

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
1	Antimony	µg/L	0.6	<1	NONE	NONE	14	4300	6	6	NO	Go to Tier 2	0.9	NO	Go to tier 3	NO	
2	Arsenic	µg/L	0.6	7	340	150	NONE	NONE	10	10	NO	Go to Tier 2		1.27	NO	Go to tier 3	NO
3	Beryllium	µg/L	0.6	<0.2	NONE	NONE	Narrative	Narrative	4	4	NO	Go to Tier 2	ND	No	Go to tier 3	NO	
4	Cadmium*	µg/L	0.3	0.5	15.54	5.8	Narrative	Narrative	5	5.8	NO	Go to Tier 2		0.6	NO	Go to tier 3	NO
5a	Chromium III*	µg/L	0.6	9	4258.46	507.58	Narrative	Narrative		507.58	NO	Go to Tier 2	0.49	NO	Go to tier 3	NO	
5b	Chromium VI	µg/L	0.6	9	16.3	11.4	Narrative	Narrative	50	11.4	NO	Go to Tier 2		0.7	NO	Go to tier 3	NO
6	Copper*	µg/L	0.3	13	39.29	23.78	1300	NONE		23.78	NO	Go to Tier 2	14	NO	Go to tier 3	NO	
7	Lead*	µg/L	0.5	1.4	329.2	12.83	Narrative	Narrative		12.83	No	Go to Tier 2		1	NO	Go to tier 3	NO
8	Mercury	µg/L	0.6	0.2	Reserved	Reserved	0.05	0.051	2	0.051	Yes	Yes	0.03	NO	Go to tier 3	NO	
9	Nickel*	µg/L	0.3	7	1185.09	131.76	610	4600	100	100	NO	Go to Tier 2		5.11	NO	Go to tier 3	NO
10	Selenium	µg/L	0.6	<3	RESERVED	5	Narrative	Narrative	50	5	NO	Go to Tier 2	0.7	NO	Go to tier 3	NO	
11	Silver*	µg/L	0.6	<1	26.7	none	NONE	NONE		26.7	NO	Go to Tier 2		0.091	No	Go to tier 3	NO
12	Thallium	µg/L	0.6	<0.2	NONE	NONE	1.7	6.3	2	2	NO	Go to Tier 2	0.04	NO	Go to tier 3	NO	
13	Zinc*	µg/L	0.2	60	303.08	303.08	none	NONE		303.08	NO	Go to Tier 2		80	NO	Go to tier 3	NO

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CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisms Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
1	Antimony	µg/L	NO													--
2	Arsenic	µg/L	NO					0			0	0		0		0 --
3	Beryllium	µg/L	NO													--
4	Cadmium*	µg/L	Yes	NA		NA	0.527	8.18958	0.715	4.147	4.147	1.26	5.22522	1.9	7.8793	5
5a	Chromium III*	µg/L	NO													--
5b	Chromium VI	µg/L	NO	N/A		N/A		0			0	0		0		0 --
6	Copper*	µg/L	Yes	N/A		N/A	0.527	20.70583	0.715	17.0027	17.0027	1.26	21.4234	1.9	32.3051	21.42
7	Lead*	µg/L	NO				0.373	122.7916	0.581	7.45423	7.45423	1.45	10.8086	2.68	19.9773	10.81
8	Mercury	µg/L	NO	0.051	2.01	1.03E-01		NA		NA	NA		NA		NA	0.051
9	Nickel*	µg/L	NO													--
10	Selenium	µg/L	Yes	NA		NA	0.321	#VALUE!	0.527	2.635	2.905	1.55	4.50275	3.11	9.03455	5
11	Silver*	µg/L	NO													--
12	Thallium	µg/L	NO													--
13	Zinc*	µg/L	Yes			NA	0.643	194.88044	0.797	241.55476	194.8804	1.17	228.01	1.55	302.065	228.01

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CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
1	Antimony	µg/L	--	No RP based on CTR/SIP; [RP triggered, based on TSD; need limit; see R3 spreadsheet]
2	Arsenic	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
3	Beryllium	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
4	Cadmium*	µg/L	7.88	Limit because of TMDL (Reso. 2007-0014).
5a	Chromium III*	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
5b	Chromium VI	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
6	Copper*	µg/L	32.31	Limit because of TMDL (Reso. 2007-0014).
7	Lead*	µg/L	19.98	Limit because of TMDL (Reso. 2007-0014).
8	Mercury	µg/L	1.03E-01	RP based on 2005-2009
9	Nickel*	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
10	Selenium	µg/L	--	Limit because of TMDL (Reso. 2007-0014).
11	Silver*	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
12	Thallium	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
13	Zinc*	µg/L	302.06	Limit because of TMDL (Reso. 2007-0014).

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CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
14	Cyanide	µg/L	0.6	0.01	22	5.2	700	220,000	200	5.2	No	No	4.9	NO	Go to tier 3	NO	
15	Asbestos	Fibers/L	0.6	N/A	NONE	NONE	7,000,000	NONE	7x10^6	7x10^6	NO	Go to Tier 2			No	Go to tier 3	NO
16	2,3,7,8-TCDD (Dioxin)	µg/L	0.6	<5.4*10^-6	NONE	NONE	0.000000013	1.4E-08	3x10^-5	1.4E-08	No	Go to Tier 2	ND	No	Go to tier 3	NO	
17	Acrolein	µg/L	0.6	<2	NONE	NONE	320	780		780	NO	Go to Tier 2		1.6	NO	Go to tier 3	NO
18	Acrylonitrile	µg/L	0.6	<2	NONE	NONE	0.059	0.66		0.66	NO	Go to Tier 2	<2		No	Go to tier 3	NO
19	Benzene	µg/L	0.6	<0.5	NONE	NONE	1.2	71	1	1	NO	Go to Tier 2		ND	NO	Go to tier 3	NO
20	Bromoform	µg/L	0.4	3.6	NONE	NONE	4.3	360		360	NO	Go to Tier 2	2.2		NO	Go to tier 3	NO
21	Carbon Tetrachloride	µg/L	0.6	<0.5	NONE	NONE	0.25	4.4	0.5	0.5	NO	Go to Tier 2		<0.5	NO	Go to tier 3	NO
22	Chlorobenzene	µg/L	0.6	<0.5	NONE	NONE	680	21,000		21,000	NO	Go to Tier 2	ND		No	Go to tier 3	NO
23	Dibromochloromethane	µg/L	0.4	32.3	NONE	NONE	0.401	34		34	NO	Go to Tier 2		16.7	NO	Go to tier 3	NO
24	Chloroethane	µg/L	0.6	<0.5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	ND		N/A	Go to tier 3	NO
25	2-chloroethyl vinyl ether	µg/L	0.6	<1	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2		ND	N/A	Go to tier 3	NO
26	Chloroform	µg/L	0.5	68	NONE	NONE	Reserved	Reserved		Reserved	No Criteria Available	Go to Tier 2	35.1		N/A	Go to tier 3	NO

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CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisms Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
14	Cyanide	µg/L	NO	220,000	2.41284	530825	0.22425	4.9335			0			0		0
15	Asbestos	Fibers/ L	NO													--
16	2,3,7,8-TCDD (Dioxin)	µg/L	NO	0.000000014	2.01	2.81E-08	0.321	#VALUE!	0.527	#VALUE!						--
17	Acrolein	µg/L	NO													--
18	Acrylonitrile	µg/L	NO													--
19	Benzene	µg/L	NO													--
20	Bromoform	µg/L	NO													--
21	Carbon Tetrachloride	µg/L	NO													--
22	Chlorobenzene	µg/L	NO													--
23	Dibromochloromethane	µg/L	NO	34		0		NA		NA	NA		NA		NA	--
24	Chloroethane	µg/L	NO													--
25	2-chloroethyl vinyl ether	µg/L	NO													--
26	Chloroform	µg/L	NO													--

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CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
14	Cyanide	µg/L		No limit because no RP, based on 2005-2009 monitoring data.
15	Asbestos	Fibers/L	--	No limit because no RP, based on 2005-2009 monitoring data.
16	2,3,7,8-TCDD (Dioxin)	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
17	Acrolein	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
18	Acrylonitrile	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
19	Benzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
20	Bromoform	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
21	Carbon Tetrachloride	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
22	Chlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
23	Dibromochloromethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
24	Chloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
25	2-chloroethyl vinyl ether	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
26	Chloroform	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

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					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O								
27	Dichlorobromomethane	µg/L	0.5	78.1	NONE	NONE	0.56	46		46	Yes	Yes	29	NO	Go to tier 3	NO
28	1,1-Dichloroethane	µg/L	0.6	<0.5	NONE	NONE	NONE	NONE	5	5	NO	Go to Tier 2	ND	No	Go to tier 3	NO
29	1,2-dichloroethane	µg/L	0.6	<0.5	NONE	NONE	0.38	99	0.5	0.5	NO	Go to Tier 2	ND	No	Go to tier 3	NO
30	1,1-Dichloroethylene	µg/L	0.6	<0.5	NONE	NONE	0.057	3.2	6	3.2	NO	Go to Tier 2	ND	No	Go to tier 3	NO
31	1,2-dichlooropropane	µg/L	0.6	<0.5	NONE	NONE	0.52	39	5	5	NO	Go to Tier 2	ND	No	Go to tier 3	NO
32	1,3-dichloropropylene	µg/L	0.6	<0.5	NONE	NONE	10	1,700	0.5	0.5	NO	Go to Tier 2	ND	No	Go to tier 3	NO
33	Ethylbenzene	µg/L	0.6	<0.5	NONE	NONE	3100	29,000	300	300	NO	Go to Tier 2	ND	No	Go to tier 3	NO
34	Methyl bromide	µg/L	0.6	1	NONE	NONE	48	4,000		4,000	NO	Go to Tier 2	ND	NO	Go to tier 3	NO
35	Methyl chloride	µg/L	0.6	<0.5	NONE	NONE	Narrative	Narrative		Narrative	No Criteria Available	Go to Tier 2	ND	N/A	Go to tier 3	NO
36	Methylene chloride	µg/L	0.6	2.1	NONE	NONE	4.7	1,600		1,600	NO	Go to Tier 2	ND	No	Go to tier 3	NO
37	1,1,2,2-tetrachlroethane	µg/L	0.6	<0.5	NONE	NONE	0.17	11	1	1	NO	Go to Tier 2	ND	NO	Go to tier 3	NO
38	Tetrachloroethylene	µg/L	0.6	<0.5	NONE	NONE	0.8	8.85	5	5	NO	Go to Tier 2	20.2	No	Go to tier 3	NO
39	Toluene	µg/L	0.6	ND	NONE	NONE	6800	200,000	150	150	NO	Go to Tier 2	<0.5	NO	Go to tier 3	NO

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				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
27	Dichlorobromomethane	µg/L	NO	46	1.84	85		NA		NA	NA		NA		NA	46
28	1,1-Dichloroethane	µg/L	NO													--
29	1,2-dichloroethane	µg/L	NO													--
30	1,1-Dichloroethylene	µg/L	NO													--
31	1,2-dichlooropropane	µg/L	NO													--
32	1,3-dichloropropylene	µg/L	NO													--
33	Ethylbenzene	µg/L	NO													--
34	Methyl bromide	µg/L	NO													--
35	Methyl chloride	µg/L	NO													--
36	Methylene chloride	µg/L	NO													--
37	1,1,2,2-tetrachlroethane	µg/L	NO													--
38	Tetrachloroethylene	µg/L	NO	8.85	2.01	18										--
39	Toluene	µg/L	NO													--

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CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
27	Dichlorobromomethane	µg/L	85	RP triggered; MEC>C; Develop limit.
28	1,1-Dichloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
29	1,2-dichloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
30	1,1-Dichloroethylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
31	1,2-dichloropropane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
32	1,3-dichloropropylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
33	Ethylbenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
34	Methyl bromide	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
35	Methyl chloride	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
36	Methylene chloride	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
37	1,1,2,2-tetrachloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
38	Tetrachloroethylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
39	Toluene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

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					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
40	Trans 1,2-Dichloroethylene	µg/L	0.6	ND	NONE	NONE	700	140,000	10	10	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
41	1,1,1-Trichloroethane	µg/L	0.6	<0.5	NONE	NONE	Narrative	Narrative	200	200	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
42	1,1,2-trichloroethane	µg/L	0.6	<0.5	NONE	NONE	0.6	42	5	5	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
43	Trichloroethylene	µg/L	0.6	<0.5	NONE	NONE	2.7	81	5	5	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
44	Vinyl chloride	µg/L	0.6	ND	NONE	NONE	2	525	0.5	0.5	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
45	2-chlorophenol	µg/L	0.6	<5	NONE	NONE	120	400		400	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
46	2,4-dihlorophenol	µg/L	0.6	<5	NONE	NONE	93	790		790	NO	Go to Tier 2	ND	NO	Go to tier 3	NO	
47	2,4-dimethylphenol	µg/L	0.6	<2	NONE	NONE	540	2,300		2,300	NO	Go to Tier 2	<2	NO	Go to tier 3	NO	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	µg/L	0.6	<0.01	NONE	NONE	13.4	765		765	NO	Go to Tier 2	<5	NO	Go to tier 3	NO	
49	2,4-dinitrophenol	µg/L	0.6	<10	NONE	NONE	70	14,000		14,000	NO	Go to Tier 2	<10	NO	Go to tier 3	NO	
50	2-nitrophenol	µg/L	0.6	<10	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	<10	N/A	Go to tier 3	NO	
51	4-nitrophenol	µg/L	0.6	<10	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	<10	N/A	Go to tier 3	NO	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	µg/L	0.6	ND	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	ND	N/A	Go to tier 3	NO	

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				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
40	Trans 1,2-Dichloroethylene	µg/L	NO													--
41	1,1,1-Trichloroethane	µg/L	NO													--
42	1,1,2-trichloroethane	µg/L	NO													--
43	Trichloroethylene	µg/L	NO													--
44	Vinyl chloride	µg/L	NO													--
45	2-chlorophenol	µg/L	NO													--
46	2,4-dihlorophenol	µg/L	NO													--
47	2,4-dimethylphenol	µg/L	NO													--
48	4,6-dinitro-o-resol (aka2-methyl-4,6- Dinitrophenol)	µg/L	NO													--
49	2,4-dinitrophenol	µg/L	NO													--
50	2-nitrophenol	µg/L	NO													--
51	4-nitrophenol	µg/L	NO													--
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	µg/L	NO													--

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CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
40	Trans 1,2-Dichloroethylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
41	1,1,1-Trichloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
42	1,1,2-trichloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
43	Trichloroethylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
44	Vinyl chloride	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
45	2-chlorophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
46	2,4-dihlorophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
47	2,4-dimethylphenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
49	2,4-dinitrophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
50	2-nitrophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
51	4-nitrophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
53	Pentachlorophenol	µg/L	0.6	ND	23.83	16.54	0.28	8.2	1	1	NO	Go to Tier 2	<5	NO	Go to tier 3	NO	
54	Phenol	µg/L	0.6	ND	NONE	NONE	21,000	4,600,000		4.6x10^6	NO	Go to Tier 2	<1	NO	Go to tier 3	NO	
55	2,4,6-trihlorophenol	µg/L	0.6	ND	NONE	NONE	2.1	6.5		6.5	NO	Go to Tier 2	<10	No	Go to tier 3	NO	
56	Acenaphthene	µg/L	0.6	<1	NONE	NONE	1200	2,700		2,700	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
57	Acenaphthylene	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	ND	N/A	Go to tier 3	NO	
58	Anthracene	µg/L	0.6	<5	NONE	NONE	9600	110,000		110,000	NO	Go to Tier 2	ND	No	Go to tier 3	NO	
59	Benzidine	µg/L	0.6	<5	NONE	NONE	0.00012	0.00054		0.00054	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
60	Benzo(a)Anthracene	µg/L	0.6	<5	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
61	Benzo(a)Pyrene	µg/L	0.6	<10	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<10	No	Go to tier 3	NO	
62	Benzo(b)Fluoranthene	µg/L	0.6	<5	NONE	NONE	0.0044	0.049		0.049	?	Go to Tier 2	<5	No	Go to tier 3	NO	
63	Benzo(ghi)Perylene	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	N/A	Go to tier 3	NO	
64	Benzo(k)Fluoranthene	µg/L	0.6	<10	NONE	NONE	0.0044	0.049		0.049	?	Go to Tier 2	<10	No	Go to tier 3	NO	
65	Bis(2-Chloroethoxy) methane	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	N/A	Go to tier 3	NO	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
53	Pentachlorophenol	µg/L	NO													--
54	Phenol	µg/L	NO													--
55	2,4,6-trihlorophenol	µg/L	NO													--
56	Acenaphthene	µg/L	NO													--
57	Acenaphthylene	µg/L	NO													--
58	Anthracene	µg/L	NO													--
59	Benzidine	µg/L	NO													--
60	Benzo(a)Anthracene	µg/L	NO													--
61	Benzo(a)Pyrene	µg/L	NO													--
62	Benzo(b)Fluoranthene	µg/L	NO													--
63	Benzo(ghi)Perylene	µg/L	NO													--
64	Benzo(k)Fluoranthene	µg/L	NO													--
65	Bis(2-Chloroethoxy) methane	µg/L	NO													--

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
53	Pentachlorophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
54	Phenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
55	2,4,6-trihlorophenol	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
56	Acenaphthene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
57	Acenaphthylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
58	Anthracene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
59	Benzidine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
60	Benzo(a)Anthracene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
61	Benzo(a)Pyrene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
62	Benzo(b)Fluoranthene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
63	Benzo(ghi)Perylene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
64	Benzo(k)Fluoranthene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
65	Bis(2-Chloroethoxy) methane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
66	Bis(2-Chloroethyl)Ether	µg/L	0.6	<1	NONE	NONE	0.031	1.4		1.4	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
67	Bis(2-Chloroisopropyl) Ether	µg/L	0.6	<2	NONE	NONE	1400	170,000		170,000	NO	Go to Tier 2	<2	No	Go to tier 3	NO	
68	Bis(2-Ethylhexyl) Phthalate - Malibu Creek	µg/L	1	20	NONE	NONE	1.8	5.9	4	4	Yes	Yes	18	Yes	Go to tier 3	NO	
68	Bis(2-Ethylhexyl) Phthalate- Los Angeles River	µg/L	1	20	NONE	NONE	1.8	5.9	4	5.9	Yes	Yes	18	Yes	Go to tier 3	NO	
69	4-Bromophenyl Phenyl Ether	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	
70	Butylbenzyl Phthalate	µg/L	0.6	<5	NONE	NONE	3000	5,200		5,200	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
71	2-Chloronaphthalene	µg/L	0.6	<5	NONE	NONE	1700	4,300		4,300	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
72	4-Chlorophenyl Phenyl Ether	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	N/A	Go to tier 3	NO	
73	Chrysene	µg/L	0.6	<5	NONE	NONE	0.0044	0.049		0.049	?	Go to Tier 2	<5	No	Go to tier 3	NO	
74	Dibenzo(a,h)Anthracene	µg/L	0.6	<10	NONE	NONE	0.0044	0.049		0.049	?	Go to Tier 2	<10	No	Go to tier 3	NO	
75	1,2-Dichlorobenzene	µg/L	0.6	<0.5	NONE	NONE	2700	17,000	600	600	NO	Go to Tier 2	<0.5	NO	Go to tier 3	NO	
76	1,3-Dichlorobenzene	µg/L	0.6	<0.5	NONE	NONE	400	2,600		2,600	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
77	1,4-Dichlorobenzene	µg/L	0.6	<0.5	NONE	NONE	400	2,600	5	5	NO	Go to Tier 2	<0.32	No	Go to tier 3	NO	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisms Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
66	Bis(2-Chloroethyl)Ether	µg/L	NO													--
67	Bis(2-Chloroisopropyl) Ether	µg/L	NO													--
68	Bis(2-Ethylhexyl) Phthalate - Malibu Creek	µg/L	NO	5.9	2.52	14.868										5.9
68	Bis(2-Ethylhexyl) Phthalate- Los Angeles River	µg/L	NO	5.9	2.52	14.868										4
69	4-Bromophenyl Phenyl Ether	µg/L	NO			0.000										--
70	Butylbenzyl Phthalate	µg/L	NO			0.000										--
71	2-Chloronaphthalene	µg/L	NO			0.000										--
72	4-Chlorophenyl Phenyl Ether	µg/L	NO			0.000										--
73	Chrysene	µg/L	NO			0.000										--
74	Dibenzo(a,h)Anthracene	µg/L	NO			0.000										--
75	1,2-Dichlorobenzene	µg/L	NO			0.000										--
76	1,3-Dichlorobenzene	µg/L	NO			0.000										--
77	1,4-Dichlorobenzene	µg/L	NO			0.000										--

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
66	Bis(2-Chloroethyl)Ether	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
67	Bis(2-Chloroisopropyl) Ether	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
68	Bis(2-Ethylhexyl) Phthalate - Malibu Creek	µg/L	15	Limit because RP exists, based on 2004-2008 monitoring data.
68	Bis(2-Ethylhexyl) Phthalate- Los Angeles River	µg/L	15	Limit because RP exists, based on 2004-2008 monitoring data.
69	4-Bromophenyl Phenyl Ether	µg/L	--	No Criteria Available
70	Butylbenzyl Phthalate	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
71	2-Chloronaphthalene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
72	4-Chlorophenyl Phenyl Ether	µg/L	--	No Criteria Available
73	Chrysene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
74	Dibenzo(a,h)Anthracene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
75	1,2-Dichlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
76	1,3-Dichlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
77	1,4-Dichlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
78	3,3'-Dichlorobenzidine	µg/L	0.6	<5	NONE	NONE	0.04	0.077		0.077	?	Go to Tier 2	<5	No	Go to tier 3	NO	
79	Diethyl Phthalate	µg/L	0.6	3.1	NONE	NONE	23000	120,000		120,000	NO	Go to Tier 2	<2	NO	Go to tier 3	NO	
80	Dimethyl Phthalate	µg/L	0.6	<2	NONE	NONE	313000	2,900,000		2.9x10^6	?	Go to Tier 2	<2	No	Go to tier 3	NO	
81	Di-n-Butyl Phthalate	µg/L	0.6	<5	NONE	NONE	2700	12,000		12,000	NO	Go to Tier 2	<5	NO	Go to tier 3	NO	
82	2,4-Dinitrotoluene	µg/L	0.6	<5	NONE	NONE	0.11	9.1		9.1	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
83	2,6-Dinitrotoluene	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	
84	Di-n-Octyl Phthalate	µg/L	0.6	<5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	
85	1,2-Diphenylhydrazine	µg/L	0.6	ND	NONE	NONE	0.04	0.54		0.54	NO	Go to Tier 2	N/A	No	Go to tier 3	NO	
86	Fluoranthene	µg/L	0.6	<1	NONE	NONE	300	370		370	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
87	Fluorene	µg/L	0.6	<5	NONE	NONE	1300	14,000		14,000	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
88	Hexachlorobenzene	µg/L	0.6	<1	NONE	NONE	0.00075	0.00077		0.00077	?	Go to Tier 2	<1	No	Go to tier 3	NO	
89	Hexachlorobutadiene	µg/L	0.6	<1	NONE	NONE	0.44	50		50	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
90	Hexachlorocyclopentadiene	µg/L	0.6	<10	NONE	NONE	240	17,000		17,000	NO	Go to Tier 2	<10	No	Go to tier 3	NO	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
78	3,3'-Dichlorobenzidine	µg/L	NO			0.000										--
79	Diethyl Phthalate	µg/L	NO			0.000										--
80	Dimethyl Phthalate	µg/L	NO			0.000										--
81	Di-n-Butyl Phthalate	µg/L	NO			0.000										--
82	2,4-Dinitrotoluene	µg/L	NO			0.000										--
83	2,6-Dinitrotoluene	µg/L	NO			0.000										--
84	Di-n-Octyl Phthalate	µg/L	NO			0.000										--
85	1,2-Diphenylhydrazine	µg/L	NO			0.000										--
86	Fluoranthene	µg/L	NO			0.000										--
87	Fluorene	µg/L	NO			0.000										--
88	Hexachlorobenzene	µg/L	NO			0.000										--
89	Hexachlorobutadiene	µg/L	NO			0.000										--
90	Hexachlorocyclopentadiene	µg/L	NO			0.000										--

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
78	3,3'-Dichlorobenzidine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
79	Diethyl Phthalate	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
80	Dimethyl Phthalate	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
81	Di-n-Butyl Phthalate	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
82	2,4-Dinitrotoluene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
83	2,6-Dinitrotoluene	µg/L	--	No Criteria Available
84	Di-n-Octyl Phthalate	µg/L	--	No Criteria Available
85	1,2-Diphenylhydrazine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
86	Fluoranthene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
87	Fluorene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
88	Hexachlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
89	Hexachlorobutadiene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
90	Hexachlorocyclopentadiene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
91	Hexachloroethane	µg/L	0.6	<1	NONE	NONE	1.9	8.9		8.9	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
92	Indeno(1,2,3-cd)Pyrene	µg/L	0.6	<10	NONE	NONE	0.0044	0.049		0.049	?	Go to Tier 2	<10	No	Go to tier 3	NO	
93	Isophorone	µg/L	0.6	ND	NONE	NONE	8.4	600		600	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
94	Napthalene	µg/L	0.6	ND	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<1	No	Go to tier 3	NO	
95	Nitrobenzene	µg/L	0.6	ND	NONE	NONE	17	1,900		1,900	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
96	N-Nitrosodimethylamine	µg/L	0.6	ND	NONE	NONE	0.00069	8.1		8.1	NO	Go to Tier 2	<0.36	No	Go to tier 3	NO	
97	N-Nitrosodi-n-Propylamine	µg/L	0.6	ND	NONE	NONE	0.005	1.4		1.4	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
98	N-Nitrosodiphenylamine	µg/L	0.6	ND	NONE	NONE	5	16		16	NO	Go to Tier 2	<1	No	Go to tier 3	NO	
99	Phenanthrene	µg/L	0.6	ND	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	NA	Go to tier 3	NO	
100	Pyrene	µg/L	0.6	ND	NONE	NONE	960	11,000		11,000	NO	Go to Tier 2	<5	No	Go to tier 3	NO	
101	1,2,4-Trichlorobenzene	µg/L	0.6	ND	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	NA	Go to tier 3	NO	
102	Aldrin	µg/L	0.6	0.34	3	NONE	0.00013	0.00014		0.00014	Yes	Yes	<0.005	N/A	Go to tier 3	NO	
103	alpha-BHC	µg/L	0.6	0.014	NONE	NONE	0.0039	0.013		0.013	Yes	Yes	<0.01	No	Go to tier 3	NO	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
91	Hexachloroethane	µg/L	NO			0.000										--
92	Indeno(1,2,3-cd)Pyrene	µg/L	NO			0.000										--
93	Isophorone	µg/L	NO			0.000										--
94	Napthalene	µg/L	NO			0.000										--
95	Nitrobenzene	µg/L	NO			0.000										--
96	N-Nitrosodimethylamine	µg/L	NO			0.000										--
97	N-Nitrosodi-n-Propylamine	µg/L	NO			0.000										--
98	N-Nitrosodiphenylamine	µg/L	NO			0.000										--
99	Phenanthrene	µg/L	NO			0.000										--
100	Pyrene	µg/L	NO			0.000										--
101	1,2,4-Trichlorobenzene	µg/L	NO			0.000										--
102	Aldrin	µg/L	NO	0.00014	2.01	0.0003	0.321	0.963	0.527		0.963	1.55	1.49265	3.11	2.99493	0.00014
103	alpha-BHC	µg/L	NO	0.013	2.01	0.026										0.013

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
91	Hexachloroethane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
92	Indeno(1,2,3-cd)Pyrene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
93	Isophorone	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
94	Napthalene	µg/L	--	No Criteria Available
95	Nitrobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
96	N-Nitrosodimethylamine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
97	N-Nitrosodi-n-Propylamine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
98	N-Nitrosodiphenylamine	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
99	Phenanthrene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
100	Pyrene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
101	1,2,4-Trichlorobenzene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
102	Aldrin	µg/L	0.0003	Lmit because RP exists, based on 2004-2008 monitoring data.
103	alpha-BHC	µg/L	0.026	Lmit because RP exists, based on 2004-2008 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
104	beta-BHC	µg/L	0.6	<0.005	NONE	NONE	0.014	0.046		0.046	NO	Go to Tier 2	N/A	No	Go to tier 3	NO	
105	gamma-BHC (aka Lindane)	µg/L	0.6	ND	0.95	NONE	0.019	0.063	0.2	0.063	NO	Go to Tier 2		<0.005	NO	Go to tier 3	NO
106	delta-BHC	µg/L	0.6	<0.005	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	0.03	No	Go to tier 3	NO	
107	Chlordane	µg/L	0.6	ND	2.4	0.0043	0.00057	0.00059		0.00059	?	Go to Tier 2		<0.01	No	Go to tier 3	NO
108	4,4'-DDT	µg/L	0.6	<0.005	1.1	0.001	0.00059	0.00059		0.00059	?	Go to Tier 2	<0.01	No	Go to tier 3	NO	
109	4,4'-DDE	µg/L	0.6	<0.005	NONE	NONE	0.00059	0.00059		0.00059	?	Go to Tier 2	<0.01	No	Go to tier 3	NO	
110	4,4'-DDD	µg/L	0.6	<0.01	NONE	NONE	0.00083	0.00084		0.00084	?	Go to Tier 2	<0.01	No	Go to tier 3	NO	
111	Dieldrin	µg/L	0.6	<0.01	0.24	0.056	0.00014	0.00014		0.00014	?	Go to Tier 2	<0.01	No	Go to tier 3	NO	
112	alpha-Endosulfan	µg/L	0.6	<0.01	0.22	0.056	110	240		0.056	NO	Go to Tier 2	N/A	No	Go to tier 3	NO	
113	beta-Endosulfan	µg/L	0.6	<0.01	0.22	0.056	110	240		0.056	NO	Go to Tier 2		N/A	No	Go to tier 3	NO
114	Endosulfan Sulfate	µg/L	0.6	<0.01	NONE	NONE	110	240		240	NO	Go to Tier 2	N/A	No	Go to tier 3	NO	
115	Endrin	µg/L	0.6	<0.01	0.086	0.036	0.76	0.81		0.036	NO	Go to Tier 2		N/A	No	Go to tier 3	NO
116	Endrin Aldehyde	µg/L	0.6	<0.01	NONE	NONE	0.76	0.81		0.81	NO	Go to Tier 2	N/A	No	Go to tier 3	NO	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
104	beta-BHC	µg/L	NO			0.000										--
105	gamma-BHC (aka Lindane)	µg/L	NO	0.063		0.000		0		#VALUE!	0.305		0		0	0
106	delta-BHC	µg/L	NO			0.000										--
107	Chlordane	µg/L	NO			0.000										--
108	4,4'-DDT	µg/L	NO			0.000										--
109	4,4'-DDE	µg/L	NO			0.000										--
110	4,4'-DDD	µg/L	NO			0.000										--
111	Dieldrin	µg/L	NO			0.000										--
112	alpha-Endosulfan	µg/L	NO			0.000										--
113	beta-Endosulfan	µg/L	NO			0.000										--
114	Endosulfan Sulfate	µg/L	NO			0.000										--
115	Endrin	µg/L	NO			0.000										--
116	Endrin Aldehyde	µg/L	NO			0.000										--

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
104	beta-BHC	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
105	gamma-BHC (aka Lindane)	µg/L	0.00	No limit because no RP, based on 2005-2009 monitoring data.
106	delta-BHC	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
107	Chlordane	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
108	4,4'-DDT	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
109	4,4'-DDE	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
110	4,4'-DDD	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
111	Dieldrin	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
112	alpha-Endosulfan	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
113	beta-Endosulfan	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
114	Endosulfan Sulfate	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
115	Endrin	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
116	Endrin Aldehyde	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B***	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	NOT applicable C hh W&O	C hh O									
117	Heptachlor	µg/L	0.6	<0.01	0.52	0.0038	0.00021	0.00021		0.00021	NO	Go to Tier 2	<0.01	No	Go to tier 3	NO	
118	Heptachlor Epoxide	µg/L	0.6	<0.01	0.52	0.0038	0.0001	0.00011		0.00011	NO	Go to Tier 2	<0.01	No	Go to tier 3	NO	
	Polychlorinated biphenyls (PCBs)	µg/L	0.6	ND							NO	Go to Tier 2	N/A	No	Go to tier 3	NO	
119	Aroclor 1016	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
120	Aroclor 1221	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
121	Aroclor 1232	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
122	Aroclor 1242	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
123	Aroclor 1248	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
124	Aroclor 1254	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
125	Aroclor 1260	µg/L	0.6	ND	NONE	0.014	0.00017	0.00017		0.00017	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	
126	Toxaphene	µg/L	0.6	ND	0.73	0.0002	0.0073	0.00075	3	0.0002	NO	Go to Tier 2	<0.05	No	Go to tier 3	NO	
FOOTNOTE:																	
*	These metals are hardness dependent. CTR criteria was calculated using an effluent hardness value of 211 mg/L (since no upstream flow most of the times).																
NOTES																	
	bolded values denote detected results																
italicized values denote detected but not quantified (estimated) results.																	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	Tier 3 - need limit?	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOS
				Organisns Only			Freshwater					Freshwater				
				AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	ECA acute multiplier (p.9)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	
117	Heptachlor	µg/L	NO			0.000										--
118	Heptachlor Epoxide	µg/L	NO			0.000										--
	Polychlorinated biphenyls (PCBs)	µg/L	NO			0.000										--
119	Aroclor 1016	µg/L	NO			0.000										--
120	Aroclor 1221	µg/L	NO			0.000										--
121	Aroclor 1232	µg/L	NO			0.000										--
122	Aroclor 1242	µg/L	NO			0.000										--
123	Aroclor 1248	µg/L	NO			0.000										--
124	Aroclor 1254	µg/L	NO			0.000										--
125	Aroclor 1260	µg/L	NO			0.000										--
126	Toxaphene	µg/L	NO			0.000										--
FOOTNOTE:																
*	These metals are hardness dependent. (															
NOTES																
	bolded values denote detected results															
	italicized values denote detected but not															

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
Las Virgenes Municipal Water District - Tapia Water Reclamation Facility
(NPDES No. CA0056014, CI No.4760)
Priority Pollutant Effluent Data

CTR#	DATE	Units	ED LIMITS	Recommendation
			Lowest MDEL	
117	Heptachlor	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
118	Heptachlor Epoxide	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
	Polychlorinated biphenyls (PCBs)	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
119	Aroclor 1016	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
120	Aroclor 1221	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
121	Aroclor 1232	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
122	Aroclor 1242	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
123	Aroclor 1248	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
124	Aroclor 1254	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
125	Aroclor 1260	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
126	Toxaphene	µg/L	--	No limit because no RP, based on 2005-2009 monitoring data.
FOOTNOTE:				
*	These metals are hardness dependent. (			
NOTES				
	bolded values denote detected results			
	italicized values denote detected but not			