ATTACHMENT D
CALIFORNIA TOXICS RULE
REASONABLE POTENTIAL ANALYSIS

VALLEY WASTE DISPOSAL COMPANY
AND CAWELO WATER DISTRICT
KERN FRONT NO. 2 TREATMENT PLANT – CAWELO RESERVOIR B
KERN COUNTY

RECEIVING WATER DATA

Constituent	**Sb**	**As**	**Be**	**Cd**	**Cr**	**Cr (III)**	**Cr (VI)**	**Cu**	**Pb**	**Hg**	**Ni**	**Se**	**Ag**	**Tl**	**Zn**	**CN**	**Asb**
units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**Total**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**MF/L**
CTR #	**#1**	**#2**	**#3**	**#4**	**µg/L**	**#5a**	**#5b**	**#6**	**#7**	**#8**	**#9**	**#10**	**#11**	**#12**	**#13**	**#14**	**#15**
4/30/01	<0.02	5.0	<0.06	<0.05	1.00	1.00	<0.2	<0.05	<0.25	0.001	<0.05	<0.5	<0.2	<0.025	<2.0	<0.005	<1.53
10/25/01	2.0	6.0	<0.06	<0.05	3.00	3.00	<0.2	<0.05	<0.25	0.0659	<0.05	<0.5	<0.2	<0.025	<2.0	<0.005	<0.2
Observed Maximum SIP Section 1.4.3.1	2.0	6.0	<0.06	<0.05	3.00	3.00	<0.2	<0.05	<0.25	0.0659	<0.05	<0.5	<0.2	<0.025	<2.0	<0.005	<1.53

EFFLUENT DATA

Constituent	**Sb**	**As**	**Be**	**Cd**	**Cr**	**Cr (III)**	**Cr (VI)**	**Cu**	**Pb**	**Hg**	**Ni**	**Se**	**Ag**	**Tl**	**Zn**	**CN**	**Asb**
units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**Total**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**MF/L**
CTR #	**#1**	**#2**	**#3**	**#4**	**µg/L**	**#5a**	**#5b**	**#6**	**#7**	**#8**	**#9**	**#10**	**#11**	**#12**	**#13**	**#14**	**#15**
4/30/01	<0.02	12	<0.06	<0.05	1.00	1.00	<0.2	5.0	<0.25	0.0075	<0.05	<0.5	<0.2	<0.025	<2.0	0.01	<7.65
10/25/01	4.0	25	<0.06	<0.05	4.00	4.00	<0.2	5.0	<0.25	0.0494	<0.05	<0.5	<0.2	<0.025	<2.0	<0.005	<0.2
MEC, total (µg/L)	**4.0**	**25**	**<0.06**	**<0.05**	**4.00**	**4.00**	**<0.2**	**5.0**	**<0.25**	**0.0494**	**<0.05**	**<0.5**	**<0.2**	**<0.025**	**<2.0**	**0.01**	**<7.65**
Max Background, Tot	**2.0**	**6.0**	**<0.06**	**<0.05**	**3.00**	**3.00**	**<0.2**	**<0.05**	**<0.25**	**0.0659**	**<0.05**	**<0.5**	**<0.2**	**<0.025**	**<2.0**	**<0.005**	**<1.53**
CMC (µg/L) Freshwater **Total** @ 53.0 mg/L Hardness	-	-	-	2.21		1032	-	7.7	36.4	-	274	-	**1.36**	-	70	-	-
CCC (µg/L) Freshwater **Total** @ 53.0 mg/L Hardness	-	-	-	**1.50**		**118**	-	**5.4**	**1.42**	-	**30.5**	**5.0** q	-	-	**70**	-	-
H Health (µg/L) Water & Org	14	-	n	N		n	n	1300	n	0.050 a	610 a	n	-	**1.7** a,s	-	700 a	**7** MF/L k,s
H Health (µg/L) Org Only	4300	-	n	n		n	n	-	n	0.051 a	4600 a	n	-	6.3 a,t	-	220,000 a,j	-
Numeric Basin Plan Objective (µg/L) (MCL, site specific)	**6**	**10**	**4**	5	**50**	-	-	1300	15	**2**	100	50	-	2	-	200	7 MF/L
Narrative Basin Plan Objective (µg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resonable Potential	N	**Y**	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**2,3,7,8-TCDD (Dioxin) #16**	**Acrolein #17**	**Acrylonitrile #18**	**Benzene #19**	**Bromoform #20**	**Carbon Tetrachloride #21**	**Chlorobenzene #22**	**Chlorodibromo-methane #23**	**Chloroethane #24**	**2-Chloro-ethylvinyl Ether #25**
MEC (µg/L)	**<0.000003**	**--**	**--**	**<0.134**	**<0.390**	**<0.184**	**<0.095**	**<0.188**	**<0.266**	**--**
Background (µg/L)	<0.000003	--	--	<0.134	<0.390	<0.184	<0.095	<0.188	<0.266	--
SWRCB MLs (µg/L) SIP Appendix 4		2.0	2.0	0.5	0.5	0.5	0.5	0.5	0.5	1
BP Obj (µg/L)	0.00003	-	-	**1**	100	0.5	**70**	100	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	0.000000013 c	**320** s	**0.059** a,c,s	1.2 a,c	**4.3** a,c	**0.25** a,c	680 a,s	**0.401** a,c	-	-
H Health (µg/L) Org Only	0.000000014 c	720 t	0.66 a,c,t	71 a,c	360 a,c	4.4 a,c,t	21,000 a,j,t	34 a,c	-	-
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**Chloroform #26**	**Dichloro-bromomethane #27**	**1,1-Dichloro-ethane #28**	**1,2-Dichloro-ethane #29**	**1,1-Dichloro-ethylene #30**	**1,2-Dichloro-propane #31**	**1,3-Dichloro-propylene #32**	**Ethyl benzene #33**	**Methyl Bromide** (Bromomethane) **#34**	**Methyl Chloride** (Chloromethane) **#35**
MEC (µg/L)	**<0.160**	**<0.117**	**<0.195**	**<0.195**	**<0.256**	**<0.167**	**<0.262**	**<0.151**	**--**	--
Background (µg/L)	<0.160	<0.117	<0.195	<0.195	<0.256	<0.167	<0.262	<0.151	--	--
SWRCB MLs (µg/L) SIP Appendix 4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5
BP Obj (µg/L)	**100**	100	**5**	0.5	6	5	**0.5**	**700**	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	Reserved	**0.56** a,c	-	**0.38** a,c,s	**0.057** a,c,s	**0.52** a	10 a,s	3,100 a,s	**48** a	n
H Health (µg/L) Org Only	Reserved	46 a,c	-	99 a,c,t	3.2 a,c,t	39 a	1,700 a,t	29,000 a,t	4,000 a	n
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**Methylene Chloride** (Dichloromethane) **#36**	**1,1,2,2-Tetra-chloroethane #37**	**Tetrachloro-ethylene #38**	**Toluene #39**	**1,2-Trans-Dichloro-ethylene #40**	**1,1,1-Trichloro-ethane #41**	**1,1,2 Trichloro-ethane #42**	**Trichloro-ethylene #43**	**Vinyl Chloride #44**	**2-Chloro-phenol #45**	**2,4 Dichloro-phenol #46**
MEC (µg/L)	**<5.0**	**<0.372**	**<0.452**	**0.58**	**<0.196**	**<0.274**	**<0.219**	**<0.206**	**<0.238**	**<2.786**	**<2.344**
Background (µg/L)	<5.0	<0.372	<0.452	<0.191	<0.196	<0.274	<0.219	<0.206	<0.238	<2.786	<2.344
SWRCB MLs (µg/L) SIP Appendix 4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	1
BP Obj (µg/L)	5	1	5	**150**	**10**	**200**	5	5	**0.5**	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	**4.7** a,c	**0.17** a,c,s	**0.8** c,s	6,800 a	700 a	n	**0.60** a,c,s	**2.7** c,s	2 c,s	**120** a	**93** a
H Health (µg/L) Org Only	1,600 a,c	11 a,c,t	8.85 c,t	200,000 a	140,000 a	n	42 a,c,t	81 c,t	525 c,t	400 a	790 a
Reasonable Potential	N	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**2,4-Dimethyl-phenol #47**	**2-Methyl 4,6-Dinitrophenol #48**	**2,4-Dinitro-phenol #49**	**2-Nitro-phenol #50**	**4-Nitro-phenol #51**	**3-Methyl-4-Chlorophenol #52**	**Pentachloro-phenol #53**	**Phenol #54**	**2,4,6-Tri-chlorophenol #55**	**Acenaphthene #56**
MEC (µg/L)	**<2.318**	**<1.340**	**<3.699**	**<2.291**	**<3.775**	**<2.260**	**<1.386**	**<2.699**	**<1.469**	**<1.089**
Background (µg/L)	<2.318	<1.340	<3.699	<2.291	<3.775	<2.260	<1.386	<2.699	<1.469	<1.089
SWRCB MLs (µg/L) SIP Appendix 4	1	5	5	10	5	1	1	1	10	0.5
BP Obj (µg/L)	-	-	-	-	-	-	1	-	-	-
CMC (µg/L)	-	-	-	-	-	-	19 f,w	-	-	-
CCC (µg/L)	-	-	-	-	-	-	15 f,w	-	-	-
H Health (µg/L) Water & Org Only	**540** a	**13.4** s	**70** a,s	-	-	-	**0.28** a,c	**21,000** a	**2.1** a,c,	**1,200** a
H Health (µg/L) Org Only	2,300 a	765 t	14,000 a,t	-	-	-	8.2 a,c,j	4,600,000 a,j,t	6.5 a,c	2,700 a
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**Acenaphthylene #57**	**Anthracene #58**	**Benzidene #59**	**Benzo(a) Anthracene #60**	**Benzo(a) Pyrene #61**	**Benzo(b) Fluoranthene #62**	**Benzo(ghi) Perylene #63**	**Benzo(k) Fluoranthene #64**	**Bis (2-Chloro-ethoxy) Methane #65**	**Bis (2-Chloro-ethyl) Ether #66**
MEC (µg/L)	**<1.506**	**<1.073**	**--**	**<1.726**	**<1.213**	**<2.661**	**<1.887**	**<2.661**	**<1.869**	**<2.321**
Background (µg/L)	<1.506	<1.073	--	<1.726	<1.213	<2.661	<1.887	<2.661	<1.869	<2.321
SWRCB MLs (µg/L) SIP Appendix 4	0.2	2	5	5	2	10	0.1	2	5	1
BP Obj (µg/L)	-	-	-	-	0.2	-	**0.2**	-	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	-	**9,600** a	**0.00012** a,c,s	**0.0044** a,c	**0.0044** a,c	**0.0044** a,c	-	**0.0044** a,c	-	**0.031** a,c,s
H Health (µg/L) Org Only	-	110,000 a	0.00054 a,c,t	0.049 a,c	0.049 a,c	0.049 a,c	-	0.049 a,c	-	1.4 a,c,t
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**Bis (2-Chloro-isopropyl) Ether #67**	**Bis (2-Ethyl-hexyl) Phthalate #68**	**4-Bromophenyl Phenyl Ether #69**	**Butylbenzyl Phthalate #70**	**2-Chloro-naphthalene #71**	**4-Chlorophenyl Phenyl Ether #72**	**Chrysene #73**	**Dibenzo(a,h) Anthracene #74**	**1,2-Dichloro-benzene #75**	**1,3-Dichloro-benzene #76**
MEC (µg/L)	**<3.270**	**<4.044**	**<1.333**	**<1.332**	**<1.762**	**<1.116**	**<1.240**	**<1.638**	**<4.017**	**<3.976**
Background (µg/L)	<3.270	<4.044	<1.333	<1.332	<1.762	<1.116	<1.240	<1.638	<4.017	<3.976
SWRCB MLs (µg/L) SIP Appendix 4	2	5	5	10	10	5	5	0.1	2	1
BP Obj (µg/L)	-	4	-	-	-	-	-	-	**600**	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	**1,400** a	**1.8** a,c,s	-	**3,000** a	**1,700** a	-	**0.0044** a,c	**0.0044** a,c	2,700 a	**400**
H Health (µg/L) Org Only	170,000 a,t	5.9 a,c,t	-	5,200 a	4,300 a	-	0.049 a,c	0.049 a,c	12,000 a,t	2,600
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**1,4-Dichloro-benzene #77**	**3,3-Dichloro-benzidine #78**	**Diethyl Phthalate #79**	**Dimethyl Phthalate #80**	**Di-n-Butyl Phthalate #81**	**2,4-Dinitro-toluene #82**	**2,6-Dinitro-toluene #83**	**Di-n-Octyl Phthalate #84**	**1,2-Diphenyl-hydrazine #85**	**Fluoranthene #86**	**Fluorene #87**
MEC (µg/L)	**<4.363**	**<2.579**	**<2.165**	**<2.237**	**<4.337**	**<3.699**	**<1.245**	**<0.934**	--	**<1.200**	**<0.953**
Background (µg/L)	<4.363	<2.579	<2.165	<2.237	<4.337	<3.699	<1.245	<0.934	--	<1.200	<0.953
SWRCB MLs (µg/L) SIP Appendix 4	1	5	2	2	10	5	5	10	1	0.05	0.1
BP Obj (µg/L)	**5**	-	-	-	**700**	-	-	-	-	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	400	**0.04** a,c,s	**23,000** a,s	**313,000** s	2,700 a,s	**0.11** c,s	-	-	**0.040** a,c,s	**300** a	**1,300** a
H Health (µg/L) Org Only	2,600	0.077 a,c,t	120,000 a,t	2,900,000 t	12,000 a,t	9.1 c,t	-	-	0.54 a,c,t	370 a	14,000 a
Reasonable Potential	N	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**Hexachloro-benzene #88**	**Hexachloro-butadiene #89**	**Hexachloro-cyclopentadiene #90**	**Hexachloro-ethane #91**	**Indeno(1,2,3-cd) Pyrene #92**	**Isophorone #93**	**Naphthalene #94**	**Nitro-benzene #95**	**N-nitrosodi-methylamine #96**	**N-Nitrosodi-n-Propylamine #97**
MEC (µg/L)	**<1.527**	**<4.205**	**--**	**<0.295**	**<1.499**	**<1.493**	**<3.053**	**<15.0**	**<2.162**	**<2.034**
Background (µg/L)	<1.527	<4.205	--	<0.295	<1.499	<1.493	<3.053	<15.0	<2.162	<2.034
SWRCB MLs (µg/L) SIP Appendix 4	1	1	5	1	0.05	1	0.2	1	5	5
BP Obj (µg/L)	1	-	**50**	-	-	-	-	-	-	-
CMC (µg/L)	-	-	-	-	-	-	-	-	-	-
CCC (µg/L)	-	-	-	-	-	-	-	-	-	-
H Health (µg/L) Water & Org Only	**0.00075** a,c	**0.44** a,c,s	240 a,s	**1.9** a,c,s	**0.0044** a,c	**8.4** c,s	-	**17** a,s	**0.00069** a,c,s	**0.005** a
H Health (µg/L) Org Only	0.00077 a,c	50 a,c,t	17,000 a,j,t	8.9 a,c,t	0.049 a,c	600 c,t	-	1,900 a,j,t	8.1 a,c,t	1.4 a
Reasonable Potential	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**N-Nitrosodi-phenylamine #98**	**Phenanthrene #99**	**Pyrene #100**	**1,2,4-Trichloro-benzene #101**	**Aldrin #102**	**alpha-BHC #103**	**beta-BHC #104**	**gamma-BHC #105**	**delta-BHC #106**	**Chlordane #107**	**4,4-DDT #108**
MEC (µg/L)	**<2.162**	**<1.522**	**<1.346**	**<3.764**	**<0.001**	**<0.001**	**<0.003**	**<0.001**	**<0.001**	**<0.063**	**<1.548**
Background (µg/L)	<2.162	<1.522	<1.346	<3.764	<0.001	<0.001	<0.003	<0.001	<0.001	<0.063	<1.548
SWRCB MLs (µg/L) SIP Appendix 4	1	0.05	0.05	1	0.005	0.01	0.005	0.02	0.005	0.1	0.01
BP Obj (µg/L)	-	-	-	**70**	-	-	-	0.2	-	0.1	-
CMC (µg/L)	-	-	-	-	3 g	-	-	0.95 w	-	2.4 g	1.1 g
CCC (µg/L)	-	-	-	-	-	-	-	-	-	0.0043 g	0.001 g
H Health (µg/L) Water & Org Only	**5.0** a,c,s	-	**960** a	-	**0.00013** a,c	**0.0039** a,c	**0.014** a,c	**0.019** c	-	**0.00057** a,c	**0.00059** a,c
H Health (µg/L) Org Only	16 a,c,t	-	11,000 a	-	0.00014 a,c	0.013 a,c	0.046 a,c	0.063 c	-	0.00059 a,c	0.00059 a,c
Reasonable Potential	N	N	N	N	N	N	N	N	N	N	N

Constituent CTR #	**4,4-DDE #109**	**4,4-DDD #110**	**Dieldrin #111**	**alpha-Endosulfan #112**	**beta-Endosulfan #113**	**Endosulfan Sulfate #114**	**Endrin #115**	**Endrin Aldehyde #116**	**Heptachlor #117**	**Heptachlor Epoxide #118**	**Polychlorinated biphenyls (PCBs) #119-125**	**Toxaphene #126**
MEC (µg/L)	**<1.448**	**<2.086**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.016**	**<0.001**	**<0.002**	**<0.12**	**<0.87**
Background (µg/L)	<1.448	<2.086	<0.001	<0.001	<0.001	<0.001	<0.001	<0.016	<0.001	<0.002	<0.12	<0.87
SWRCB MLs (µg/L) SIP Appendix 4	0.05	0.05	0.01	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.5	0.5
BP Obj (µg/L)	-	-	-	-	-	-	2	-	0.01	0.01	0.5	3
CMC (µg/L)	-	-	0.24 w	0.22 g	0.22 g	-	0.086 w	-	0.52 g	0.52 g		0.73
CCC (µg/L)	-	-	0.056 w	**0.056** g	**0.056** g	-	**0.036** w	-	0.0038 g	0.0038 g	0.014 u	0.0002
H Health (µg/L) Water & Org Only	**0.00059** a,c	**0.00083** a,c	**0.00014** a,c	110 a	110 a	**110** a	0.76 a	**0.76** a	**0.00021** a,c	**0.00010** a,c	**0.00017** c,v	**0.00073** a,c
H Health (µg/L) Org Only	0.00059 a,c	0.00084 a,c	0.00014 a,c	240 a	240 a	240 a	0.81 a,j	0.81 a,j	0.00021 a,c	0.00011 a,c	0.00017 c,v	0.00075 a,c
Reasonable Potential	N	N	N	N	N	N	N	N	N	N	N	N

**Footnotes taken from 40 CFR 131.38 (b)(1)