	481,948	2,662,188

Oils Subcategory Option 9 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
9	INDIRECT	0.0021	0	0	0	45,600
16	INDIRECT	0.0282	545,116	110,938	6,128	91,200
17	INDIRECT	0.0081	333,817	47,713	5,003	45,600
36	INDIRECT	0.0065	142,030	13,492	5,310	45,600
37	INDIRECT	0.00197	211,221	38,005	12,052	45,600
60	INDIRECT	0.00008	155,823	32,542	3,559	29,520
67	INDIRECT	0.00067	103,441	14,433	4,854	29,520
71	INDIRECT	0.0203	84,221	10,447	20,784	0
72	INDIRECT	0.0016	0	0	0	37,560
75	INDIRECT	0.0268	205,183	58,709	10,390	29,520
88	INDIRECT	0.02	187,882	45,368	2,316	35,100
89	INDIRECT	0.00177	114,444	13,492	2,004	0
103	INDIRECT	0.0021	0	0	0	34,200
104	INDIRECT	0.0126	165,603	21,808	9,741	22,140
125	INDIRECT	0.0502	124,476	126,585	1,494	44,260
129	DIRECT	0.0155	0	0	0	51,648
138	INDIRECT	0.039	0	0	0	44,260
173	INDIRECT	0.017	179,400	36,064	47,146	45,600
184	INDIRECT	0.0128	166,274	22,174	5,190	41,800
216	INDIRECT	0.00857	0	0	0	29,520
231	INDIRECT	0.0043	131,081	14,433	2,084	29,520
284	INDIRECT	0.0807	0	46,006	0	34,200
294	INDIRECT	0.0228	195,288	45,941	3,355	34,200
302	INDIRECT	0.0061	140,182	14,433	9,279	29,520
323	INDIRECT	0.0094	352,757	52,557	33,509	38,220
398	INDIRECT	0.0109	159,692	18,862	3,159	29,520
409	INDIRECT	0.0150	222,146	29,005	8,410	29,520
449	INDIRECT	0.0131	167,271	22,730	8,322	29,520

Oils Subcategory Option 9 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
450	INDIRECT	0.0269	205,422	59,054	3,441	29,520
451	INDIRECT	0.137	0	74,570	0	0
452	INDIRECT	0.0646	159,580	158,564	4,135	91,200
700	INDIRECT	0.0069	46,913	2,226	1,295	29,520
707	INDIRECT	0.0006	158,589	31,920	11,872	29,520
708	INDIRECT	0.046	113,803	117,132	7,522	29,520
724	INDIRECT	0.0058	187,430	16,055	12,992	29,520
731	INDIRECT	0.0042	181,793	27,659	3,572	29,520
733	INDIRECT	0.0030	0	0	0	29,520
738	INDIRECT	0.0296	452,620	142,212	7,412	29,520
740	INDIRECT	0.0171	396,728	44,698	20,342	29,520
744	INDIRECT	0.0027	232,388	38,865	2,242	29,520
746	INDIRECT	0.0423	0	25,890	0	29,520
753	INDIRECT	0.1423	872,556	156,356	128,168	34,200
754	INDIRECT	0.0065	308,960	44,779	15,488	29,520
764	INDIRECT	0.0162	225,704	31,497	9,344	29,520
776	INDIRECT	0.0054	136,809	13,492	3,519	29,520
777	INDIRECT	0.03346	87,632	94,327	5,695	29,520
787	INDIRECT	0.00125	187,905	34,943	88,082	29,520
789	INDIRECT	0.0023	220,808	37,893	15,859	29,520
793	INDIRECT	0.0896	865,646	285,623	7,283	29,520
795	INDIRECT	0.02649	531,226	116,780	7,736	29,520
803	INDIRECT	0.0049	199,463	28,788	5,263	29,520
804	INDIRECT	0.039	514,184	153,688	25,353	29,520
805	INDIRECT	0.0552	0	0	0	29,520
814	INDIRECT	0.00096	176,871	33,864	2,011	29,520
815	INDIRECT	0.0250	486,029	55,046	7,957	29,520
816	INDIRECT	0.1231	816,054	142,462	25,927	29,520

Oils Subcategory Option 9 Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total.Monitoring Cost(89\$/yr)
817	INDIRECT	0.069	169,852	168,227	2,809	29,520
818	INDIRECT	0.0527	544,253	86,666	17,993	41,580
819	INDIRECT	0.0239	474,575	53,550	21,886	29,520
821	INDIRECT	0.0196	427,265	47,927	18,755	29,520
839	INDIRECT	0.0111	375,354	55,103	24,301	29,520
840	INDIRECT	0.0124	333,265	38,740	19,141	29,520
843	INDIRECT	0.033	0	0	0	29,520
848	INDIRECT	0.0000	155,823	31,603	9,188	29,520
850	INDIRECT	0.0266	502,579	57,313	16,897	12,060
851	INDIRECT	0.0654	0	0	0	34,200
852	INDIRECT	0.0082	335,325	47,953	17,506	29,520
869	INDIRECT	0.0281	544,316	110,526	10,218	29,520
875	INDIRECT	0.0023	220,808	38,832	6,570	29,520
876	INDIRECT	0.0039	259,653	41,056	21,027	29,520
883	INDIRECT	0.0017	0	0	0	29,520
902	INDIRECT	0.0001	155,823	31,603	4,233	29,520
907	INDIRECT	0.0106	369,676	53,994	114,872	29,520
912	INDIRECT	0.0577	659,563	204,193	6,239	29,520
924	DIRECT	0.0183	183,175	33,897	2,298	29,520
928	INDIRECT	0.0025	0	0	0	29,520
930	INDIRECT	0.0252	520,431	99,080	6,415	29,520
933	INDIRECT	0.0047	133,318	14,433	43,223	29,520
936	INDIRECT	0.0019	115,255	13,492	1,800	29,520
937	INDIRECT	0.0385	509,940	152,292	5,446	29,520
945	DIRECT	0.0193	185,873	36,280	2,308	29,520
950	INDIRECT	0.0745	772,996	247,484	54,958	29,520
951	INDIRECT	0.1154	266,634	268,097	8,381	29,520
TOTAL	ALL FACILITIES		20,068,215	4,736,464	1,063,064	2,662,188

Oils Subcategory Option 8V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
9	INDIRECT	0.0021	64,922	18,508	2,904	59,280
16	INDIRECT	0.0282	319,185	89,808	2,784	118,560
17	INDIRECT	0.0081	243,823	37,463	2,570	59,280
36	INDIRECT	0.0065	233,159	33,360	6,762	59,280
37	INDIRECT	0.00197	201,892	35,457	6,997	59,280
60	INDIRECT	0.00008	184,472	35,169	2,507	43,200
67	INDIRECT	0.00067	175,500	32,608	6,306	43,200
71	INDIRECT	0.0203	216,693	32,977	32,821	0
72	INDIRECT	0.0016	75,914	18,341	4,401	51,240
75	INDIRECT	0.0268	329,229	82,133	12,936	43,200
88	INDIRECT	0.02	303,091	67,853	2,899	47,640
89	INDIRECT	0.00177	191,051	31,888	2,587	0
103	INDIRECT	0.0021	64,922	18,508	12,037	44,460
104	INDIRECT	0.0126	269,238	43,041	12,288	32,400
125	INDIRECT	0.0502	272,451	152,470	2,040	57,940
129	DIRECT	0.0155	108,495	21,761	1,907	65,328
138	INDIRECT	0.039	137,436	24,816	546	57,940
173	INDIRECT	0.017	290,230	58,078	59,183	59,280
184	INDIRECT	0.0128	270,261	43,445	6,545	54,340
216	INDIRECT	0.00857	95,841	20,381	358	43,200
231	INDIRECT	0.0043	216,347	33,672	2,667	43,200
284	INDIRECT	0.0807	171,862	74,232	2,547	44,460
294	INDIRECT	0.0228	314,295	68,832	4,190	44,460
302	INDIRECT	0.0061	230,323	34,194	11,825	43,200
323	INDIRECT	0.0094	250,423	41,267	16,976	48,480
398	INDIRECT	0.0109	260,216	39,755	3,994	43,200
409	INDIRECT	0.0150	274,851	50,678	10,579	43,200
449	INDIRECT	0.0131	271,781	44,059	10,491	43,200

Oils Subcategory Option 8V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
450	INDIRECT	0.0269	329,589	82,491	4,284	43,200
451	INDIRECT	0.137	206,437	31,433	652	0
452	INDIRECT	0.0646	319,521	185,635	5,427	118,560
700	INDIRECT	0.0069	46,913	2,226	1,295	43,200
707	INDIRECT	0.0006	185,320	34,230	7,545	43,200
708	INDIRECT	0.046	113,803	117,132	7,522	43,200
724	INDIRECT	0.0058	230,608	35,725	16,570	43,200
731	INDIRECT	0.0042	127,735	21,429	1,352	43,200
733	INDIRECT	0.0030	67,542	18,806	1,597	43,200
738	INDIRECT	0.0296	219,812	120,548	2,548	43,200
740	INDIRECT	0.0171	202,842	28,607	6,752	43,200
744	INDIRECT	0.0027	208,996	34,786	1,267	43,200
746	INDIRECT	0.0423	140,689	51,038	843	43,200
753	INDIRECT	0.1423	209,334	108,946	13,661	44,460
754	INDIRECT	0.0065	235,204	35,933	8,117	43,200
764	INDIRECT	0.0162	279,358	53,370	11,740	43,200
776	INDIRECT	0.0054	225,142	33,058	4,492	43,200
777	INDIRECT	0.03346	219,295	118,548	8,225	43,200
787	INDIRECT	0.00125	194,237	34,295	52,935	43,200
789	INDIRECT	0.0023	205,097	34,635	9,091	43,200
793	INDIRECT	0.0896	427,781	247,786	2,679	43,200
795	INDIRECT	0.02649	314,107	96,335	3,537	43,200
803	INDIRECT	0.0049	133,790	21,653	1,961	43,200
804	INDIRECT	0.039	148,841	103,882	5,906	43,200
805	INDIRECT	0.0552	126,884	26,313	835	43,200
814	INDIRECT	0.00096	155,673	16,055	950	43,200
815	INDIRECT	0.0250	235,016	35,220	2,553	43,200
816	INDIRECT	0.1231	198,636	98,291	2,723	43,200

Oils Subcategory Option 8V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
817	INDIRECT	0.069	333,182	195,628	3,652	43,200
818	INDIRECT	0.0527	150,203	57,558	2,178	55,260
819	INDIRECT	0.0239	230,855	34,198	7,050	43,200
821	INDIRECT	0.0196	213,776	30,548	6,148	43,200
839	INDIRECT	0.0111	258,335	42,597	12,119	43,200
840	INDIRECT	0.0124	180,337	25,383	6,543	43,200
843	INDIRECT	0.033	0	0	0	43,200
848	INDIRECT	0.0000	184,472	34,230	6,868	43,200
850	INDIRECT	0.0266	241,047	36,804	5,391	12,060
851	INDIRECT	0.0654	160,581	27,134	1,907	44,460
852	INDIRECT	0.0082	198,174	17,326	7,076	43,200
869	INDIRECT	0.0281	257,069	65,847	3,733	43,200
875	INDIRECT	0.0023	205,097	35,574	3,766	43,200
876	INDIRECT	0.0039	218,258	35,176	11,532	43,200
883	INDIRECT	0.0017	76,449	18,383	1,292	43,200
902	INDIRECT	0.0001	184,472	34,230	2,997	43,200
907	INDIRECT	0.0106	256,343	41,792	57,509	43,200
912	INDIRECT	0.0577	314,240	173,754	2,175	43,200
924	DIRECT	0.0183	295,958	56,122	2,881	43,200
928	INDIRECT	0.0025	79,526	18,658	697	43,200
930	INDIRECT	0.0252	310,173	79,170	2,948	43,200
933	INDIRECT	0.0047	133,318	14,433	43,223	43,200
936	INDIRECT	0.0019	192,261	31,921	2,323	43,200
937	INDIRECT	0.0385	236,431	127,466	1,810	43,200
945	DIRECT	0.0193	300,047	58,654	2,891	43,200
950	INDIRECT	0.0745	376,032	212,945	19,762	43,200
951	INDIRECT	0.1154	460,792	298,413	10,320	43,200
TOTAL	ALL FACILITIES		17,793,532	4,917,106	660,504	3,744,048

Oils Subcategory Option 9V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
9	INDIRECT	0.0021	64,922	18,508	2,904	59,280
16	INDIRECT	0.0282	649,882	134,538	6,674	118,560
17	INDIRECT	0.0081	412,837	67,983	5,549	59,280
36	INDIRECT	0.0065	233,159	33,360	6,762	59,280
37	INDIRECT	0.00197	275,723	56,469	13,624	59,280
60	INDIRECT	0.00008	215,351	50,717	4,142	43,200
67	INDIRECT	0.00067	175,500	32,608	6,306	43,200
71	INDIRECT	0.0203	216,693	32,977	32,821	0
72	INDIRECT	0.0016	75,914	18,341	4,401	51,240
75	INDIRECT	0.0268	329,229	82,133	12,936	43,200
88	INDIRECT	0.02	303,091	67,853	2,899	47,640
89	INDIRECT	0.00177	191,051	31,888	2,587	0
103	INDIRECT	0.0021	64,922	18,508	12,037	44,460
104	INDIRECT	0.0126	269,238	43,041	12,288	32,400
125	INDIRECT	0.0502	272,451	152,470	2,040	57,940
129	DIRECT	0.0155	108,495	21,761	1,907	65,328
138	INDIRECT	0.039	137,436	24,816	546	57,940
173	INDIRECT	0.017	290,230	58,078	59,183	59,280
184	INDIRECT	0.0128	270,261	43,445	6,545	54,340
216	INDIRECT	0.00857	95,841	20,381	358	43,200
231	INDIRECT	0.0043	216,347	33,672	2,667	43,200
284	INDIRECT	0.0807	171,862	74,232	2,547	44,460
294	INDIRECT	0.0228	314,295	68,832	4,190	44,460
302	INDIRECT	0.0061	230,323	34,194	11,825	43,200
323	INDIRECT	0.0094	434,068	73,128	37,087	48,480
398	INDIRECT	0.0109	260,216	39,755	3,994	43,200
409	INDIRECT	0.0150	329,822	50,678	10,579	43,200
449	INDIRECT	0.0131	271,781	44,059	10,491	43,200

Oils Subcategory Option 9V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
450	INDIRECT	0.0269	329,589	82,491	4,284	43,200
451	INDIRECT	0.137	206,437	106,003	652	0
452	INDIRECT	0.0646	319,521	185,635	5,427	118,560
700	INDIRECT	0.0069	46,913	2,226	1,295	43,200
707	INDIRECT	0.0006	218,329	50,095	13,614	43,200
708	INDIRECT	0.046	113,803	117,132	7,522	43,200
724	INDIRECT	0.0058	276,730	35,725	16,570	43,200
731	INDIRECT	0.0042	266,717	46,863	4,156	43,200
733	INDIRECT	0.0030	67,542	18,806	1,597	43,200
738	INDIRECT	0.0296	558,724	165,981	8,196	43,200
740	INDIRECT	0.0171	507,642	66,721	22,873	43,200
744	INDIRECT	0.0027	299,295	57,596	2,523	43,200
746	INDIRECT	0.0423	140,689	51,038	843	43,200
753	INDIRECT	0.1423	1,081,889	188,049	141,830	44,460
754	INDIRECT	0.0065	384,979	64,657	17,231	43,200
764	INDIRECT	0.0162	335,230	53,370	11,740	43,200
776	INDIRECT	0.0054	225,142	33,058	4,492	43,200
777	INDIRECT	0.03346	219,295	118,548	8,225	43,200
787	INDIRECT	0.00125	249,942	53,182	100,119	43,200
789	INDIRECT	0.0023	286,387	56,473	17,891	43,200
793	INDIRECT	0.0896	1,013,968	314,431	7,829	43,200
795	INDIRECT	0.02649	634,284	140,165	8,433	43,200
803	INDIRECT	0.0049	286,499	48,215	6,098	43,200
804	INDIRECT	0.039	617,021	153,688	25,353	43,200
805	INDIRECT	0.0552	126,884	26,313	835	43,200
814	INDIRECT	0.00096	212,245	33,864	2,011	43,200
815	INDIRECT	0.0250	607,857	78,236	8,868	43,200
816	INDIRECT	0.1231	1,014,691	173,188	28,651	43,200

Oils Subcategory Option 9V (Volatiles Treatment) Costs

Facility #	Discharge (Dir/ind)	Flow (Mgd)	Total Capital Cost (89\$)	Total O&M Cost(89\$/yr)	Total Land Cost (89\$)	Total Monitoring Cost(89\$/yr)
817	INDIRECT	0.069	333,182	195,628	3,652	43,200
818	INDIRECT	0.0527	694,456	112,774	20,171	55,260
819	INDIRECT	0.0239	594,999	76,591	24,417	43,200
821	INDIRECT	0.0196	541,902	70,351	21,021	43,200
839	INDIRECT	0.0111	459,403	76,033	26,832	43,200
840	INDIRECT	0.0124	436,463	59,925	21,688	43,200
843	INDIRECT	0.033	0	0	0	43,200
848	INDIRECT	0.0000	215,351	49,778	10,785	43,200
850	INDIRECT	0.0266	626,440	80,718	18,804	12,060
851	INDIRECT	0.0654	160,581	27,134	1,907	44,460
852	INDIRECT	0.0082	402,390	47,953	17,506	43,200
869	INDIRECT	0.0281	653,180	110,526	10,218	43,200
875	INDIRECT	0.0023	286,387	57,412	7,412	43,200
876	INDIRECT	0.0039	329,764	60,176	23,558	43,200
883	INDIRECT	0.0017	76,449	18,383	1,292	43,200
902	INDIRECT	0.0001	215,351	49,778	4,930	43,200
907	INDIRECT	0.0106	453,036	74,834	126,909	43,200
912	INDIRECT	0.0577	788,218	230,717	6,785	43,200
924	DIRECT	0.0183	295,958	56,122	2,881	43,200
928	INDIRECT	0.0025	79,526	18,658	697	43,200
930	INDIRECT	0.0252	622,164	122,297	6,998	43,200
933	INDIRECT	0.0047	133,318	14,433	43,223	43,200
936	INDIRECT	0.0019	192,261	31,921	2,323	43,200
937	INDIRECT	0.0385	624,050	177,057	5,992	43,200
945	DIRECT	0.0193	300,047	58,654	2,891	43,200
950	INDIRECT	0.0745	912,486	275,279	59,359	43,200
951	INDIRECT	0.1154	460,792	298,413	10,320	43,200
TOTAL	ALL FACILITIES		28,417,336	6,401,720	1,241,620	3,744,048

Organics Subcategory Options 3 and 4 Costs

Plant Number	Discharge (Dir/ind)	Flow (Mgd)	BAT3	BAT3	BAT3	BAT4	BAT4	BAT4	BAT3	BAT4
			Total Capital Cost (89\$)	Total O&M Cost (89\$/yr)	Total Land (89\$)	Total Capital Cost (89\$)	Total O&M Cost (89\$/yr)	Total Land (89\$)	Monitoring Cost (89\$/yr)	Monitoring Cost (89\$/yr)
9	INDIRECT	0.0258	1,151,879	108,353	14,673	1,049,526	85,057	11,769	53,280	39,600
59	INDIRECT	0.0597	0	0	0	0	0	0	48,840	36,300
60	INDIRECT	0.0112	1,005,405	126,698	2,918	753,596	105,743	2,335	43,200	29,520
64	INDIRECT	0.0001	188,990	68,403	9,456	129,462	50,228	7,287	43,200	29,520
80	INDIRECT	0.0236	1,104,205	104,978	17,603	1,004,166	81,977	14,026	0	0
90	INDIRECT	0.0202	1,231,150	99,438	21,198	1,115,661	76,923	16,697	0	0
103	INDIRECT	0.0059	698,460	67,818	44,641	507,355	48,112	32,604	39,960	29,700
104	INDIRECT	0.0005	213,283	40,709	8,809	153,651	22,534	6,263	0	0
118	DIRECT	0.0454	181,834	69,219	6,896	60,067	47,322	3,319	10,944	10,944
129	DIRECT	0.00027	71,434	18,175	1,907	0	0	0	50,760	37,080
203	DIRECT	0.0007	72,167	18,175	1,907	0	0	0	42,048	38,448
216	INDIRECT	0.000163	149,640	35,480	1,239	90,112	17,305	881	129,600	88,560
230	INDIRECT	0.0293	1,468,496	113,441	4,390	1,117,909	89,706	3,555	52,440	38,760
294	INDIRECT	0.0085	744,646	118,452	4,013	664,904	98,087	3,178	39,960	29,700
388	DIRECT	0.0429	141,258	25,207	835	0	0	0	50,880	37,200
449	INDIRECT	0.0062	714,178	68,761	8,095	519,823	48,973	5,926	43,200	29,520
450	INDIRECT	0.0217	1,122,882	151,474	4,889	1,024,929	128,739	4,046	43,200	29,520
452	INDIRECT	0.6794	879,278	78,614	5,173	650,747	57,955	3,881	106,560	79,200
TOTAL	All Facilities		11,139,186	1,313,393	158,644	8,841,908	958,659	115,766	798,072	583,572

RCRA Costs

Plant #	RCRACosts 1989\$	Plant #	RCRACosts1989\$	Plant #	RCRA Costs 1989\$
9	30,000	184	30,000	776	0
11	0	203	0	777	0
16	0	216	30,000	787	0
17	0	230	0	789	0
22	30,000	231	0	793	0
36	30,000	255	30,000	795	0
37	0	256	30,000	803	0
49	30,000	257	30,000	804	0
59	30,000	279	30,000	805	0
60	30,000	284	30,000	814	0
64	30,000	288	30,000	815	0
67	30,000	294	30,000	817	0
71	30,000	296	0	818	0
72	30,000	298	30,000	819	0
75	30,000	302	0	821	0
76	30,000	323	30,000	839	0
80	30,000	367	30,000	840	0
81	30,000	378	30,000	843	0
88	30,000	388	30,000	848	30,000
89	30,000	398	30,000	850	0
90	30,000	409	30,000	851	0
98	30,000	449	30,000	852	0
99	30,000	450	30,000	869	0
100	30,000	451	30,000	875	30,000
103	30,000	452	30,000	876	30,000
104	30,000	700	0	883	0
105	30,000	707	0	902	30,000
118	30,000	708	0	907	30,000
119	30,000	724	30,000	912	0
125	30,000	731	30,000	924	0
129	30,000	733	30,000	928	0
130	30,000	738	0	930	0
132	30,000	740	0	933	30,000
133	30,000	744	0	936	30,000
134	30,000	746	0	937	0
135	30,000	753	30,000	945	0
138	30,000	754	0	950	0
144	30,000	764	30,000	951	0
173	0				