Table A5
Donald C. Tillman Water Reclamation Plant
Reasonable Potential Analyses and Limit Derivations
(CA0056227, CI-5695)

CTR#	Pollutant	MEC	CTR WQC=C	Basin Plan WQC Title 22 GWR=C	Lowest C	MEC>C	MEC>Title 22 GWR	RPA	CV
	Cadmium (Cd)	2.7	4.9917489		4.991748864	NO		NO, but need limit	0.6
6	Copper (Cu)	47.7	26.117064		26.11706405	YES		YES (MEC > C)	0.2951234
7	Lead (Pb)	20.1	10.01		10.00702199	YES		YES (MEC > C)	0.9940343
8	Mercury (Hg)	0.53	0.051		0.051	YES		YES (MEC > C)	0.8413603
10	Selenium (Se)	6.7	5		5	YES		YES (MEC > C)	1.0570799
13	Zinc (Zn)	84	256.89499		256.8949921	NO		NO, but need limit	0.202697
14	Cyanide (CN)	15	5.2		5.2	YES		YES (MEC > C)	0.9344543
38	Tetrachloroethylene	31.4	8.85	5	5	YES	YES	YES (MEC > C)	3.7094445
68	Bis(2-ethylhexyl)phthalate	21.77	5.9	4	4	YES	YES	YES (MEC > C)	1.2723232
105	Gamma-BHC	0.075	0.063		0.063	YES		YES (MEC > C)	1.1735621

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CTR#	Pollutant	ECA multiplier acute	ECA multiplier chronic	Water Quality-Based Effluent Limitation		
				ECAacute	ECAchronicle	LTAacute=ECA*ECAacute
	Cadmium (Cd)	0.321083214	0.527433444	12.469853	4.991748864	4.003860482
6	Copper (Cu)	0.532367977	0.718484294	34.1131516	26.11706405	18.1607495
7	Lead (Pb)	0.205033929	0.374375265	256.797297	10.00702199	52.65215874
8	Mercury (Hg)	0.238329191	0.424242233	NA	NA	NA
10	Selenium (Se)	0.194069019	0.356538074	NA	5	NA
13	Zinc (Zn)	0.639797733	0.79451367	256.894992	256.8949921	164.3608336
14	Cyanide (CN)	0.216766512	0.392642047	22	5.2	4.76886326
38	Tetrachloroethylene	0.084557396	0.123126807	NA	NA	NA
68	Bis(2-ethylhexyl)phthalate	0.165155035	0.305435188	NA	NA	NA
105	Gamma-BHC	0.17701641	0.327165811	0.95	NA	0.16816559

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CTR#	Pollutant	LTAchronic=ECA*ECAchronic	LTAlowest	AMEL multiplier	MDEL multiplier	AMELaquatic
	Cadmium (Cd)	2.632815295	2.6328153	1.552424614	3.114457427	4.087247268
6	Copper (Cu)	18.76470033	18.1607495	1.259434216	1.878399986	22.8722693
7	Lead (Pb)	3.746381503	3.7463815	1.93968757	4.877241559	7.266809634
8	Mercury (Hg)	NA	NA	1.790608149	4.19587712	NA
10	Selenium (Se)	1.782690372	1.78269037	2.000316019	5.152805974	3.565944107
13	Zinc (Zn)	204.1065829	164.360834	1.174899955	1.562993972	193.107536
14	Cyanide (CN)	2.041738646	2.04173865	1.881833364	4.613258717	3.842211905
38	Tetrachloroethylene	NA	NA	3.536338553	11.82628664	NA
68	Bis(2-ethylhexyl)phthalate	NA	NA	2.20126482	6.05491682	NA
105	Gamma-BHC	NA	0.16816559	2.110358279	5.649193764	0.354889644

Table A5
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Reasonable Potential Analyses and Limit Derivations
(CA0056227, CI-5695)

CTR#	Pollutant		Human Health		Numerical Limitation	
		MDELaquatic	AMELhh=ECA	MDELhh	Monthly Average	Daily Maximum
	Cadmium (Cd)	8.199791151	NA	NA	4.087247268	8.199791151
6	Copper (Cu)	34.11315161	NA	NA	22.8722693	34.11315161
7	Lead (Pb)	18.27200757	NA	NA	7.266809634	18.27200757
8	Mercury (Hg)	NA	0.051	0.119506735	0.051	0.119506735
10	Selenium (Se)	9.185857597	NA	NA	3.565944107	9.185857597
13	Zinc (Zn)	256.8949921	NA	NA	193.107536	256.8949921
14	Cyanide (CN)	9.419068604	220000	539323.4794	3.842211905	9.419068604
38	Tetrachloroethylene	NA	8.85	29.59632828	8.85	29.59632828
68	Bis(2-ethylhexyl)phthalate	NA	5.9	16.22885575	5.9	16.22885575
105	Gamma-BHC	0.95	0.063	0.168643974	0.063	0.168643974

Table A5
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Reasonable Potential Analyses and Limit Derivations
(CA0056227, CI-5695)

CTR#	Pollutant	Recommendation
	Cadmium (Cd)	Need Limit. Based on FW Aq Life
6	Copper (Cu)	Need Limit. Based on FW Aq Life
7	Lead (Pb)	Need Limit. Based on FW Aq Life
8	Mercury (Hg)	Need Limit. Based on Human Health Organisms only
10	Selenium (Se)	Need Limit. Receiving water conc. greater than effluent
13	Zinc (Zn)	Need Limit. Based on FW Aq Life
14	Cyanide (CN)	Need Limit. Based on FW Aq Life
38	Tetrachloroethylene	Need Limit for Effluent and Groundwater
68	Bis(2-ethylhexyl)phthalate	Need Limit for Effluent and Groundwater
105	Gamma-BHC	Need Limit. Based on Human Health Organisms only