USS C Works
Total Annual Benzene (TAB) - 2004
MTCE-RELIEF/CONTROL VALVES LISTING

| Waste Stream ID# | Mtce - Valves Waste Stream Description | Controlled Y/N | Water Content >10% Y/N | Waste Stream Types 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** | | | | | | | | |
| 1CR165 | LICV2725 DEP Rich Tank Level | N | Y | A | 4.5 | 8.16 - 14 | 9.9 | 1.7E-07 | Y |
| 1CR166 | FRCV2726 DEP Rich Tank Level | N | Y | A | 1 | 8.16 - 14 | 9.9 | 3.7E-08 | Y |
| 1CR167 | LICV3011 Top Recirc. H2O Level | N | Y | A | 50 | 93 - 221 | 144.1 | 2.7E-05 | Y |
| 1CR168 | LRACV3014 Phosam Solution Level | N | Y | A | 13 | 8.16 - 14 | 9.9 | 4.8E-07 | Y |
| 1CR169 | LICV3016 DEP Level | N | Y | A | 3 | 8.16 - 14 | 9.9 | 1.1E-07 | Y |
| 1CR170 | LICV3021 Top Recirc. H2O Level | N | Y | A | 50 | 93 - 221 | 144.1 | 2.7E-05 | Y |
| 1CR171 | LRCAV3024 Phosam Solution Level | N | Y | A | 13 | 8.16 - 14 | 9.9 | 4.8E-07 | Y |
| 1CR172 | LICV3031Top Recirc. H2O Level | N | Y | A | 50 | 93 - 221 | 144.1 | 2.7E-05 | Y |
| 1CR173 | LICAV3056 Phosam Rich Solution Flow | N | Y | A | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR174 | LICV3063 Phosam StripP Bottom Level | N | Y | A | 4.5 | 0.23 - 5.0 | 1.8 | 3.0E-08 | Y |
| 1CR175 | LICV3073 Phosam Strip Bottom Level | N | Y | A | 4.5 | 0.23 - 5.0 | 1.8 | 3.0E-08 | Y |
| 1CR176 | LICV3103 Vapor Cont. Level+B14 | N | Y | A | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR177 | LICV3113 Vapor Cont Level | N | Y | A | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR178 | LICV3124 Fract. Feed Tank Level | N | Y | A | 2 | 0.005 - 0.027 | 0.02 | 1.5E-10 | Y |
| 1CR179 | LICV3134 Fract. Feed Tank Level | N | Y | A | 1 | 0.005 - 0.027 | 0.02 | 7.5E-11 | Y |
| 1CR180 | LICV3174 Phosam Flash Tank Level | N | Y | A | 15 | 0.23 - 5.0 | 1.8 | 1.0E-07 | Y |
| 1CR181 | PICV3244 Fract. Feed Tank Pressure | N | Y | A | 4.5 | 0.005 - 0.027 | 0.02 | 3.4E-10 | Y |
| 1CR182 | PICV3254 Fract. Feed Tank Pressure | N | Y | A | 4.5 | 0.005 - 0.027 | 0.02 | 3.4E-10 | Y |
| 1CR183 | TICV3302 E330 Lean Solution Cooler | N | Y | A | 18 | 0.23 - 5.0 | 1.8 | 1.2E-07 | Y |
| 1CR184 | TICV3312 E331 Lean Solution Cooler | N | Y | A | 18 | 0.23 - 5.0 | 1.8 | 1.2E-07 | Y |
| 1CR185 | LICV3505 NH3 Fract. Bottoms Level | N | Y | A | 13 | 0 - .05.3 | 0.2 | 9.8E-09 | Y |
| 1CR186 | PICV3523 NH3 Fract. Top Pressure | N | Y | A | 1 | 0 - 0.53 | 0.2 | 7.5E-10 | Y |
| 1CR187 | PICV3535 NH3 Fract. Bottoms | N | Y | A | 2 | 0 - 0.53 | 0.2 | 1.5E-09 | Y |
| 1CR188 | FRCV3558 NH3 Product Flow | N | Y | A | 1 | 0.005 - 0. 027 | 0.02 | 7.5E-11 | Y |
| 1CR189 | HIC CV Make-up H2O | N | Y | A | 1 | 0.005 - 0.027 | 0.02 | 7.5E-11 | Y |
| 1CR190 | HIC H360 Lean Solution Bypass | N | Y | A | 7 | 0.23 - 5.0 | 1.8 | 4.7E-08 | Y |
| 1CR191 | FICV2700 Superstill CV-Process Water Flow | N | Y | A | 2 | 93 - 221 | 144.1 | 1.1E-06 | Y |
| 1CR192 | LICV2705 Superstill CV - Bottoms Level | N | Y | A | 4.5 | 0.03 - 0.081 | 0.06 | 1.0E-09 | Y |
| 1CR193 | LIC2709 Superstill CV - Phosam Level | N | Y | A | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR194 | LIC2710 Superstill CV - Phosam Level | N | Y | A | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR195 | LICAV2015 Section Level - T201 Valve | N | Y | A | 25 | 93 - 221 | 144.1 | 1.4E-05 | Y |
| 1CR196 | LICAV2025 Section Level - T202 Valve | N | Y | A | 25 | 93 - 221 | 144.1 | 1.4E-05 | Y |
| 1CR197 | LICAV2035 Section Level - T203 Valve | N | Y | A | 25 | 93 - 221 | 144.1 | 1.4E-05 | Y |
| 1CR198 | LICV2044 West Final Cooler Sump Level Control Valve | N | Y | A | 1.5 | 93 - 221 | 144.1 | 8.1E-07 | Y |
| 1CR199 | LICV2058 Final Cooler Sump Level Control Valve | N | Y | A | 1.5 | 93 - 221 | 144.1 | 8.1E-07 | Y |
| 1CR200 | FIRCV2128 Cold Proc Water - Mid. Sprays - T201 Valve | N | Y | A | 24 | 93 - 221 | 144.1 | 1.3E-05 | Y |



ED_002508A_00000268-00001

| Waste Stream ID# | Mtce - Valves Waste Stream Description | Controlled Y/N | Water Content >10% Y/N | Waste Stream Types Code | Annual Waste Quantity (Gal) | Range of Benzene Concentration (ppm) | Annual Flow Weighted Avg. Benz. Conc.(ppm) | Annual BQ (Mg) | TAB Component Y/N |
|---|---|---|---|---|---|---|---|---|---|
| 1CR201 | CV2136 Tar Water Section Level - T210 Valve | N | Y | A | 24 | 93 - 221 | 144.1 | 1.3E-05 | Y |
| 1CR202 | FIRCV2149 Top Spray Water Make-up - T202 Valve | N | Y | A | 1 | 93 - 221 | 144.1 | 5.4E-07 | Y |
| 1CR203 | FIRCV2238 Cold Proc. Water - Middle Sprays - T202 | N | Y | A | 24 | 93 - 221 | 144.1 | 1.3E-05 | Y |
| 1CR204 | FIRCV 2279 Top Sprays Water Make-up - T202 Valve | N | Y | A | 1 | 93 - 221 | 144.1 | 5.4E-07 | Y |
| 1CR205 | LICAV 2356 Tar Water Section Level - T203 Valve | N | Y | A | 24 | 93 - 221 | 144.1 | 1.3E-05 | Y |
| 1CR206 | FIRCV2369 Top Spray Water Make-up- T203 Valve | N | Y | A | 1 | 93 - 221 | 144.1 | 5.4E-07 | Y |
| 1CR207 | CV2635 Valve Knockout Pot for T206 | N | Y | A | 24 | 93 - 221 | 144.1 | 1.3E-05 | Y |
| 1CR208 | HIC2666 Top Recirculating Water Bleed-off T206 | N | Y | A | 1 | 93 - 221 | 144.1 | 5.4E-07 | Y |
| 1CR209 | LICAV2667 Tar Water Section Levelof T206 Valve | N | Y | A | 8 | 93 - 221 | 144.1 | 4.3E-06 | Y |
| 1CR210 | CV2668 Cold Process Water to Middle Sprays T206 | N | Y | A | 32 | 93 - 221 | 144.1 | 1.7E-05 | Y |
| 1CR211 | HIC2669 Top Recirculating Water Makeup for T206 | N | Y | A | 2 | 93 - 221 | 144.1 | 1.1E-06 | Y |
| 1CR212 | E324 Pressure Relief 1X2 | N | Y | A | 0 | 93 - 221 | 144.1 | 0.0E+00 | Y |
| 1CR213 | E325 Pressure Relief 1X1 | N | Y | A | 0 | 93 - 221 | 144.1 | 0.0E+00 | Y |
| 1CR214 | E360 Pressure Relief 3/4X1 | N | Y | E | 0 | 0.23 - 5.0 | 1.8 | 0.0E+00 | Y |
| 1CR215 | E360 Pressure Relief 3/4X1 | N | Y | E | 0 | 0.23 - 5.0 | 1.8 | 0.0E+00 | Y |
| | **#2 CONTROL ROOM** | | | | | | | | |
| 2CR74 | LCV5730 Level Control on Injection H2O Makeup Line | N | Y | A | 15 | 235 - 343 | 284 | 1.6E-05 | Y |
| 2CR75 | LICV5753 Level Control in Injection H2O Line - D575 | N | Y | A | 10 | 235 - 343 | 284 | 1.1E-05 | Y |
| 2CR76 | LICAV5764 Level Control on Injection H2O Line - D576 | N | Y | A | 10 | 235 - 343 | 284 | 1.1E-05 | Y |
| 2CR77 | CV6005 Control Valve on Bottom Line of D600 | N | Y | A | 10 | 235 - 343 | 284 | 1.1E-05 | Y |
| 2CR78 | CV6023 Control Valve on Bottom Line of D602 | N | Y | A | 7 | 235 - 343 | 284 | 7.5E-06 | Y |
| 2CR79 | CV6243 Control Valve on Bottom Line of D624 | N | Y | A | 7 | 235 - 343 | 284 | 7.5E-06 | Y |
| 2CR80 | CV6048 Level Control for Cont. H2O Level in V604&5 | N | Y | A | 15 | 235 - 343 | 284 | 1.6E-05 | Y |
| 2CR81 | CV6041 L.O. Level Control for V604 and V605 | N | Y | A | 5 | 89 - 2000 | 983 | 1.8E-05 | Y |
| 2CR98 | E424 Relief Valve 3252-R Vessel E-424 | N | Y | A | 0 | 235 - 343 | 284 | 0 | Y |
| | **#5 CONTROL ROOM** | | | | | | | | |
| 5CR81 | LCV-6513 Lean Sol. To T-651 | N | Y | E | 0 | 0.003 - 0003 | 0.003 | 0 | Y |
| 5CR82 | FCV-6515 Rich to T651 Stripper | N | Y | E | 0 | 9.32 - 11.13 | 10.2 | 0 | Y |
| 5CR83 | LC-321 304-F Drain Valve | N | Y | E | 0 | 0.04 - 0.13 | 0.1 | 0 | Y |
| 5CR84 | LCV-6571 Acid gas K/O Pot | N | Y | E | 5.2 | 7.4 - 9.8 | 8.3 | 1.6E-07 | Y |
| 5CR86 | FCV-110 Rich Carb. Flow | N | Y | E | 14.2 | 9.32 - 11.13 | 10.2 | 5.4E-07 | Y |
| 5CR87 | FCV-101 Lean Carb. | N | Y | E | 20.4 | 0.003 - 0.003 | 0.003 | 2.3E-10 | Y |
| 5CR88 | FIC-103 D/C to 102-F | N | Y | E | 0 | 7.4 - 9.8 | 8.3 | 0 | Y |
| 5CR89 | LIC-104 102-F Level | N | Y | E | 0 | 7.4 - 9.8 | 8.3 | 0 | Y |
| 5CR90 | LCV-6500 T-650 ABS Make Up | N | Y | E | 0 | 7.4 - 9.8 | 8.3 | 0 | Y |
| 5CR91 | LCV-6516 T-651 Blowdown | N | Y | E | 0 | 7.4 - 9.8 | 8.3 | 0 | Y |
| 5CR92 | FRCA-307 301-F Blowdown | N | Y | E | 0 | 0.028 - 0.16 | 0.1 | 0 | Y |



ED_002508A_00000268-00002

USS C Works
Total Annual Benzene (TAB) - 2004
MTCE-RELIEF/CONTROL VALVES LISTING

| Waste Stream ID# | Mtce - Valves Waste Stream Description | Controlled Y/N | Water Content >10% Y/N | Waste Stream Types Code | Annual Waste Quantity (Gal) | Range of Benzene Concentration (ppm) | Annual Flow Weighted Avg. Benz. Conc.(ppm) | Annual BQ (Mg) | TAB Component Y/N |
|---|---|---|---|---|---|---|---|---|---|
| 5CR93 | LCV-305 303-E Reflux Flow 319 | N | Y | E | 0 | 0.028 - 0.16 | 0.1 | 0 | Y |
| 5CR94 | LRCA-301 302-E Level Control | N | Y | E | 0 | 0.028 - 0.16 | 0.1 | 0 | Y |
| 5CR95 | FRCA-305 303-E Lean Flow | N | Y | E | 0 | <0.005 | <0.005 | 0 | Y |
| 5CR96 | FRCA-304 302-E Quench Flow | N | Y | E | 0 | 0.04 - 0.13 | 0.1 | 0 | Y |
| 5CR97 | LRCA-300 301-E Level | N | Y | E | 0 | 0.04 - 0.13 | 0.1 | 0 | Y |
| 5CR98 | E302C1S Valve Relief 1"x2" | N | Y | E | 0 | 0.04 - 0.13 | 0.1 | 0 | Y |
| 5CR99 | E302C2S Valve Relief 1'x2' | N | Y | E | 0 | 0.04 - 0.13 | 0.1 | 0 | Y |
| 5CR100 | E303C1S Valve Relief 1"x2" | N | Y | E | 0 | 0.065 - 0.069 | 0.068 | 0 | Y |
| 5CR101 | E303C2S Valve Relief 1"x2" | N | Y | E | 0 | <0.005 | <0.005 | 0 | Y |
| 5CR103 | E-654A Relief Valve 3/4"x1" | N | Y | E | 0 | 9.32 - 11.13 | 10.2 | 0 | Y |
| 5CR104 | E-654B Relief Valve 3/4"x1" | N | Y | E | 0 | 9.32 - 11.13 | 10.2 | 0 | Y |
| | **#1 BY-PRODUCTS** | | | | | | | | |
| 1B/P-52 | CV-2000 Cont. Valve To ST. 1-2-3 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1B/P-53 | LCV Surge - Tank Level | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| | **#2 BY-PRODUCTS** | | | | | | | | |
| 2B/P-33 | LCV-TSP-1 Sump Level Cont. | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2B/P-34 | LCV-ST-1&2 Surge Tanks | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2B/P-35 | LCV-RTR Tar Receiver Level | N | N | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| | **CWTP #2 TANK FARM** | | | | | | | | |
| TKF-35 | LICV-101 WW-1&2 level valve | N | Y | A | 0 | 8.6 - 61 | 34.8 | 0 | Y |
| TKF-36 | FCV-102 Valve from WW-3 | N | Y | A | 0 | 8.6 - 61 | 34.8 | 0 | Y |
| TKF-37 | TRCV-42 Temp.E-1 Outlet | N | Y | A | 0 | 8.6 - 61 | 34.8 | 0 | Y |
| TKF-38 | FCV-41 Still Feed Flow Valve | N | Y | A | 0 | 8.6 - 61 | 34.8 | 0 | Y |
| TKF-20 | PSV-35 Relief Valve E1 Heater | N | Y | A | 0 | 8.6 - 61 | 34.8 | 0 | Y |
| | **#1 PRIMARY COOLER** | | | | | | | | |
| 1P/C64 | LCV-801 Level Control 801-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C65 | LCV-802 Level Control 802-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C66 | LCV-803 Level Control 803-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C67 | LTV-801 Liq. Trim Valve 801-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C68 | LTV-802 Liq. Trim Valve 802-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C69 | LTV-803 Liq. Trim Valve 803-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C70 | FCV-801-1 Tar to 801-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C71 | FCV-802-1 Tar to 802-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 1P/C72 | FCV-803-1 Tar to 803-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| | **#2 PRIMARY COOLER** | | | | | | | | |
| 2P/C-51 | Lcv-804 Level Control 804-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-52 | Lcv-805 Level Control 805-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |



ED_002508A_00000268-00003

USS C Works
Total Annual Benzene (TAB) - 2004
MTCE-RELIEF/CONTROL VALVES LISTING

| Waste Stream ID# | Mtce - Valves Waste Stream Description | Controlled Y/N | Water Content >10% Y/N | Waste Stream Types 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-84 | Lcv-806 Level Control 806-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-57 | LTV-804 Liq. Trim Valve 804-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-58 | LTV-805 Liq. Trim Valve 805-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-87 | LTV-806 Liq. Trim Valve 806-T1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-43 | FCV-804-1 Tar to 804-T-1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-44 | FCV-805-1 Tar to 805-T-1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| 2P/C-80 | FCV-806-1 Tar to 806-T-1 | N | Y | A | 0 | 2.37 - 6.41 | 4.7 | 0 | Y |
| | | | | | | Subtotal Mtce - Valves: | | 3.1E-04 | |



ED_002508A_00000268-00004

USS [illegible] Works
Total Annual Benzene (TAB) - 2004
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** | | | | | | | | |
| 1CR216 | FR3010 Phosam Rich Solution Return From #1 BP | N | N | E | 1 | 8.16 - 14 | 9.9 | 0 | Y |
| 1CR217 | LIC3011 Top Water Level T301 Absorber | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR218 | LR3014 Bottoms Level T301 Absorber | N | Y | A | 20 | 93 - 221 | 144.1 | 0 | Y |
| 1CR219 | LIC3021 Top Water Level T302 Absorber | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR220 | LR3024 Bottoms Level T302 Absorber | N | Y | A | 20 | 93 - 221 | 144.1 | 0 | Y |
| 1CR221 | FR3030 Lean Phosam Solution to #1 BP | N | Y | E | 1 | 0.23 - 5.0 | 1.8 | 6.8E-09 | Y |
| 1CR222 | LIC3031 Top water Level T303 Absorber | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR223 | LR3034 Bottoms Level T303 Absorber | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR224 | FRC3056 Rich Solution Flow to Sueprstill | N | Y | E | 1 | 8.16 - 14 | 9.9 | 3.7E-08 | Y |
| 1CR225 | LIC3063 T-306 Stripper Bottoms Level Control | N | Y | E | 10 | 0.23 - 5.0 | 1.8 | 6.8E-08 | Y |
| 1CR226 | LIC3073 T307 Stripper Bottoms Level Control | N | Y | E | 10 | 0.23 - 5.0 | 1.8 | 6.8E-08 | Y |
| 1CR227 | LIC3103 East Contractor Liquid Level | N | Y | E | 10 | 8.16 - 14 | 9.9 | 3.7E-07 | Y |
| 1CR228 | FRC3105 Lean Phosam Solution Flow to Absorber | N | Y | E | 1 | 0.23 - 5.0 | 1.8 | 6.8E-09 | Y |
| 1CR229 | FRC3106 Rich Phosam Solution Flow to Contactor | N | Y | E | 1 | 8.16 - 14 | 9.9 | 3.7E-08 | Y |
| 1CR230 | LIC3113 West Contactor Level Control | N | Y | E | 10 | 8.16 - 14 | 9.9 | 3.7E-07 | Y |
| 1CR231 | LIC3123 East Fractionator Feed Tank Level Control | N | Y | E | 10 | 0.005 - 0.027 | 0.02 | 7.5E-10 | Y |
| 1CR232 | FRC3124 Fractionator Column Feed | N | Y | E | 1 | 0.005 - 0.027 | 0.02 | 7.5E-11 | Y |
| 1CR233 | LIC3133 West Frac. Feed Tank Level Control | N | Y | E | 10 | 0.005 - 0.027 | 0.02 | 7.5E-10 | Y |
| 1CR234 | LIC3174 Flash Tank Liquid Level Control | N | Y | E | 10 | 8.16 - 14 | 9.9 | 3.7E-07 | Y |
| 1CR235 | LIC3332 E333 Overhead Condenser Level | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR236 | FR3527 Fractionator Reflux | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR237 | FRC3528 Fractionator Product | N | Y | E | 1 | 0 - 0.53 | 0.2 | 0 | Y |
| 1CR238 | FRC3709 Hot Proc. H2O from Absorbers-Spirals | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR239 | FIC2700 Hot Process Flow to Superstill | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR240 | LIC2025 Injection Water Level in T202 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR241 | LI2035 Injection Water Level in T203 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR242 | LI2047 East Sump Water Level | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR243 | LIC2054 East Sump Tar Liquid Level | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR244 | LI2057 Middle Sump Water Level | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR245 | LI2127 Tp Recirc. H2O Level T201 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR246 | FIC2128 Inject H2O Flow to MDL Sprays T201 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR247 | LIC2136 Bottom Tar Water Level T201 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR248 | FIC2149 Makeup H2O to Top Sprays T201 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR249 | LI2237 Top Recirc. H2O Level T202 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR250 | FIC2238 Inject H2O Flow to Middle Sprays T202 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR251 | LIC2246 Bottom Tar Water Level T202 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR252 | FIC2279 Makeup Water to Top Sprays T202 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |



ED_002508A_00000268-00005

USS [illegible] Works
Total Annual Benzene (TAB) - 2004
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 |
|---|---|---|---|---|---|---|---|---|---|
| 1CR253 | LI2327 Top Recirc. H2O Level T203 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR254 | FIC2328 Injection H2O Flow to Middle Sprays T203 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR255 | LIC2356 Bottom Tar Water Level T203 | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR256 | FIC2369 Makeup H2O to Top Sprays T203 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR257 | FIC2384 CTW Return Temp from N. Spirals | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR258 | LI2627 T206 TOP Recirc. Level | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| 1CR259 | F2668 MID H2O SPRAY to T206 | N | Y | A | 1 | 93 - 221 | 144.1 | 0 | Y |
| 1CR260 | LI2821 Condensate Level in Free Blowdown Tank | N | Y | A | 10 | 93 - 221 | 144.1 | 0 | Y |
| | **#2 CONTROL ROOM** | | | | | | | | |
| 2CR82 | FT6262 FlowTransmitter - 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 | 824 | 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 | 1.7E-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_00000268-00006

USS C Works
Total Annual Benzene (TAB) - 2004
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 | 9.21 - 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 |
| 5CR134 | 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 317A 303-E Level Displ. | N | Y | E | 0 | <0.005 | <0.005 | 0 | Y |
| 5CR152 | LG 317B 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 Leve 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_00000268-00007

USS ( Works
Total Annual Benzene (TAB) - 2004
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 | 3.0024E-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 | 6.20E-08 | Y |
| 5CR162 | LI-1 Dehy. Cond. Pot Level Glass | N | Y | A | 0.4 | 82 | 82 | 1.20E-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 | 1.79919E-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 |
| 1P/C79 | 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_00000268-00008

USS C Works
Total Annual Benzene (TAB) - 2004
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 Repray 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-T-1 | 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-T-1 | 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: | | | 8.20E-05 | |



ED_002508A_00000268-00009

USS C Works
Total Annual Benzene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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** | | | | | | | | |
| 1CR340 | E-2101 SS Reboiler | N | Y | D | 75 | 0.03 - 0.081 | 0.06 | 1.7E-08 | Y |
| 1CR341 | HESS01 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR342 | HESS02 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR343 | HESS03 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR344 | HESS04 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR345 | HESS05 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR346 | HESS06 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR347 | HESS07 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR348 | HESS08 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR349 | HESS09 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR350 | HESS010 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR351 | HESS011 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR352 | HESS012 SS Spiral | N | Y | D | 2500 | 93 - 221 | 144.1 | 1.4E-03 | Y |
| 1CR353 | T207 SS | N | Y | D | 100 | 0.03 - 0.081 | 0.06 | 2.3E-08 | Y |
| 1CR354 | V208B SS Light Oil Pump | N | Y | D | 100 | 89 - 2000 | 983 | 3.7E-04 | Y |
| 1CR355 | P207A SS BTMS Pump | N | Y | D | 295 | 0.03 - 0.081 | 0.06 | 6.6E-08 | Y |
| 1CR356 | P207B SS BTMS Pump | N | Y | D | 390 | 0.03 - 0.081 | 0.06 | 8.8E-08 | Y |
| 1CR357 | P207C SS Cond. Section Pump | N | Y | D | 450 | 93 - 221 | 144.1 | 2.4E-04 | Y |
| 1CR358 | P207D SS Cond. Section Pump | N | Y | D | 350 | 93 - 221 | 144.1 | 1.9E-04 | Y |
| 1CR359 | P207E SS Phosam Pump | N | Y | D | 50 | 8.16 - 14 | 9.9 | 1.9E-06 | Y |
| 1CR360 | P207F SS Phosam Pump | N | Y | D | 50 | 8.16 - 14 | 9.9 | 1.9E-06 | Y |
| 1CR361 | P207G SS L.O. Pump | N | Y | D | 25 | 89 - 2000 | 983 | 0.0E+00 | Y |
| 1CR362 | P207H SS L.O. Pump | N | Y | D | 25 | 89 - 2000 | 983 | 0.0E+00 | Y |
| 1CR363 | P2101 N Inline Pump | N | Y | D | 20 | 0.03 - 0.081 | 0.06 | 4.5E-09 | Y |
| 1CR364 | P2102 S Inline Pump | N | Y | D | 20 | 0.03 - 0.081 | 0.06 | 4.5E-09 | Y |
| 1CR365 | P2103 SS Reboiler Cond. Pump | N | Y | D | 15 | 0.03 - 0.081 | 0.06 | 3.4E-09 | Y |
| 1CR366 | P2104 SS Reboiler Cond. Pump | N | Y | D | 15 | 0.03 - 0.081 | 0.06 | 3.4E-09 | Y |
| 1CR367 | PP5 S SS TRENCH Pump | N | Y | D | 5 | 0.03 - 0.081 | 0.06 | 1.1E-09 | Y |
| 1CR368 | FICV2700 SS CV - Process Water Flow | N | Y | D | 2 | 93 - 221 | 144.1 | 1.1E-06 | Y |
| 1CR369 | LICV2705 SS CV - Bottoms Level | N | Y | D | 4.5 | 0.03 - 0.081 | 0.06 | 1.0E-09 | Y |
| 1CR370 | LIC2709 SS CV - Phosam Level | N | Y | D | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| 1CR371 | LICV2710 SS CV - Phosam Level | N | Y | D | 2 | 8.16 - 14 | 9.9 | 7.4E-08 | Y |
| | **LIGHT OIL STORAGE** | | | | | | | | |
| LOS26 | T59 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |
| LOS27 | T60 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |
| LOS28 | T61 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |
| LOS29 | T62 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |

*Y - Subpart L Controlled



ED_002508A_00000268-00010

USS C Works
Total Annual Benzene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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 |
|---|---|---|---|---|---|---|---|---|---|
| LOS30 | T63 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |
| LOS31 | T64 L.O. Storage Tank | *Y | Y | D | 0 | 714 - 1211 | 962.5 | 0.0E+00 | N |
| | **#5 CONTROL ROOM - 100 VCU** | | | | | | | | |
| 5CR1 | V101E Carbonate Absorber | N | Y | D | 75 | 10 - 14 | 11.7 | 3.3E-06 | Y |
| 5CR2 | V102E Carb. Str./Cond. | N | Y | D | 75 | 0.003 - 0.003 | 0.003 | 8.5E-10 | Y |
| 5CR12 | E101CA Carb. Reb. Heat Exch. | N | Y | D | 502 | 0.003 - 0.003 | 0.003 | 5.7E-09 | Y |
| 5CR13 | E101CB Carb. Reb. Heat Exch. | N | Y | D | 502 | 0.003 - 0.003 | 0.003 | 5.7E-09 | Y |
| 5CR14 | E102C1 Proc. H2O cool HT Exc | N | Y | D | 2254 | 7.4 - 9.8 | 8.3 | 7.1E-05 | Y |
| 5CR15 | E102C2 Proc H2O cool HT Exc | N | Y | D | 2254 | 7.4 - 9.8 | 8.3 | 7.1E-05 | Y |
| 5CR16 | E103CA Carb.Sol. Heat Exch. | N | Y | D | 502 | 9.32 - 11.13 | 10.2 | 1.9E-05 | Y |
| 5CR17 | E103CB Carb. Sol. Heat Exch. | N | Y | D | 502 | 9.32 - 11.13 | 10.2 | 1.9E-05 | Y |
| 5CR67 | P111J Lean Carb. Sol. Pump | N | Y | D | 77 | 0.003 - 0.003 | 0.003 | 8.7E-10 | Y |
| 5CR68 | P111JA Lean Carb. Sol. Pump | N | Y | D | 77 | 0.003 - 0.003 | 0.003 | 8.7E-10 | Y |
| 5CR69 | P113J Direct Condenser Pump | N | Y | D | 95 | 7.4 - 9.8 | 8.3 | 3.0E-06 | Y |
| 5CR70 | P113JA Direct Cond. Pump | N | Y | D | 95 | 7.4 - 9.8 | 8.3 | 3.0E-06 | Y |
| 5CR73 | P662A Rich 100 Carb.Sol Pump 26.6 | N | Y | D | 26.6 | 10 - 14 | 11.7 | 1.2E-06 | Y |
| 5CR74 | P662B New Rich Carb.Sol.Pump | N | Y | D | 26.6 | 10 - 14 | 11.7 | 1.2E-06 | Y |
| 5CR86 | FCV-110 Rich Carb. Flow | N | Y | D | 14.2 | 10 - 14 | 11.7 | 6.3E-07 | Y |
| 5CR87 | FCV-101 Lean Carb. | N | Y | D | 20.4 | 0.003 - 0.003 | 0.003 | 2.3E-10 | Y |
| 5CR118 | LG 101 101-E Level Glass | N | Y | D | 1.5 | 10 - 14 | 11.7 | 6.6E-08 | Y |
| 5CR119 | LT 101 101-E Level Displacer | N | Y | D | 4 | 10 - 14 | 11.7 | 1.8E-07 | Y |
| 5CR120 | LT 101-A 101-E Level D/P | N | Y | D | 0.2 | 10 - 14 | 11.7 | 8.9E-09 | Y |
| 5CR121 | FI 110-A ABS Blowdown | N | Y | D | 0.2 | 10 - 14 | 11.7 | 8.9E-09 | Y |
| 5CR122 | FIC-110 Rich Flow Transmitter | N | Y | D | 0.3 | 10 - 14 | 11.7 | 1.3E-08 | Y |
| 5CR123 | LG102-A Strip Level Glass | N | Y | D | 0.5 | 0.003 - 0.003 | 0.003 | 5.7E-12 | Y |
| 5CR124 | LT 102-A 102-E Strip Level Disp. | N | Y | D | 2.5 | 0.003 - 0.003 | 0.003 | 2.8E-11 | Y |
| 5CR125 | LT 102-B 102-E Strip Level Disp. | N | Y | D | 2.5 | 0.003 - 0.003 | 0.003 | 2.8E-11 | Y |
| 5CR126 | LG 102-B 102-E DC Level Glass | N | Y | D | 0.5 | 7.4 - 9.8 | 8.3 | 1.6E-08 | Y |
| 5CR127 | LT-102-C 102-E DC Level Disp. | N | Y | D | 2.5 | 7.4 - 9.8 | 8.3 | 7.9E-08 | Y |
| 5CR128 | LT 102-D 102-E DC Level Disp. | N | Y | D | 2.5 | 7.4 - 9.8 | 8.3 | 7.9E-08 | Y |
| 5CR129 | FT 102-C D/C To 102-E | N | Y | D | 0.1 | 7.4 - 9.8 | 8.3 | 3.1E-09 | Y |
| 5CR130 | FI 102-B 102-E D/C Blowdown | N | Y | D | 0.12 | 7.4 - 9.8 | 8.3 | 3.8E-09 | Y |
| 5CR131 | FT 101 Lean To 101-E ABS | N | Y | D | 0.3 | 0.003 - 0.003 | 0.003 | 3.4E-12 | Y |
| 5CR132 | FIC 103 D/C To 102-F | N | Y | D | 0.05 | 7.4 - 9.8 | 8.3 | 1.6E-09 | Y |
| | **#5 CONTROL ROOM - 600 VCU** | | | | | | | | |
| 5CR7 | VT650 Carb. Absorber | N | Y | D | 50 | 1.9 - 11.0 | 5 | 9.5E-07 | Y |
| 5CR8 | VT651 Cond. Str.&Dir. Cond. | N | Y | D | 75 | 7.4 - 9.8 | 8.3 | 2.4E-06 | Y |
| 5CR18 | E652A Solution Reboiler | N | Y | D | 665 | 0.003 - 0.003 | 0.003 | 7.6E-09 | Y |

*Y - Subpart L Controlled



ED_002508A_00000268-00011

USS C Works
Total Annual Benzene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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 |
|---|---|---|---|---|---|---|---|---|---|
| 5CR19 | E652B Solution Reboiler | N | Y | D | 665 | 0.003 - 0.003 | 0.003 | 7.6E-09 | Y |
| 5CR20 | E653 Lean Solution Cooler | N | Y | D | 958 | 0.003 - 0.003 | 0.003 | 1.1E-08 | Y |
| 5CR21 | E654A Carb. Sol. Heat Exch. | N | Y | D | 689 | 0.003 - 0.003 | 0.003 | 7.8E-09 | Y |
| 5CR22 | E654B Carb. Sol. Heat Exch. | N | Y | D | 689 | 0.003 - 0.003 | 0.003 | 7.8E-09 | Y |
| 5CR23 | E655A Process Water Cooler | N | Y | D | 910 | 7.4 - 9.8 | 8.3 | 2.9E-05 | Y |
| 5CR24 | E655B Process Water Cooler | N | Y | D | 910 | 7.4 - 9.8 | 8.3 | 2.9E-05 | Y |
| 5CR45 | P662 Rich Carb. Sol. Pump | N | Y | D | 46.9 | 1.9 - 11.0 | 5 | 8.9E-07 | Y |
| 5CR46 | P663C Rich Carb. Sol. Pump | N | Y | D | 53.9 | 1.9 - 11.0 | 5 | 1.0E-06 | Y |
| 5CR47 | P663 Lean Carb. Sol. Pump | N | Y | D | 54.8 | 0.003 - 0.003 | 0.003 | 6.2E-10 | Y |
| 5CR48 | P663A Lean Carb. Sol. Pump | N | Y | D | 54.8 | 0.003 - 0.003 | 0.003 | 6.2E-10 | Y |
| 5CR49 | P664 Direct Cond. H2O Pump | N | Y | D | 79 | 7.4 - 9.8 | 8.3 | 2.5E-06 | Y |
| 5CR50 | P664A Ditect Cond. H2O Pump | N | Y | D | 79 | 7.4 - 9.8 | 8.3 | 2.5E-06 | Y |
| 5CR81 | LCV-6513 Lean Sol. To T-651 | N | Y | D | 10.2 | 0.003 - 0.003 | 0.003 | 1.2E-10 | Y |
| 5CR82 | FCV-6515 Rich to T651 Stripper | N | Y | D | 5.2 | 1.9 - 11.0 | 5 | 9.8E-08 | Y |
| 5CR90 | LCV-6500 T-650 ABS Make Up | N | Y | D | 0.5 | 7.4 - 9.8 | 8.3 | 1.6E-08 | Y |
| 5CR91 | LCV-6516 T-651 Blowdown | N | Y | D | 0.5 | 7.4 - 9.8 | 8.3 | 1.6E-08 | Y |
| 5CR103 | E-654A Relief Valve 3/4"x1" | N | Y | D | 2.31 | 1.9 - 11.0 | 5 | 4.4E-08 | Y |
| 5CR104 | E-654B Relief Valve 3/4"x1" | N | Y | D | 2.31 | 1.9 - 11.0 | 5 | 4.4E-08 | Y |
| 5CR106 | LICA 6500 Abs Level Displacer | N | Y | D | 1 | 1.9 - 11.0 | 5 | 1.9E-08 | Y |
| 5CR107 | LG 6507 ABS Level Glass | N | Y | D | 0.5 | 1.9 - 11.0 | 5 | 9.5E-09 | Y |
| 5CR108 | FR 6513 Level Flow Trans. | N | Y | D | 0.4 | 0.003 - 0.003 | 0.003 | 4.5E-12 | Y |
| 5CR109 | FI 6580 Axi Inj. Water | N | Y | D | 0.6 | 7.4 - 9.8 | 8.3 | 1.9E-08 | Y |
| 5CR110 | FRC 6515 Rich Flow | N | Y | D | 0.4 | 1.9 - 11.0 | 5 | 7.6E-09 | Y |
| 5CR111 | LICA 6513 Stripper Level Disp | N | Y | D | 1.5 | 0.003 - 0.003 | 0.003 | 1.7E-11 | Y |
| 5CR112 | LG 6510 Stripper Level Glass | N | Y | D | 0.5 | 0.003 - 0.003 | 0.003 | 5.7E-12 | Y |
| 5CR113 | LICA 6516 D/C Level Displacer | N | Y | D | 1 | 7.4 - 9.8 | 8.3 | 3.1E-08 | Y |
| 5CR114 | LG 6524 D/C Level Glass | N | Y | D | 0.5 | 7.4 - 9.8 | 8.3 | 1.6E-08 | Y |
| 5CR115 | FI 6556 D/C Flow | N | Y | D | 0.32 | 7.4 - 9.8 | 8.3 | 1.0E-08 | Y |
| | **#5 CONTROL ROOM - 300 SCOT** | | | | | | | | |
| 5CR26 | E302C1 Quench Col. Cooler | N | Y | D | 307 | 0.04 - 0.13 | 0.08 | 9.3E-08 | Y |
| 5CR27 | E302C2 Quench Col. Cooler | N | Y | D | 307 | 0.04 - 0.13 | 0.08 | 9.3E-08 | Y |
| 5CR28 | E303C1 Lean MDEA SolCooler | N | Y | D | 306 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR29 | E303C2 Lean MDEA SolCooler | N | Y | D | 306 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR30 | E304C1 MDEA L/R Sol Exch. | N | Y | D | 2394 | 0.065 - 0.069 | 0.068 | 6.2E-07 | Y |
| 5CR31 | E304C2 MDEA L/R Sol Exch. | N | Y | D | 2394 | 0.065 - 0.069 | 0.068 | 6.2E-07 | Y |
| 5CR32 | E304C3 MDEA L/R Sol Exch. | N | Y | D | 2394 | 0.065 - 0.069 | 0.068 | 6.2E-07 | Y |
| 5CR33 | E305C 303-E Strip.Reboiler | N | Y | D | 987 | 0.065 - 0.069 | 0.068 | 2.5E-07 | Y |
| 5CR34 | P310J Que.Col.Bottoms Pump | N | Y | D | 11.5 | 0.04 - 0.13 | 0.08 | 3.5E-09 | Y |

*Y - Subpart L Controlled



ED_002508A_00000268-00012

USS C Works
Total Annual Benzene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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 |
|---|---|---|---|---|---|---|---|---|---|
| 5CR35 | P310Ja Que.Col.Bottom Pump | N | Y | D | 11.5 | 0.04 - 0.13 | 0.08 | 3.5E-09 | Y |
| 5CR36 | P311J MDEA Rich Sol. Pump | N | Y | D | 11.6 | 0.065 - 0.069 | 0.068 | 3.0E-09 | Y |
| 5CR37 | P312J Lean MDEA Sol. Pump | N | Y | D | 20.5 | <0.005 | <0.005 | 0 | Y |
| 5CR38 | P312JA Lean MDEA Sol.Pump | N | Y | D | 13.3 | <0.005 | <0.005 | 0 | Y |
| 5CR39 | P313J Stripper Accum. Pump | N | Y | D | 6 | 0.028 - 0.16 | 0.099 | 2.2E-09 | Y |
| 5CR40 | P313JA Stripper Accum. Pump | N | Y | D | 6 | 0.028 - 0.16 | 0.099 | 2.2E-09 | Y |
| 5CR62 | 301J 300 Axi | N | Y | D | 2 | 0.04 - 0.13 | 0.08 | 6.1E-10 | Y |
| 5CR75 | T301F Stripper Accumulator | N | Y | D | 10 | 0.028 - 0.16 | 0.099 | 3.7E-09 | Y |
| 5CR76 | T304F Acid Gas K/O Drum | N | Y | D | 5 | 0.04 - 0.13 | 0.08 | 1.5E-09 | Y |
| 5CR78 | V301E Quench Column | N | Y | D | 50 | 0.04 - 0.13 | 0.08 | 1.5E-08 | Y |
| 5CR79 | V302E MDEA Absorber | N | Y | D | 50 | 0.065 - 0.069 | 0.068 | 1.3E-08 | Y |
| 5CR80 | V303E MDEA Stripper | N | Y | D | 50 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR83 | LC-321 304-F Drain Valve | N | Y | D | 0.3 | 0.04 - 0.13 | 0.08 | 9.1E-11 | Y |
| 5CR92 | FRCA-307 301-F Blowdown | N | Y | D | 0.4 | 0.028 - 0.16 | 0.099 | 1.5E-10 | Y |
| 5CR93 | LCV-305 303-E Reflux Flow 319 | N | Y | D | 0.5 | 0.028 - 0.16 | 0.099 | 1.9E-10 | Y |
| 5CR94 | LRCA-301 302-E Level Control | N | Y | D | 2.6 | 0.028 - 0.16 | 0.099 | 9.7E-10 | Y |
| 5CR95 | FRCA-305 303-E Lean Flow | N | Y | D | 17.9 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR96 | FRCA-304 302-E Quench Flow | N | Y | D | 17.9 | 0.04 - 0.13 | 0.08 | 5.4E-09 | Y |
| 5CR97 | LRCA-300 301-E Level | N | Y | D | 0.4 | 0.04 - 0.13 | 0.08 | 1.2E-10 | Y |
| 5CR98 | E302C1S Valve Relief 1"x2" | N | Y | D | 2.93 | 0.04 - 0.13 | 0.08 | 8.9E-10 | Y |
| 5CR99 | E302C2S Valve Relief 1'x2' | N | Y | D | 2.93 | 0.04 - 0.13 | 0.08 | 8.9E-10 | Y |
| 5CR100 | E303C1S Valve Relief 1"x2" | N | Y | D | 2.94 | 0.065 - 0.069 | 0.068 | 7.6E-10 | Y |
| 5CR101 | E303C2S Valve Relief 1"x2" | N | Y | D | 2.94 | 0.065 - 0.069 | 0.068 | 7.6E-10 | Y |
| 5CR139 | LG 315 A&B 301-E Que Level Gl | N | Y | D | 1 | 0.04 - 0.13 | 0.08 | 3.0E-10 | Y |
| 5CR140 | LRCA 300 301-E Level Displ. | N | Y | D | 3 | 0.04 - 0.13 | 0.08 | 9.1E-10 | Y |
| 5CR141 | FRCA 304 301-E Circ. Rate | N | Y | D | 0.1 | 0.04 - 0.13 | 0.08 | 3.0E-11 | Y |
| 5CR142 | LC 321 304-F Level Displacer | N | Y | D | 2 | 0.04 - 0.13 | 0.08 | 6.1E-10 | Y |
| 5CR143 | LG 324-F Level Glass | N | Y | D | 0.5 | 0.04 - 0.13 | 0.08 | 1.5E-10 | Y |
| 5CR144 | HLA 322 304-F Alarm | N | Y | D | 0.25 | 0.04 - 0.13 | 0.08 | 7.6E-11 | Y |
| 5CR145 | HHLA 323 304-F Alarm | N | Y | D | 0.25 | 0.04 - 0.13 | 0.08 | 7.6E-11 | Y |
| 5CR146 | LG 318A 302-E Level Glass | N | Y | D | 1 | 0.065 - 0.069 | 0.068 | 2.6E-10 | Y |
| 5CR147 | LG 318B 302-E Level Glass | N | Y | D | 1 | 0.065 - 0.069 | 0.068 | 2.6E-10 | Y |
| 5CR148 | LRCA 301 302-E Level Displ. | N | Y | D | 5.5 | 0.065 - 0.069 | 0.068 | 1.4E-09 | Y |
| 5CR149 | FRA 311 Rich MDEA Flow Trans. | N | Y | D | 0.1 | 0.065 - 0.069 | 0.068 | 2.6E-11 | Y |
| 5CR150 | FRCA 305 Lean MDEA to 302-E | N | Y | D | 0.12 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR151 | LG 317 A 303-E Level Displ. | N | Y | D | 0.5 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR152 | LG 317 B 303-E Level Displ. | N | Y | D | 0.5 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR153 | LG 317-C 303-E Level Displ. | N | Y | D | 0.5 | <0.005 | <0.005 | 0.0E+00 | Y |

*Y - Subpart L Controlled



ED_002508A_00000268-00013

USS C Works
Total Annual Benzene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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 |
|---|---|---|---|---|---|---|---|---|---|
| 5CR154 | LRA 302 303-E Level Displacer | N | Y | D | 3.5 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR155 | LG 318 307-C Trap Out Level Gl. | N | Y | D | 0.5 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR156 | LLA 331 307-C Trap Out Low Lev. | N | Y | D | 0.5 | <0.005 | <0.005 | 0.0E+00 | Y |
| 5CR157 | LC 305 301-F Accum. Displacer | N | Y | D | 2 | 0.028 - 0.16 | 0.099 | 7.5E-10 | Y |
| 5CR158 | LG 326 301-F Level Glass | N | Y | D | 0.25 | 0.028 - 0.16 | 0.099 | 9.4E-11 | Y |
| 5CR159 | FRCA 307 313 J & JA Flow | N | Y | D | 0.08 | 0.028 - 0.16 | 0.099 | 3.0E-11 | Y |
| 5CR160 | FRCA 319 Flow TO 303-E Reflux | N | Y | D | 0.1 | 0.028 - 0.16 | 0.099 | 3.7E-11 | Y |
| | **#1 BY-PRODUCTS** | | | | | | | | |
| 1BP-8 | D1 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0 | N |
| 1B/P-9 | D2 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0 | N |
| 1B/P-10 | D3 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0 | N |
| 1B/P-11 | D4 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0 | N |
| 1B/P-12 | D5 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 1B/P-13 | D6 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 1B/P-14 | D7 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 1B/P-15 | D8 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 1B/P-16 | D9 #1 Unit Decanter | *Y | Y | D | 1500 | 2.37 - 6.41 | 4.7 | 2.7E-05 | Y |
| 1B/P-17 | D10 #1 Unit Decanter | *Y | Y | D | 1500 | 2.37 - 6.41 | 4.7 | 2.7E-05 | Y |
| 1B/P-18 | D11 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 1B/P-19 | D12 #1 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| | **#2 BY-PRODUCTS** | | | | | | | | |
| 2B/P-1 | D1 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-2 | D2 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-3 | D3 #2 Unit Decanter | *Y | Y | D | 1500 | 2.37 - 6.41 | 4.7 | 2.7E-05 | Y |
| 2B/P-4 | D4 #2 Unit Decanter | *Y | Y | D | 1500 | 2.37 - 6.41 | 4.7 | 2.7E-05 | Y |
| 2B/P-5 | D5 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-6 | D6 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-7 | D7 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-8 | D8 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-9 | D11 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| 2B/P-10 | D12 #2 Unit Decanter | *Y | Y | D | 0 | 2.37 - 6.41 | 4.7 | 0.0E+00 | Y |
| | **Tar Tanks** | | | | | | | | |
| TT-1 | D13 #2 Tar Tank | *Y | Y | D | 0 | 0 - 82 | 0.05 | 0.000000 | Y |
| TT-2 | D14 #5 Tar Tank | *Y | Y | D | 0 | 0 - 82 | 0.05 | 0.000000 | Y |
| TT-3 | D15 #7 Tar Tank | *Y | Y | D | 0 | 0 - 82 | 0.05 | 0.000000 | Y |
| | **Miscellaneous** | | | | | | | | |
| M-1 | Primary Cooler. 806 | Y | Y | D | 0 | 2.37 -6.41 | 4.7 | 0.000000 | Y |
| M-2 | ST-1 | *Y | Y | D | 0 | 2.37 -6.41 | 4.7 | 0.00000 | Y |

*Y - Subpart L Controlled



ED_002508A_00000268-00014

USS C Works
Total Annual Be..ene (TAB) - 2004
PROCESS UNIT TURNAROUNDS LISTING

| Waste Stream ID# | Process Unit Turnaround 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 |
|---|---|---|---|---|---|---|---|---|---|
| M-3 | Centrifuge from Koppers | Y | Y | D | 115966 | 2.37 -6.41 | 4.7 | 0.00206 | Y |
| M-4 | Light Oil Tanks, 624 | *Y | Y | D | 0 | 89 - 2000 | 284 | 0.00000 | |
| | | | | | | Subtotal - Process Unit Turnarounds | | 0.020 | |

*Y - Subpart L Controlled



ED_002508A_00000268-00015

USS C Works
Total Annual Benzene (TAB) - 20[illegible] Process Sampling Streams Listing

| Waste No. | Waste Stream | 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 |
|---|---|---|---|---|---|---|---|---|---|
| TT4 | Wastewater Tanks Inlet Sample Line | N | Y | A | 12 | 260 - 360 | 310.0 | 0.0 | Y |
| | **#1 CONTROL ROOM** | | | | | | | | |
| 1CR328 | Fractionator Feed | N | Y | E | 91.3 | 0.005 - 0.027 | 0.02 | 0.0 | Y |
| 1CR329 | Lean Phosam Soln. | N | Y | E | 91.3 | 0.23 - 5.0 | 1.8 | 0.0 | Y |
| 1CR330 | Rich Phosam Soln. | N | Y | E | 91.3 | 8.16 - 14 | 9.9 | 0.0 | Y |
| 1CR331 | Superstill Bottoms Condensate H2O | N | Y | A | 91.3 | 0.016 - 0.073 | 0.04 | 0.0 | Y |
| 1CR332 | Fractionator Bottoms H2O | N | Y | A | 91.3 | 0 - 0.53 | 0.2 | 0.0 | Y |
| 1CR333 | Rich Phosam Soln. | N | Y | E | 91.3 | 8.16 - 14 | 9.9 | 0.0 | Y |
| 1CR334 | Mid Rich Phosam Soln. | N | Y | E | 91.3 | 8.16 - 14 | 9.9 | 0.0 | Y |
| 1CR335 | Condensate H2O | N | Y | A | 91.3 | <0.005 | 0 | 0.0 | Y |
| 1CR336 | Contaminated H2O | N | Y | A | 91.3 | 260 - 500 | 373 | 0.0 | Y |
| 1CR337 | Process H2O | N | Y | A | 91.3 | 93 - 221 | 144.1 | 0.0 | Y |
| 1CR338 | P-207 G Pump Sample | N | Y | A | 29.2 | <0.005 | 0 | 0.0 | Y |
| 1CR339 | P-207 H Pump Sample | N | Y | A | 29.2 | <0.005 | 0 | 0.0 | Y |
| | **#2 CONTROL ROOM** | | | | | | | | |
| 2CR124 | Injection H2O Sample | N | Y | A | 91.25 | 235 - 343 | 284 | 0.0 | Y |
| 2CR125 | P-619A L.O. Decanter Water Pump | N | Y | A | 1.10 | 89 - 2000 | 284 | 0.0 | Y |
| 2CR126 | P-619B L.O. Decanter Water Pump | N | Y | A | 1.10 | 89 - 2000 | 284 | 0.0 | Y |
| 2CR127 | 618 Sample | N | Y | A | 45.63 | 89 - 2000 | 983 | 0.0 | Y |
| | **LIGHT OIL FACILITY** | | | | | | | | |
| LOS25 | Contaminated Water | N | Y | A | 91.25 | 714 - 1211 | 962.5 | 0.0 | Y |
| LOS32 | Contaminated Water Pumps East | N | Y | A | 7.3 | 89 - 2000 | 962.5 | 0.0 | Y |
| LOS33 | Contaminated Water Pumps West | N | Y | A | 7.3 | 89 - 2000 | 962.5 | 0.0 | Y |
| | **#5 CONTROL ROOM** | | | | | | | | |
| 5CR57 | P424 Methanol Transfer Pump | N | Y | E | 91.25 | 4285 - 40000 | 26295 | 0.0 | Y |
| 5CR95 | FRCA-305 303-E Lean Flow | N | Y | E | 228.13 | <0.005 | <0.005 | 0.0 | Y |
| 5CR96 | FRCA-304 302-E Quench Flow | N | Y | E | 228.13 | 0.04 - 0.13 | 0.1 | 0.0 | Y |
| 5CR108 | FR 6513 Level Flow Trans. | N | Y | E | 228.13 | 0.003 - 0.003 | 0.003 | 0.0 | Y |
| 5CR110 | FRC 6515 Rich Flow | N | Y | E | 228.13 | 0.065 - 0.069 | 0.067 | 0.0 | Y |
| 5CR115 | FI 6556 D/C Flow | N | Y | A | 228.13 | 7.4 - 9.8 | 8.3 | 0.0 | Y |
| 5CR130 | FT 102-D/C To 102-E | N | Y | A | 228.13 | 7.4 - 9.8 | 8.3 | 0.0 | Y |
| 5CR132 | FIC 103 D/C To 102-F | N | Y | A | 228.13 | 7.4 - 9.8 | 8.3 | 0.0 | Y |
| 5CR141 | FRCA 304 301-E Circ. Rate | N | Y | E | 228.13 | 0.04 - 0.13 | 0.1 | 0.0 | Y |
| 5CR149 | FRA 311 Rich MDEA Flow Trans. | N | Y | E | 228.13 | 0.065 - 0.069 | 0.068 | 0.0 | Y |
| 5CR150 | FRCA 305 Lean MDEA To 302-E | N | Y | E | 228.13 | <0.005 | <0.005 | 0 | Y |
| 5CR160 | FRCA 319 Flow TO 303-E Reflux | N | Y | E | 228.13 | 0.04 - 0.13 | 0.1 | 0.0 | Y |
| | **#1 BY-PRODUCTS** | | | | | | | | |
| 1B/P-46 | FO-1EX #1 FPH Excess Liquor | N | Y | A | 68.44 | 2.37 - 6.41 | 4.7 | 0.0 | Y |

*N - TAB Double Counted



ED_002508A_00000268-00016

USS C Works
Total Annual Benzene (TAB) - 20[illegible] Process Sampling Streams Listing

| Waste No. | Waste Stream | 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 |
|---|---|---|---|---|---|---|---|---|---|
| 1B/P-49 | FO-KOP Cont. Flow From Kop. Condensate | N | Y | A | 45.63 | 210 - 560 | 392 | 0.0 | N |
| 1B/P-50 | FO-SUI Cont. Flow - Carb. Plant - D/C | N | Y | A | 22.81 | 7.4 - 9.8 | 8.3 | 0.0 | Y |
| 1B/P-51 | 1BP 1/6 Pitch Traps | N | Y | F | 136.9 | 1000 - 4500 | 3167 | 0.0 | *N |
| 1B/P-52 | 1B/P 7/12 Pitch Traps | N | Y | F | 136.9 | 150 - 1200 | 850 | 0.0 | *N |
| | **#2 BY-PRODUCTS** | | | | | | | | |
| 2B/P-36 | FO-2EX #2 Excess Liquor | N | Y | A | 68.4 | 2.37 - 7.41 | 4.7 | 0.0 | Y |
| 2B/P-38 | 2BP 1/6 Pitch Traps | N | Y | F | 136.9 | 20 - 10000 | 20 | 0.0 | *N |
| 2B/P-39 | 2B/P 7/12 Pitch Traps | N | Y | F | 136.9 | 20 - 13000 | 20 | 0.0 | *N |
| | **CWTP #2 TANK FARM** | | | | | | | | |
| TKF-39 | Feed to Wastewater Tanks | N | Y | A | 109.5 | 260 - 360 | 310 | 0.0 | Y |
| TKF-40 | Wastewater Tank - P2601A/B | N | Y | A | 109.5 | 190 - 400 | 284 | 0.0 | Y |
| TKF-41 | Wastewater T-3 Tank to Still - P2602A/B | N | Y | A | 146.0 | 160 - 260 | 207 | 0.0 | Y |
| | | | | | | Subtotal - Samples: | | 1.0E-02 | |

*N - TAB Double Counted



ED_002508A_00000268-00017