USS Clairton Works
Total Annual Benzene (TAB) - 1998
INSTRUMENTATION MAINTENANCE LISTING

Waste Stream ID#	Instrumentation Waste Stream Description	Controlled Y/N	Water Content >10% Y/N	Waste Stream Type Code	Annual Waste Quantity (Gal)	Range of Benzene Concentration (ppm)	Annual Flow Weighted Avg. Benz. Conc.(ppm)	Annual BQ (Mg)	TAB Component Y/N
	#1 CONTROL ROOM								
1CR210	FR3010 Phosam Rich Solution Return From #1 BP	N	N	E	1	8.16 - 14	9.9	0	Y
1CR211	LIC3011 Top Water Level T301 Absorber	N	Y	A	10	93 - 221	144.1	0	Y
1CR212	LR3014 Bottoms Level T301 Absorber	N	Y	A	20	93 - 221	144.1	0	Y
1CR213	LIC3021 Top Water Level T302 Absorber	N	Y	A	10	93 - 221	144.1	0	Y
1CR214	LR3024 Bottoms Level T302 Absorber	N	Y	A	20	93 - 221	144.1	0	Y
1CR215	FR3030 Lean Phosam Solution to #1 BP	N	Y	E	1	0.23 - 5.0	1.8	6.8E-09	Y
1CR216	LIC3031 Top water Level T303 Absorber	N	Y	A	10	93 - 221	144.1	0	Y
1CR217	LR3034 Bottoms Level T303 Absorber	N	Y	A	10	93 - 221	144.1	0	Y
1CR218	FRC3056 Rich Solution Flow To Superstill	N	Y	E	1	8.16 - 14	9.9	3.7E-08	Y
1CR219	LIC3063 T-306 Stripper Bottoms Level Control	N	Y	E	10	0.23 - 5.0	1.8	6.8E-08	Y
1CR220	LIC3073 T307 Stripper Bottoms Level Control	N	Y	E	10	0.23 - 5.0	1.8	6.8E-08	Y
1CR221	LIC3103 East Contactor Liquid Level	N	Y	E	10	8.16 - 14	9.9	3.7E-07	Y
1CR222	FRC3105 Lean Phosam Solution Flow to Absorber	N	Y	E	1	0.23 - 5.0	1.8	6.8E-09	Y
1CR223	FRC3106 Rich Phosam Solution Flow To Contactor	N	Y	E	1	8.16 - 14	9.9	3.7E-08	Y
1CR224	LIC3113 West Contactor Level Control	N	Y	E	10	8.16 - 14	9.9	3.7E-07	Y
1CR225	LIC3123 East Fractionator Feed Tank Level Control	N	Y	E	10	0.005 - 0.027	0.02	7.5E-10	Y
1CR226	FRC3124 Fractionator Column Feed	N	Y	E	1	0.005 - 0.027	0.02	7.5E-11	Y
1CR227	LIC3133 West Frac. Feed Tank Level Control	N	Y	E	10	0.005 - 0.027	0.02	7.5E-10	Y
1CR228	LIC3174 Flash Tank Liquid Level Control	N	Y	E	10	8.16 - 14	9.9	3.7E-07	Y
1CR229	LIC3332 E333 Overhead Condenser Level	N	Y	A	10	93 - 221	144.1	0	Y
1CR230	FR3527 Fractionator Reflux	N	Y	A	1	93 - 221	144.1	0	Y
1CR231	FRC3528 Fractionator Product	N	Y	E	1	0 - 0.53	0.2	0	Y
1CR232	FRC3709 Hot Proc. H2O from Absorbers -Spirals	N	Y	A	1	93 - 221	144.1	0	Y
1CR233	FIC2700 Hot Process Flow to Superstill	N	Y	A	1	93 - 221	144.1	0	Y
1CR234	LIC2025 Injection Water Level in T202	N	Y	A	10	93 - 221	144.1	0	Y
1CR235	LI2035 Injection Water Level in T203	N	Y	A	10	93 - 221	144.1	0	Y
1CR236	LI2047 East Sump Water Level	N	Y	A	10	93 - 221	144.1	0	Y
1CR237	LIC2054 East Sump Tar Liquid Level	N	Y	A	10	93 - 221	144.1	0	Y
1CR238	LI2057 Middle Sump Water Level	N	Y	A	10	93 - 221	144.1	0	Y
1CR239	LI2127 Top Recirc. H20 Level T201	N	Y	A	10	93 - 221	144.1	0	Y
1CR240	FIC2128 Inject H20 Flow to MDL Sprays T201	N	Y	A	1	93 - 221	144.1	0	Y
1CR241	LIC2136 Bottom Tar Water Level T201	N	Y	A	10	93 - 221	144.1	0	Y
1CR242	FIC2149 Makeup H20 to Top Sprays T201	N	Y	A	1	93 - 221	144.1	0	Y
1CR243	LI2237 Top Recirc. H20 Level T202	N	Y	A	10	93 - 221	144.1	0	Y
1CR244	FIC2238 Inject H20 Flow to Middle Sprays T202	N	Y	A	1	93 - 221	144.1	0	Y
1CR245	LIC2246 Bottom Tar Water Level T202	N	Y	A	1	93 - 221	144.1	0	Y
1CR246	FIC2279 Makeup Water to Top Sprays T202	N	Y	A	1	93 - 221	144.1	0	Y

ED_002508A_00001331-00001

USS Clairton Works
Total Annual Benzene (TAB) - 1998
INSTRUMENTATION MAINTENANCE LISTING

Waste Stream ID#	Instrumentation Waste Stream Description	Controlled Y/N	Water Content >10% Y/N	Waste Stream Type Code	Annual Waste Quantity (Gal)	Range of Benzene Concentration (ppm)	Annual Flow Weighted Avg. Benz. Conc.(ppm)	Annual BQ (Mg)	TAB Component Y/N
1CR247	LI2327 Top Recirc. H20 Level T203	N	Y	A	10	93 - 221	144.1	0	Y
1CR248	FIC2328 Injection H20 Flow to Middle Sprays T203	N	Y	A	1	93 - 221	144.1	0	Y
1CR249	LIC2356 Bottom Tar Water Level T203	N	Y	A	10	93 - 221	144.1	0	Y
1CR250	FIC2369 Makeup H20 to Top Sprays T203	N	Y	A	1	93 - 221	144.1	0	Y
1CR251	FIC2384 CTW Return Temp from N. Spirals	N	Y	A	1	93 - 221	144.1	0	Y
1CR252	LI2627 T206 TOP Recirc. Level	N	Y	A	10	93 - 221	144.1	0	Y
1CR253	F2668 MID H20 SPRAY TO T206	N	Y	A	1	93 - 221	144.1	0	Y
1CR254	LI2821 Condensate Level in Free Blowdown Tank	N	Y	A	10	93 - 221	144.1	0	Y
	#2 CONTROL ROOM								
2CR82	FT6262 Flow Transmitter - Injection H2O outlet - E626	N	Y	A	2	235 - 343	284	2.1E-06	Y
2CR83	LIC5730 Level Indicator Control on D573 Separator	N	Y	A	5	235 - 343	284	5.3E-06	Y
2CR84	LG5742 Level Gauge - D573 Separator	N	Y	A	7	235 - 343	284	7.5E-06	Y
2CR85	LG5750 Level Gauge - D575	N	Y	A	5	235 - 343	284	5.3E-06	Y
2CR86	LIC5733 Level Indicator Control on D575 Separator	N	Y	A	5	235 - 343	284	5.3E-06	Y
2CR87	LG5766 Level Gauge - D576	N	Y	A	10	235 - 343	284	1.1E-05	Y
2CR88	Level Gauge - D596	N	Y	A	5	235 - 343	284	5.3E-06	Y
2CR89	LG6003 Level Gauge - D600	N	Y	A	10	235 - 343	284	1.1E-05	Y
2CR90	LG6020 Level Gauge - D602	N	Y	A	10	235 - 343	284	1.1E-05	Y
2CR91	LG6240 Level Gauge - D-624	N	Y	A	10	235 - 343	284	1.1E-05	Y
2CR92	LIC6243 Level Indicator - D624	N	Y	A	5	235 - 343	284	5.3E-06	Y
2CR93	LICA6048 Cont. H2O Level Indicator - V604	N	Y	A	5	89 - 2000	983	0	Y
2CR94	LG6047 Level Gauge for H2O Level V604	N	Y	A	10	89 - 2000	983	0	Y
2CR95	LIC6058 Cont. H2O Level Indicator for V605	N	Y	A	5	89 - 2000	983	0	Y
2CR96	LG6057 Cont. H2O Level Gauge for V605	N	Y	A	5	89 - 2000	983	0	Y
2CR97	LG6222 Level Gauge on D622	N	Y	A	1	235 - 343	284	1.1E-06	Y
	#5 CONTROL ROOM								
5CR106	LICA 6500 Abs Level Displacer	N	Y	E	4	9.32 - 11.13	10.2	1.5E-07	Y
5CR107	LG 6507 ABS Level Glass	N	Y	E	2	9.32 - 11.13	10.2	7.7E-08	Y
5CR108	FR 6513 Level Flow Trans.	N	Y	E	0	0.003 - 0.003	0.003	0	Y
5CR109	FI 6580 Axi Inj. Water	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR110	FRC 6515 Rich Flow	N	Y	E	0	9.32 - 11.13	10.2	0	Y
5CR111	LICA 6513 Stripper Level Disp	N	Y	E	1.5	0.003 - 0.003	0.003	1.7E-11	Y
5CR112	LG 6510 Stripper Level Glass	N	Y	E	0.5	0.003 - 0.003	0.003	5.6E-12	Y
5CR113	LICA 6516 D/C Level Displacer	N	Y	A	1	7.4 - 9.8	8.3	3.1E-08	Y
5CR114	LG 6524 D/C Level Glass	N	Y	A	0.5	7.4 - 9.8	8.3	1.6E-08	Y
5CR115	FI 6556 D/C Flow	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR116	LIC 6571 V-657 Level Displacer	N	Y	A	3	7.4 - 9.8	8.3	9.3E-08	Y
5CR117	LG 6572 V-657 Level Glass	N	Y	A	0.8	7.4 - 9.8	8.3	2.5E-08	Y

ED_002508A_00001331-00002

USS Clairton Works
Total Annual Benzene (TAB) - 1998
INSTRUMENTATION MAINTENANCE LISTING

Waste Stream ID#	Instrumentation Waste Stream Description	Controlled Y/N	Water Content >10% Y/N	Waste Stream Type Code	Annual Waste Quantity (Gal)	Range of Benzene Concentration (ppm)	Annual Flow Weighted Avg. Benz. Conc.(ppm)	Annual BQ (Mg)	TAB Component Y/N
5CR118	LG 101 101-E Level Glass	N	Y	E	1.5	9.32 - 11.13	10.2	5.7E-08	Y
5CR119	LT 101 101-E Level Displacer	N	Y	E	4	9.32 - 11.13	10.2	1.5E-07	Y
5CR120	LT 101-A 101-E Level D/P	N	Y	E	0	9.32 - 11.13	10.2	0	Y
5CR121	FI 110-A ABS Blowdown	N	Y	E	0	9.32 - 11.13	10.2	0	Y
5CR122	FIC-110 Rich Flow Transmitter	N	Y	E	0	9.32 - 11.13	10.2	0	Y
5CR123	LG102-A Strip Level Glass	N	Y	E	0	0.003 - 0.003	0.003	0	Y
5CR124	LT 102-A 102-E Strip Level Disp.	N	Y	E	0	0.003 - 0.003	0.003	0	Y
5CR125	LT 102-B 102-E Strip Level Disp	N	Y	E	0	0.003 - 0.003	0.003	0	Y
5CR126	LG-102-B 102-E DC Level Glass	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR127	LT-102-C 102-E DC level Disp.	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR128	LT 102-D 102-E DC level Disp.	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR129	FT 102-C D/C To 102-E	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR130	FT 102-B 102-E D/C Blowdown	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR131	FT 101 Lean To 101-E ABS	N	Y	E	0	0.003 - 0.003	0.003	0	Y
5CR132	FIC 103 D/C To 102-F	N	Y	A	0.05	7.4 - 9.8	8.3	1.6E-09	Y
5CR133	LIC 104 102-F Level Displacer	N	Y	A	5	7.4 - 9.8	8.3	1.6E-07	Y
5VR134	LG 102-F Level Glass	N	Y	A	0.5	7.4 - 9.8	8.3	1.6E-08	Y
5CR135	LSL 100 S-100 Low Level	N	Y	A	0.5	7.4 - 9.8	8.3	1.6E-08	Y
5CR136	LSH 100 S- 100 High Level	N	Y	A	0.5	7.4 - 9.8	8.3	1.6E-08	Y
5CR137	LC 401 401-F Level Displacer	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR138	LG 401 401-F Level Glass	N	Y	A	0	7.4 - 9.8	8.3	0	Y
5CR139	LG 315 A&B 301-E Que Level Gl	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR140	LRCA 300 301-E Level Displ.	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR141	FRCA 304 301-E Circ. Rate	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR142	LC 321 304-F Level Displacer	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR143	LG 324 304-F Level Glass	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR144	HLA 322 304-F Alarm	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR145	HHLA 323 304-F Alarm	N	Y	E	0	0.04 - 0.13	0.1	0	Y
5CR146	LG 318A 302-E Level Glass	N	Y	E	0	0.065 - 0.069	0.068	0	Y
5CR147	LG 318B 302-E Level Glass	N	Y	E	0	0.065 - 0.069	0.068	0	Y
5CR148	LRCA 301 302-E Level Displ.	N	Y	E	0	0.065 - 0.069	0.068	0	Y
5CR149	FRA 311 Rich MDEA Flow Trans.	N	Y	E	0	0.065 - 0.069	0.068	0	Y
5CR150	FRCA 305 Lean MDEA To 302-E	N	Y	E	0	<0.005	<0.005	0	Y
5CR151	LG 317 A 303-E Level Displ.	N	Y	E	0	<0.005	<0.005	0	Y
5CR152	LG 317 B 303-E Level Displ.	N	Y	E	0	<0.005	<0.005	0	Y
5CR153	LG 317-C 303-E Level Displ.	N	Y	E	0	<0.005	<0.005	0	Y
5CR154	LRA 302 303-E Level Displacer	N	Y	E	0	<0.005	<0.005	0	Y
5CR155	LG 318 307-C Trap Out Level Gl.	N	Y	E	0	<0.005	<0.005	0	Y

ED_002508A_00001331-00003

USS Clairton Works
Total Annual Benzene (TAB) - 1998
INSTRUMENTATION MAINTENANCE LISTING

Waste Stream ID#	Instrumentation Waste Stream Description	Controlled Y/N	Water Content >10% Y/N	Waste Stream Type Code	Annual Waste Quantity (Gal)	Range of Benzene Concentration (ppm)	Annual Flow Weighted Avg. Benz. Conc.(ppm)	Annual BQ (Mg)	TAB Component Y/N
5CR156	LLA 331 307-C Trap Out Low Lev.	N	Y	E	0	<0.005	<0.005	0	Y
5CR157	LC 305 301-F Accum. Displacer	N	Y	E	0	0.028 - 0.16	0.1	0	Y
5CR158	LG 326 301-F Level Glass	N	Y	E	0	0.028 - 0.16	0.1	0	Y
5CR159	FRCA 307 313 J & JA Flow	N	Y	E	0.08	0.028 - 0.16	0.1	3E-11	Y
5CR160	FRCA 319 Flow TO 303-E Reflux	N	Y	E	0	0.028 - 0.16	0.1	0	Y
5CR161	LSLL-3 Dehy. Low Level Switch	N	Y	A	0.2	82	82	6.2E-08	Y
5CR162	LI-1 Dehy. Cond. Pot Level Glass	N	Y	A	0.4	82	82	1.2E-07	Y
	#1 BY-PRODUCTS								
1B/P-46	FO-1EX #1 FPH Excess Liquor	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1B/P-47	FO-2000 Flow To Stg. Tank	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1B/P-48	FO-R1 Flow From Stg. Tank	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1B/P-49	FO-KOP Cont. Flow From Kop.	N	Y	A	1.02	2.37 - 6.41	4.7	1.8E-08	Y
1B/P-50	FO-SUI Cont. Flow - Carb. Plant	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1B/P-54	FO-2001 From ST.1-2-3	N	Y	A	0	2.37 - 6.41	4.7	0	Y
	#2 BY-PRODUCTS								
2B/P-36	FO-2EX #2 Excess Liquor	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2B/P-37	PI-FP1 Pressure to Batt.	N	Y	A	0	2.37 - 6.41	4.7	0	Y
	CWTP #2 TANK FARM								
TKF-32	FT -102 2602 A&B pump flow	N	Y	A	0	8.6 - 61	34.8	0	Y
TKF-33	FT-101 2601 A&B pump flow	N	Y	A	0	8.6 - 61	34.8	0	Y
TKF-34	FT-41 Flow to Still	N	Y	A	0	8.6 - 61	34.8	0	Y
	#1 PRIMARY COOLER								
1P/C73	FO-801 Respray Liq.to 801-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C74	FO-802 Respray Liq. to 802-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C75	FO-803 Respray Liq.to 803-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C76	FO-801-5 Cond.from 801-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C77	FO-802-5 Cond.from 802-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C78	FO-803-5 Cond.from 803-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1/PC79	FO-801-3 Circ.Liq. to 801-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C80	FO-802-3 Circ Liq. to 802-T2	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C81	FO-803-3 Circ.Liq. to 803-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C82	LIC-801 Level Trans. 801-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C83	LIC-802 Level Trans. 802-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C84	LIC-803 Level Trans. 803-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C85	LG-801 Level glass 801-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C86	LG-802 Level glass 802-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
1P/C87	LG-803 Level glass 803-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
	#2 PRIMARY COOLER								

ED_002508A_00001331-00004

USS Clairton Works
Total Annual Benzene (TAB) - 1998
INSTRUMENTATION MAINTENANCE LISTING

Waste Stream ID#	Instrumentation Waste Stream Description	Controlled Y/N	Water Content >10% Y/N	Waste Stream Type Code	Annual Waste Quantity (Gal)	Range of Benzene Concentration (ppm)	Annual Flow Weighted Avg. Benz. Conc.(ppm)	Annual BQ (Mg)	TAB Component Y/N
2P/C-45	FO-804 Respray Liq. to 804-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-48	FO-805 Respray Liq. to 805-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-81	FO-806 Respray Liq. to 806-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-46	FO-804-3 Circ Liq. to 804-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-49	FO-805-3 Circ Liq. to 805-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-82	FO-806-3 Circ Liq to 806-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-47	FO-804-5 Cond.from 804-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-50	FO-805-5 Cond.from 805-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-83	FO-806-5 Cond.from 806-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-53	LG-804 Level glass 804-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-54	LG-805 Level glass 805-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-85	LG-806 Level glass 806-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-55	LIC-804 Level Trans. 804-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-56	LIC-805 Level Trans. 805-T1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
2P/C-86	LIC-806 Level Trans. 806-T-1	N	Y	A	0	2.37 - 6.41	4.7	0	Y
						Subtotal - Mtce - Valves:		**8.2E-06**	

ED_002508A_00001331-00005