

US EPA ARCHIVE DOCUMENT

**APPENDIX F**  
**TIER 1 LCTV TABLES**

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**Table F-1: Landfill No-Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Acenaphthene	83-32-9		1.47E+00				2.2		2.2	3.3		2.2		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	2.2		2.2		0.49	2.2		0.091
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		2.2		2.2	5.4	1.0E+03 <sup>b</sup>	2.2		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		2.2		2.2		6.9	2.2		
Acetophenone	98-86-2		2.45E+00				2.2		2.2	5.4		2.2		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	2.6		2.6	0.013		2.6	5.5E-05	13
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		2.2		2.2	27	33	2.2		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	2.3		2.3	9.4E-03 <sup>d</sup>	0.088	2.3	4.1E-05 <sup>d</sup>	2.3E-03
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	1.3E+05		1.3E+05	97 <sup>c</sup>		1.4E+05	0.77 <sup>c</sup>	1.4 <sup>c</sup>
Allyl alcohol	107-18-6		1.22E-01				2.2		2.2	0.27		2.2		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	2.2		2.2		2.1	2.2	0.037	4.9
Anthracene	120-12-7		7.34E+00				2.3		2.3	17 <sup>c</sup>		2.3		
Antimony	7440-36-0	6.00E-03	9.79E-03					0.014		0.023				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				0.11		0.016			1.9E-04	
Barium	7440-39-3	2.00E+00	1.71E+00					4.3		3.8				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	5.3		5.4			5.4	4.3E-04	0.097 <sup>c</sup>
Benzene	71-43-2	5.00E-03	1.76E-03	1.90E-01	1.60E-03		2.2	0.011	2.2		0.42	2.2	3.9E-03	3.6E-03
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	2.2		2.2	0.2		2.2	9.3E-07	5.7
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	58	0.012 <sup>c</sup>	59			59	7.8E-04	0.32 <sup>c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	59		59			59	4.8E-03 <sup>c</sup>	0.037 <sup>c</sup>
Benzyl alcohol	100-51-6		7.34E+00				2.2		2.2	16		2.2		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	19 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					0.026		0.14				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	6.8		6.8		1.0E+03 <sup>e</sup>	6.8	6.00E-04	7.50E-03
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	2.2		2.2	2.2		2.2	3.10E-03	0.013
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	2.5	0.2	2.5	1.2		2.5	3.9E-03	2.0E-03
Bromomethane	74-83-9		3.43E-02		1.50E-02		2.1E+07		2.1E+07	80 <sup>d</sup>	1.0E+03 <sup>b</sup>	2.1E+07		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	2.2		2.2		0.13	2.2		8.9E-05
Butanol n-	71-36-3		2.45E+00				2.2		2.2	5.4		2.2		
Butyl benzyl phthalate	85-68-7		4.90E+00				2.7		2.7	13 <sup>c</sup>		2.7		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				2.2	0.015	2.2	0.054		2.2		
Cadmium	7440-43-9	5.00E-03	1.22E-02					0.011		0.027				
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		2.4		2.4	5.9	4.6	2.4		
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04	2.8	0.014	2.8	0.048	0.059	2.8	2.1E-03	2.2E-03
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03	160	0.030 <sup>a</sup>	160	0.030 <sup>a</sup>	0.030 <sup>a</sup>	160	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		2.2		2.2	1.1	0.049	2.2		
Chloroaniline p-	106-47-8		9.79E-02				2.2		2.2	0.22		2.2		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		2.2	0.22	2.2	1.1	0.44	2.2		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	5.8		5.8	2.8		5.8	2.1E-03	6.9
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	2.4	0.19	2.4	1.2		2.4	2.7E-03	1.8E-03
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		2.2		2.2		66	2.2		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		2.3	0.18	2.3	0.55	0.74	2.3		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	2.2		2.2		0.57	2.2	0.016	0.013
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		2.2		2.2	0.27	0.022	2.2		
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					0.31		81				
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					0.25		0.19				
Chrysene	218-01-9			8.05E-04		7.30E-03	5.3		5.4			5.4	4.3E-03 <sup>c</sup>	0.039 <sup>c</sup>

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-1: Landfill No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Cobalt	7440-48-4		4.90E-01					1.1							
Copper	7440-50-8	1.30E+00					3								
Cresol m-	108-39-4		1.22E+00		1.20E+03	2.2		2.2	2.7	200 <sup>a</sup>	2.2				
Cresol o-	95-48-7		1.22E+00		8.80E+02	2.2		2.2	2.7	200 <sup>a</sup>	2.2				
Cresol p-	106-44-5		1.22E-01		1.30E+03	2.2		2.2	0.27	200 <sup>a</sup>	2.2				
Cresols	1319-77-3		1.22E+00		1.10E+03	2.2		2.2	2.7	1.0E+03 <sup>b</sup>	2.2				
Cumene	98-82-8		2.45E+00		1.30E+00	2.2		2.2	5.5	2.9	2.2				
Cyclohexanol	108-93-0		4.16E-04		3.90E-04	2.2		2.2	9.2E-04	8.6E-04	2.2				
Cyclohexanone	108-94-1		1.22E+02			2.2		2.2	270		2.2				
DDD	72-54-8			4.02E-04		1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>			
DDE	72-55-9			2.84E-04		1.8E+13		1.8E+13			1.8E+13	1.0E+03 <sup>b,c</sup>			
DDT p,p'-	50-29-3		1.22E-02		2.84E-04	8.80E-03		1.0E+30		1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Diallate	2303-16-4			1.58E-03		8.0E+03		8.0E+03			8.0E+03	13			
Dibenz(a,h)anthracene	53-70-3			1.32E-05		3.80E-01	1.2E+10	1.2E+10			1.2E+10	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	2.8	5.5E-04	2.8	8.0E-03	2.8	1.9E-04	0.22		
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		2.2	1.3	2.2	4.9	1.7	2.2			
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	2.2	0.17	2.2		6.7	2.2	8.9E-03	2.9E-03	
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	2.2		2.2		2.2	4.8E-04	11 <sup>c</sup>		
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		2.2		2.2	11	1.3	2.2			
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	2.5	9.9E-03 <sup>e</sup>	2.5	0.36 <sup>d</sup>	0.45 <sup>d</sup>	2.5	6.7E-04 <sup>e</sup>	0.012 <sup>d</sup>	
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	2.5	7.0E-03 <sup>d</sup>	2.5	0.26 <sup>e</sup>	0.32 <sup>d</sup>	2.5	4.7E-04 <sup>d</sup>	1.5E-03	
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				2.2	0.15	2.2	0.54		2.2			
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				2.2	0.22	2.2	1.1		2.2			
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	2.2	0.016	2.2	0.49	0.47	2.2	3.6E-04	4.9E-04	
Dichlorophenol 2,4-	120-83-2		7.34E-02				2.2		2.2	0.16		2.2			
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				2.2	0.15	2.2	0.54		2.2			
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		3.2	0.016	3.2	7	0.044	3.2	4.5E-03		
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	2.2		2.2	1.6	0.13	2.2	2.1E-03	6.4E-03	
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.5E+15	1.5E+15	1.0E+03 <sup>b,c</sup>		1.5E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Diethyl phthalate	84-66-2		1.96E+01				2.9		2.9	58		2.9			
Diethylstilbestrol	56-53-1			2.05E-08			2.3		2.3			2.3	4.7E-08		
Dimethoate	60-51-5		4.90E-03				550		550	0.55 <sup>d</sup>	1.0E+03 <sup>b</sup>	550			
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			2.2		2.2			2.2	0.015		
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		2.2		2.2	5.4	1.0E+03 <sup>b</sup>	2.2			
Dimethylbenz(a)anthracene 7,12-	57-97-6					3.00E-03	6.5E+12	6.6E+12				6.6E+12		1.0E+03 <sup>b,c</sup>	
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			2.2		2.2			2.2	2.3E-05		
Dimethylphenol 2,4-	105-67-9		4.90E-01				2.2		2.2	1.1		2.2			
Di-n-butyl phthalate	84-74-2		2.45E+00				2.8		2.8	6.7		2.8			
Dinitrobenzene 1,3-	99-65-0		2.45E-03				2.2		2.2	5.4E-03		2.2			
Dinitrophenol 2,4-	51-28-5		4.90E-02				2.2		2.2	0.11		2.2			
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	2.2		2.2	0.11		2.2	3.1E-04	0.13 <sup>a</sup>	
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			2.2		2.2	0.054		2.2	3.1E-04		
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	2.2		2.2		1.0E+03 <sup>b</sup>	2.2	0.019	0.4	
Diphenylamine	122-39-4		6.12E-01				2.2		2.2	1.4		2.2			
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	2.2		2.2			2.2	2.70E-04	0.044	
Disulfoton	298-04-4		9.79E-04				2.1E+06	2.20E+06	1.0E+03 <sup>b,c</sup>		2.20E+06				

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-1: Landfill No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				2.2		2.2	0.33		2.2		
Endrin	72-20-8	2.00E-03	7.34E-03				7.7E+04	0.02 <sup>a</sup>	7.7E+04	0.020 <sup>a</sup>		7.7E+04		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		2.2		2.2		0.53	2.2		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		2.2		2.2	22	1.0E+03 <sup>b</sup>	2.2		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		2.2		2.2	16	660	2.2		
Ethyl acetate	141-78-6		2.20E+01				7.4		7.4	160		7.4		
Ethyl ether	60-29-7		4.9				2.2		2.2	11		2.2		
Ethyl methacrylate	97-63-2		2.20E+00				3.9		3.9	8.5		3.9		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	2.2	1.6	2.2	5.4	7.3	2.2		0.024
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	25	1.3E-03	25		0.025	25	2.9E-05	2.1E-03
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		2.2		2.2	110	1.0E+03 <sup>b</sup>	2.2		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	2.2		2.2	4.3E-03		2.2	1.9E-03	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				2.5		2.5	2.5 <sup>c</sup>		2.5		
Fluoride	16984-48-8	4.00E+00	2.90E+00					8.7		6.3				
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	2.2		2.2	11	110	2.2		3.3
Formic acid	64-18-6		4.90E+01				2.2		2.2	110		2.2		
Furfural	98-01-1		7.34E-02		2.20E+01		2.2		2.2	0.16	49	2.2		
HCH beta-	319-85-7			5.36E-05		1.70E-02	2.2		2.2			2.2	1.2E-04	0.038
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05	1.60E-03		4.2E+06	0.26 <sup>c,d</sup>	4.3E+06	0.4 <sup>a,b,c,d</sup>	0.4 <sup>a,e</sup>	4.3E+06	0.4 <sup>a,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		0.196	1.53E-05	3.60E-04		7.4E+06	0.25 <sup>e</sup>	7.6E+06	0.56 <sup>d</sup>	3.0 <sup>c,e</sup>	7.6E+06	120 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05	1.50E-05		1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05	2.80E-04		3.9E+08	1.0E+03 <sup>b,c</sup>	3.9E+08	1.0E+03 <sup>b,c</sup>		3.9E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03	6.10E-04		2.4		2.4	0.018		2.4	3.0E-03	1.5E-03
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05	3.60E-05		6.3	6.3E-03 <sup>c</sup>	6.3	0.12 <sup>c</sup>		6.3	3.8E-04	2.3E-04
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09	1.44E-07		1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09	1.43E-07		4.6E+07		4.6E+07			4.8E+07	0.30 <sup>c</sup>	6.9 <sup>c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03	3.30E-03		2.2		2.2	0.055		2.2	0.015	7.4E-03
Hexachlorophene	70-30-4		7.34E-03				3.1		3.1	0.023		3.1		
Hexane n-	110-54-3		2.69E+02		6.60E-01		2.2		2.2	600 <sup>c</sup>	1.5	2.2		
Hydrogen Sulfide	7783-06-4		7.34E-02				2.2		2.2	0.16		2.2		
Indeno(1,2,3-cd)pyrene	193-39-5			8.05E-05	3.80E-02		1.3E+06		1.3E+06			1.3E+06	110 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				2.2		2.2	16		2.2		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		2.2		2.2	11	1.0E+03 <sup>b</sup>	2.2	0.23	
Kepone	143-50-0		1.22E-02				2.3		2.3	0.028		2.3		
Lead	7439-92-1	1.50E-02						0.037						
Manganese	7439-96-5		1.15E+00							2.5				
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			5.8E-03		7.2E-03	2.1E-03			
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		2.3		2.3	5.7E-03	0.015	2.3		
Methanol	67-56-1		1.22E+01		1.54E+03		2.2		2.2	27	1.0E+03 <sup>b</sup>	2.2		
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>		1.0E+30		
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		2.2		2.2	0.054	970	2.2		
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		2.2		2.2	0.11	1.0E+03 <sup>b</sup>	2.2		
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		2.2		2.2	32	73	2.2		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		2.2		2.2	4.3	2.7	2.2		

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-1: Landfill No-Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		4.6		4.6	84 <sup>d</sup>	24	4.6		
Methyl parathion	298-00-0		6.12E-03				8.1E+04		8.1E+04	1.3 <sup>cd</sup>	1.0E+03 <sup>e</sup>	8.1E+04		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		2.2		2.2		38	2.2		
Methylcholanthrene 3-	56-49-5					1.20E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				2.2		2.2	0.54		2.2		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	2.2	0.011	2.2	3.3	22	2.2	0.029	0.063
Molybdenum	7439-98-7		1.22E-01							0.28				
Naphthalene	91-20-3		4.90E-01		1.90E-02		2.2		2.2	1.1	0.042	2.2		
Nickel	7440-02-0		4.90E-01							1.1				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		2.2		2.2	0.027	0.33	2.2		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	2.2		2.2		0.73	2.2		5.1E-05
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	2.2		2.2			2.2	1.4E-06	9.5E-05
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	2.2		2.2	4.30E-04		2.2	4.2E-06	8.8E-04
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	2.2		2.2			2.2	4.0E-05	4.4E-05
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	2.2		2.2			2.2	3.0E-05	3.3E-03
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	2.2		2.2	1.1		2.2	0.044	1.2
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	2.2		2.2			2.2	9.7E-06	9.9E-03
Nitrosopiperidine N-	100-75-4					8.70E-03	2.2		2.2			2.2		0.019
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	2.2		2.2			2.2	1.0E-04	2
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				2.3		2.3	0.11		2.3		
Parathion (ethyl)	56-38-2		0.147				1.1E+09		1.2E+09	1.0E+03 <sup>b,c</sup>		1.2E+09		
Pentachlorobenzene	608-93-5		1.96E-02				6.1		6.1	0.12		6.1		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	3		3			3	3.7E-09	1.9E-07
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	4.4E+06		4.5E+06			4.5E+06	2.8E-03 <sup>c</sup>	0.27 <sup>c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			2.5		2.5	0.18		2.5	9.2E-04	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	2.2	2.2E-03	2.2	1.6		2.2	1.8E-03	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01		9.00E+02		2.2		2.2	32	1.0E+03 <sup>b</sup>	2.2		
Phenyl mercuric acetate	62-38-4		1.96E-03				2.2		2.2	4.3E-03		2.2		
Phenylenediamine 1,3-	108-45-2		1.47E-01				2.2		2.2	0.32		2.2		
Phorate	298-02-2		4.90E-03				1.00E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.00E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	1.70E+05	83 <sup>c</sup>	1.7E+05	82 <sup>c</sup>		1.7E+05	40 <sup>c</sup>	23 <sup>c</sup>
Pronamide	23950-58-5		1.84E+00				2.3		2.3	4.2		2.3		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	2.2		2.2		1.1	2.2	8.9E-04	0.038
Pyrene	129-00-0		7.34E-01				2.9		2.9	2.2 <sup>c</sup>		2.9		
Pyridine	110-86-1		2.45E-02		1.40E+00		2.2		2.2	0.054	3.1	2.2		
Safrole	94-59-7			5.36E-04			2.2		2.2			2.2	1.2E-03	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.12		0.3				
Silver	7440-22-4		1.22E-01							0.37				
Strychnine and salts	57-24-9		7.34E-03				2.2		2.2	0.016		2.2		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		2.2	0.22	2.2	11	8	2.2		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				2.3		2.3	0.017		2.3		
Tetrachlorodibenzofuran, 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	2.2E+12		2.2E+12			2.2E+12	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin, 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	1.4E+04	4.1E-04 <sup>c</sup>	1.4E+04	3.4E-04 <sup>c</sup>		1.4E+04	9.0E-06 <sup>c</sup>	3.1E-05 <sup>c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	3	0.014 <sup>e</sup>	3	2.2		3	0.011	5.7E-03
Tetrachloroethane 1,1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	17	0.014 <sup>e</sup>	17	24	0.64 <sup>e</sup>	17	8.0E-03	8.3E-03
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	2.2	0.011	2.2	0.54	0.70 <sup>a</sup>	2.2	4.10E-03	0.047
Tetrachlorophenol 2,3,4,6-	58-90-2		0.734				2.2		2.2	1.6		2.2		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-1: Landfill No-Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil									
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)					
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Thallium	7440-28-0		2.00E-03	1.96E-03				5.8E-03		5.8E-03						
Thiram [Thiuram]	137-26-8			1.22E-01			2.2			2.2	0.27			2.2		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		2.2	2.2	2.2	11	2.9		2.2			
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	2.2		2.2				2.2	6.7E-05		17
Toluidine o-	95-53-4			4.02E-04		3.60E-02	2.2		2.2				2.2	8.9E-04		0.08
Toluidine p-	106-49-0			5.08E-04			2.2		2.2				2.2	1.1E-03		
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	6.3E+03	0.50 <sup>a</sup>	6.3E+03				6.3E+03	0.50 <sup>a</sup>		0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	2.3	0.18	2.3		1.1		2.3	0.028		0.044
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02			9.50E+01	2.2		2.2	1.0E+03 <sup>b,c</sup>	210 <sup>c</sup>		2.2			
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01			8.30E-01	2.3	0.16	2.3	0.56	1.9		2.3			
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00			6.90E+00	98	0.021 <sup>d</sup>	98	0.67 <sup>d</sup>	0.64 <sup>d</sup>		98	4.9E-04 <sup>e</sup>		6.72E-04 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03	2.5	0.012	2.5	0.24	0.64 <sup>e</sup>		2.5	4.9E-04 <sup>d</sup>		6.7E-04 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	2.2	0.011	2.2		0.50 <sup>a</sup>		2.2	0.019		0.015
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00			2.10E+00	2.2		2.2	16	4.7		2.2			
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				2.2		2.2	5.4			2.2			
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	2.2		2.2				2.2	0.019		0.62
Trichlorophenoxy)propionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				2.2	0.11	2.2	0.43			2.2			
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				2.2		2.2	0.54			2.2			
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		2.7		2.7	0.39	0.09		2.7	3.7E-05		
Triethylamine	121-44-8					1.10E-01	2.2		2.2		0.24		2.2			
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				2.2		2.2	1.6			2.2			
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			21		21				21	2.0E-04		
Vanadium	7440-62-2		1.71E-01							0.5						
Vinyl acetate	108-05-4		2.45E+01			1.20E+00	2.2		2.2	54	2.7		2.2			
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	2.2	4.4E-03	2.2	0.16	0.20 <sup>a</sup>		2.2	3.0E-04		5.5E-03
Xylene m-	108-38-3		4.90E+01			1.30E+00	2.2		2.2	110	2.9		2.2			
Xylene o-	95-47-6		4.90E+01			1.40E+00	2.2		2.2	110	3.1		2.2			
Xylene p-	106-42-3		4.90E+01			1.30E+00	2.2		2.2	110	2.9		2.2			
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01			1.40E+00	2.2	22	2.2	110	3.1		2.2			
Zinc	7440-66-6		7.34E+00							16						

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-2: Landfill Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Acenaphthene	83-32-9						6.4		6.4	9.4 <sup>c</sup>					
Acetaldehyde [Ethanal]	75-07-0		1.47E+00			2.20E-01	4.10E-02	6.1		6.1		1.3	6.1		0.25
Acetone (2-propanone)	67-64-1		2.45E+00			1.50E+03		6.1		6.1	15	1.0E+03 <sup>b</sup>	6.1		
Acetonitrile (methyl cyanide)	75-05-8					3.10E+00		6.1		6.1		19	6.1		
Acetophenone	98-86-2		2.45E+00					6.1		6.1	15		6.1		
Acrolein	107-02-8		4.90E-01			3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00		8.8		8.8	0.043		8.8	1.9E-04	45
Acrylic acid [propenoic acid]	79-10-7		1.22E+01			1.50E+01		6.1		6.1	74	91	6.1		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04		3.80E-02	1.00E-03	6.6		6.6	0.032 <sup>d</sup>	0.25	6.6	1.4E-04 <sup>d</sup>	6.6E-03
Aldrin	309-00-2		7.34E-04	5.68E-06			1.00E-05	1.6E+15		1.6E+15	1.0E+03 <sup>b,c</sup>		1.6E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01					6.1		6.1	0.74		6.1		
Aniline (benzeneamine)	62-53-3			1.69E-02		9.30E-01	2.20E+00	6.1		6.1		5.7	6.1	0.10	13
Anthracene	120-12-7		7.34E+00					7.2		7.2	53 <sup>c</sup>		7.2		
Antimony	7440-36-0	6.00E-03	9.79E-03						0.040		0.068				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05					0.33		0.050			1.3E-03	
Barium	7440-39-3	2.00E+00	1.71E+00						13		12				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02		280		280			280	0.023 <sup>c</sup>	5.1 <sup>c</sup>
Benzene	71-43-2	5.00E-03	1.76E-03	1.90E-01		1.60E-03		6.1	0.030	6.1		0.50 <sup>a</sup>	6.1	0.011	0.010
Benzidine	92-87-5		7.34E-02			4.20E-07	2.60E+00	6.1		6.1	0.45		6.1	2.6E-06	16
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03		5.1E+06	1.0E+03 <sup>b,c</sup>	5.1E+06			5.2E+06	69 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04		6.2E+06		6.2E+06			6.4E+06	520 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Benzyl alcohol	100-51-6		7.34E+00					6.1		6.1	45		6.1		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04		1.0E+30		1.0E+30	52 <sup>a</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02						0.13		0.45				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03		79		79		1.0E+03 <sup>a</sup>	79	7.0E-03	0.087
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03		6.1		6.1	6.0		6.1	8.4E-03	0.036
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04		7.5	0.60	7.5	3.7		7.5	0.012	6.0E-03
Bromomethane	74-83-9		3.43E-02			1.50E-02		1.0E+30		1.0E+30	220 <sup>d</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Butadiene 1, 3-	106-99-0					6.00E-02	4.00E-05	6.1		6.1		0.37	6.1		2.4E-04
Butanol n-	71-36-3		2.45E+00					6.1		6.1	15		6.1		
Butyl benzyl phthalate	85-68-7		4.90E+00					11		11	52 <sup>c</sup>		11		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02					6.1	0.043	6.1	0.15		6.1		
Cadmium	7440-43-9	5.00E-03	1.22E-02						0.033		0.083				
Carbon disulfide	75-15-0		2.45E+00			1.90E+00		7.1		7.1	17		7.1		
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04		11.0	0.055	11	0.2	0.23	11	8.2E-03	8.4E-03
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03		8.2E+07	0.030 <sup>a</sup>	8.4E+07	0.030 <sup>a</sup>	0.030 <sup>a</sup>	8.5E+07	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01			2.20E-02		6.1		6.1	3.0	0.13	6.1		
Chloroaniline p-	106-47-8		9.79E-02					6.1		6.1	0.6		6.1		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01			2.00E-01		6.1	0.61	6.1	3.0	1.2	6.1		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00		36		36	17 <sup>c</sup>		36	0.013	43 <sup>b</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04		6.9	0.55	6.9	3.4		6.9	7.9E-03	5.2E-03
Chloroethane [Ethyl chloride]	75-00-3					3.00E+01		6.1		6.1		180	6.1		
Chloroform	67-66-3	8.00E-02	2.45E-01			3.30E-01		6.3	0.50	6.3	1.5	2.1	6.3		
Chloromethane	74-87-3			7.43E-03		2.60E-01	5.90E-03	6.1		6.1		1.6	6.1	0.045	0.036
Chlorophenol 2-	95-57-8		1.22E-01			9.70E-03		6.1		6.1	0.74	0.059	6.1		
Chloropropene 3- (Allyl Chloride)	107-05-1					3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01						1.3		260				
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02						1.0		0.75				

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-2: Landfill Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Chrysene	218-01-9			8.05E-04		7.30E-03	280		280			280	0.23 <sup>c</sup>	2.0 <sup>c</sup>
Cobalt	7440-48-4		4.90E-01						3.1					
Copper	7440-50-8	1.30E+00						9.4						
Cresol m-	108-39-4		1.22E+00		1.20E+03		6.1		6.1	7.4	200 <sup>a</sup>	6.1		
Cresol o-	95-48-7		1.22E+00		8.80E+02		6.1		6.1	7.4	200 <sup>a</sup>	6.1		
Cresol p-	106-44-5		1.22E-01		1.30E+03		6.1		6.1	0.74	200 <sup>a</sup>	6.1		
Cresols	1319-77-3		1.22E+00		1.10E+03		6.1		6.1	7.4	1.0E+03 <sup>b</sup>	6.1		
Cumene	98-82-8		2.45E+00		1.30E+00		6.2		6.2	15	8.0	6.2		
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		6.1		6.1	2.5E-03	2.4E-03	6.1		
Cyclohexanone	108-94-1		1.22E+02				6.1		6.1	740		6.1		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT p,p'-	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			4.9E+08		4.9E+08			4.9E+08	1.0E+03 <sup>b,c</sup>	
Dibenz[a,h]anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	9.8	2.0E-03	9.8		0.028	9.8	6.7E-04	0.77
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		6.1	3.7	6.1	13	4.7	6.1		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	6.1	0.46	6.1		7.5 <sup>a</sup>	6.1	0.025	7.9E-03
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	6.1		6.1			6.1	1.3E-03	0.30 <sup>c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		6.1		6.1	30	3.5	6.1		
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	7.8	0.027 <sup>a</sup>	7.8	0.45 <sup>d</sup>	0.45 <sup>d</sup>	7.8	1.8E-03 <sup>a</sup>	0.034 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	7.6	0.019 <sup>a</sup>	7.6	0.32 <sup>a</sup>	0.32 <sup>d</sup>	7.6	1.3E-03 <sup>d</sup>	4.8E-03
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				6.1	0.43	6.1	1.5		6.1		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				6.1	0.61	6.1	3.0		6.1		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	6.1	0.043	6.1	0.70 <sup>a</sup>	0.70 <sup>a</sup>	6.1	9.8E-04	1.3E-03
Dichlorophenol 2,4-	120-83-2		7.34E-02				6.1		6.1	0.45		6.1		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				6.1	0.43	6.1	1.5		6.1		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		14.0	0.071	14.0	31	0.20	14.0	0.02	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	6.1		6.1	4.5	0.37	6.1	5.9E-03	0.018
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				11		11	220		11		
Diethylstilbestrol	56-53-1			2.05E-08			6.8		6.8			6.8	1.4E-07	
Dimethoate	60-51-5		4.90E-03				1.1E+06		1.2E+06	1.5 <sup>d</sup>	1.0E+03 <sup>a</sup>	1.2E+06		
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			6.1		6.1			6.1	0.042	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		6.1		6.1	15	1.0E+03 <sup>b</sup>	6.1		
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			6.1		6.1			6.1	6.4E-05	
Dimethylphenol 2,4-	105-67-9		4.90E-01				6.1		6.1	3.0		6.1		
Di-n-butyl phthalate	84-74-2		2.45E+00				12		12	28 <sup>c</sup>		12		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				6.1		6.1	0.015		6.1		
Dinitrophenol 2,4-	51-28-5		4.90E-02				6.1		6.1	0.30		6.1		
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	6.1		6.1	0.13 <sup>a</sup>		6.1	8.6E-04	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			6.1		6.1	0.15		6.1	8.6E-04	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	6.1		6.1		1.0E+03 <sup>b</sup>	6.1	0.053	1.1

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-2: Landfill Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Diphenylamine	122-39-4			6.12E-01			6.1		6.1	3.8					
Diphenylhydrazine 1, 2-	122-66-7				1.21E-04		2.00E-02	6.1		6.1			6.1	7.4E-04	0.12
Disulfoton	298-04-4		9.79E-04					1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01					6.3		6.3	0.92 <sup>c</sup>		6.3		
Endrin	72-20-8	2.00E-03	7.34E-03					1.1E+22	0.020 <sup>a</sup>	1.1E+22	0.020 <sup>a</sup>		1.1E+22		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01			6.1		6.1	1.5	6.1			
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03			6.1		6.1	60	1.0E+03 <sup>b</sup>	6.1		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02			6.1		6.1	45	1.0E+03 <sup>b</sup>	6.1		
Ethyl acetate	141-78-6		2.20E+01					55		55	1.0E+03 <sup>b</sup>		55		
Ethyl ether	60-29-7		4.9					6.1		6.1	30		6.1		
Ethyl methacrylate	97-63-2		2.20E+00					17		17	37		17		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	6.1	4.3	6.1	15	20	6.1			0.067
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	1.3E+03	0.063	1.3E+03	6.1	1.2	1.3E+03	1.4E-03		0.11
Ethylene glycol	107-21-1		4.90E+01		1.20E+04			6.1		6.1	300	1.0E+03 <sup>b</sup>	6.1		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	6.1		6.1	0.012		6.1	5.3E-03	1.0E+03 <sup>b</sup>	
Fluoranthene	206-44-0		9.79E-01				11		11	11 <sup>c</sup>		11			
Fluoride	16984-48-8	4.00E+00	2.90E+00					27		27	20				
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	6.1		6.1	30	310	6.1			9.1
Formic acid	64-18-6		4.90E+01				6.1		6.1	300		6.1			
Furfural	98-01-1		7.34E-02		2.20E+01		6.1		6.1	0.45	130	6.1			
HCH beta-	319-85-7			5.36E-05		1.70E-02	6.2		6.2			6.2	3.3E-04	0.10	
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	1.0E+30	0.4 <sup>a,d</sup>	1.0E+30	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>	
HCH alpha-	319-84-6		0.196	1.53E-05		3.60E-04	1.0E+30	0.74 <sup>a</sup>	1.0E+30	1.6 <sup>d</sup>	8.8 <sup>c,e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>	
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	8.8		8.8	0.065		8.8	0.011	5.4E-03	
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	570	0.13 <sup>a,c</sup>	580	0.13 <sup>a,c</sup>		580	0.035 <sup>c</sup>	0.021 <sup>c</sup>	
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01			6.90E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30			
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	6.3		6.3	0.15		6.3	0.043	0.021	
Hexachlorophene	70-30-4		7.34E-03				31		31	0.22		31			
Hexane n-	110-54-3		2.69E+02		6.60E-01		6.1		6.1	1.0E+03 <sup>b,c</sup>	4.0	6.1			
Hydrogen Sulfide	7783-06-4		7.34E-02				6.1		6.1	0.45		6.1			
Indeno{1,2,3-cd}pyrene	193-39-5			8.05E-05		3.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Isobutyl alcohol	78-83-1		7.34E+00				6.1		6.1	45		6.1			
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		6.1		6.1	30	1.0E+03 <sup>b</sup>	6.1	0.62		
Kepon	143-50-0		1.22E-02				7.0		7.0	0.086		7.0			
Lead	7439-92-1	1.50E-02						0.15							
Manganese	7439-96-5		1.15E+00							8.0					
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			0.019		0.20 <sup>a,c</sup>	9.4E-03				
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		6.6		6.6	0.016	0.043	6.6			
Methanol	67-56-1		1.22E+01		1.54E+03		6.1		6.1	74	1.0E+03 <sup>b</sup>	6.1			
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>		1.0E+30			
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		6.1		6.1	0.15	1.0E+03 <sup>b</sup>	6.1			

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-2: Landfill Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Methoxyethanol acetate 2-	110-49-6		4.90E-02			5.10E+02		6.1		6.1	0.30	1.0E+03 <sup>b</sup>	6.1		
Methyl ethyl ketone	78-93-3		1.47E+01			3.30E+01		6.1		6.1	90	200 <sup>a</sup>	6.1		
Methyl isobutyl ketone	108-10-1		1.96E+00			1.20E+00		6.1		6.1	12	7.3	6.1		
Methyl methacrylate	80-62-6		3.43E+01			5.30E+00		22		22	230 <sup>a</sup>	120	22		
Methyl parathion	298-00-0		6.12E-03					1.0E+30		1.0E+30	3.5 <sup>d</sup>	1.0E+03 <sup>a</sup>	1.0E+30		
Methyl tert-butyl ether [MTBE]	1634-04-4					1.70E+01		6.1		6.1		100	6.1		
Methylcholanthrene 3-	56-49-5					1.20E-03		1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01					6.1		6.1	1.5		6.1		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02		6.2	0.031	6.2	9.2	62	6.2	0.080	0.17
Molybdenum	7439-98-7		1.22E-01								0.90				
Naphthalene	91-20-3		4.90E-01			1.90E-02		6.1		6.1	3.0	0.12	6.1		
Nickel	7440-02-0		4.90E-01								3.3				
Nitrobenzene	98-95-3		1.22E-02			1.50E-01		6.1		6.1	0.074	0.91	6.1		
Nitropropane 2-	79-46-9					3.30E-01	2.30E-05	6.1		6.1		2.0	6.1		1.4E-04
Nitrosodiethylamine N-	55-18-5			6.44E-07			4.30E-05	6.1		6.1			6.1	3.9E-06	2.6E-04
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06			4.00E-04	6.1		6.1	1.2E-03		6.1	1.2E-05	2.4E-03
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05			2.00E-05	6.1		6.1			6.1	1.1E-04	1.2E-04
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05			1.50E-03	6.1		6.1			6.1	8.4E-05	9.1E-03
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02			5.20E-01	6.1		6.1	3.0		6.1	0.12	3.2
Nitrosomethylethylamine N-	10595-95-6			4.39E-06			4.50E-03	6.1		6.1			6.1	2.7E-05	0.027
Nitrosopiperidine N-	100-75-4						8.70E-03	6.1		6.1			6.1		0.053
Nitrosopyrrolidine N-	930-55-2			4.60E-05			9.20E-01	6.1		6.1			6.1	2.8E-04	5.6
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02					6.6		6.6	0.32		6.6		
Parathion (ethyl)	56-38-2		0.147					1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Pentachlorobenzene	608-93-5		1.96E-02					660		670	13 <sup>c</sup>		670		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09			6.29E-08	22		22			22	2.78E-08	1.4E-06
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10			6.00E-08	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04				10		10	0.73 <sup>c</sup>		10	3.7E-03	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04			5.40E+01	6.1	6.E-03	6.1	4.5		6.1	4.9E-03	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01			9.00E+02		6.1		6.1	90	1.0E+03 <sup>b</sup>	6.1		
Phenyl mercuric acetate	62-38-4		1.96E-03					6.1		6.1	0.012		6.1		
Phenylenediamine 1,3-	108-45-2		1.47E-01					6.1		6.1	0.90		6.1		
Phorate	298-02-2		4.90E-03					1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01			1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04			1.40E-04	3.1E+15	1.0E+03 <sup>b,c</sup>	3.1E+15	1.0E+03 <sup>b,c</sup>		3.4E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00					6.5		6.5	12		6.5		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02		6.1		6.1		3.0	6.1	2.4E-03	0.10
Pyrene	129-00-0		7.34E-01					22		22	16 <sup>c</sup>		22		
Pyridine	110-86-1		2.45E-02			1.40E+00		6.1		6.1	0.15	5.0 <sup>a</sup>	6.1		
Safrole	94-59-7			5.36E-04				6.1		6.1			6.1	3.3E-03	
Selenium	7782-49-2	5.00E-02	1.22E-01						0.50		1.0 <sup>a</sup>				
Silver	7440-22-4		1.22E-01								5.0 <sup>a</sup>				
Strychnine and salts	57-24-9		7.34E-03					6.1		6.1	0.045		6.1		
Styrene	100-42-5	1.00E-01	4.90E+00			3.60E+00		6.1	0.61	6.1	30	22	6.1		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03					7.5		7.5	0.055		7.5		
Tetrachlorodibenzofuran, 2,3,7,8-	51207-31-9			6.19E-09			1.00E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin, 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10			2.20E-09	1.2E+13	1.0E+03 <sup>b,c</sup>	1.2E+13	1.0E+03 <sup>b,c</sup>		1.2E+13	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03			1.90E-03	13	0.039 <sup>a</sup>	13	9.4		13	0.047	0.024
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04			5.00E-04	200	0.039 <sup>a</sup>	200	300	0.64 <sup>a</sup>	200	0.068 <sup>a</sup>	0.053 <sup>a</sup>

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-2: Landfill Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	6.1	0.030	6.1	0.70 <sup>a</sup>	0.70 <sup>a</sup>	6.1	0.011	0.13
Tetrachlorophenol 2,3,4,6-	58-90-2		0.734				6.1		6.1	4.5		6.1		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					0.018		0.019				
Thiram [Thiuram]	137-26-8		1.22E-01				6.1		6.1	0.74		6.1		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		6.1	6.1	6.1	30	7.9	6.1		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	6.1		6.1			6.1	1.8E-04	46
Toluidine o-	95-53-4			4.02E-04		3.60E-02	6.1		6.1			6.1	2.4E-03	0.22
Toluidine p-	106-49-0			5.08E-04			6.1		6.1			6.1	3.1E-03	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.8E+08	0.50 <sup>a</sup>	1.8E+08			1.8E+08	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	6.5	0.52	6.5	3.2		6.5	0.080	0.12
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		6.1		6.1	1.0E+03 <sup>b,c</sup>	580 <sup>c</sup>	6.1		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		6.6	0.46	6.6	1.6	5.5	6.6		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		2.0E+04	0.059 <sup>d</sup>	2.0E+04	0.96 <sup>d</sup>	0.96 <sup>d</sup>	2.0E+04	1.4E-03 <sup>e</sup>	1.8E-03 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03	7.5	0.037	7.5	0.73	0.96 <sup>a</sup>	7.5	1.4E-03 <sup>d</sup>	1.8E-03 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	6.1	0.030	6.1		0.50 <sup>a</sup>	6.1	0.053	0.041
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		6.1		6.1	45	13	6.1		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				6.1		6.1	15		6.1		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	6.1		6.1			6.1	0.053	1.7
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				6.1	0.30	6.1	1.0 <sup>a</sup>		6.1		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				6.1		6.1	1.5		6.1		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		9.3		9.3	1.4	0.32	9.3	1.3E-04	
Triethylamine	121-44-8				1.10E-01		6.1		6.1		0.67	6.1		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				6.1		6.1	4.5		6.1		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			610		610			610	6.1E-03	
Vanadium	7440-62-2		1.71E-01							1.8				
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		6.1		6.1	150	7.3	6.1		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	6.1	0.012	6.1	0.20 <sup>a</sup>	0.20 <sup>a</sup>	6.1	8.2E-04	0.015
Xylene m-	108-38-3		4.90E+01		1.30E+00		6.1		6.1	300 <sup>c</sup>	7.9	6.1		
Xylene o-	95-47-6		4.90E+01		1.40E+00		6.1		6.1	300 <sup>c</sup>	8.5	6.1		
Xylene p-	106-42-3		4.90E+01		1.30E+00		6.1		6.1	300 <sup>c</sup>	7.9	6.1		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		6.1	61	6.1	300 <sup>c</sup>	8.6	6.1		
Zinc	7440-66-6		7.34E+00							51				

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-3: Landfill Composite Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Acenaphthene	83-32-9		1.47E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	1.5E+04		1.5E+04		1.0E+03 <sup>b</sup>	1.5E+04		620
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		1.5E+04		1.6E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.6E+04		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		1.6E+04		1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04		
Acetophenone	98-86-2		2.45E+00				2.1E+05		2.1E+05	1.0E+03 <sup>b</sup>		2.1E+05		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		1.5E+04		1.5E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.5E+04		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	9.3E+05		9.3E+05	740 <sup>d</sup>	740 <sup>d</sup>	9.3E+05	170	750 <sup>d</sup>
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01				2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>		2.7E+05		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	1.6E+04		1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04	270	1.0E+03 <sup>b</sup>
Anthracene	120-12-7		7.34E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Antimony	7440-36-0	6.00E-03	9.79E-03					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				5.0 <sup>a</sup>		5.0 <sup>a</sup>			5.0 <sup>a</sup>	
Barium	7440-39-3	2.00E+00	1.71E+00					100 <sup>a</sup>		100 <sup>a</sup>				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	1.9E+04	0.50 <sup>a</sup>	1.9E+04		0.50 <sup>a</sup>	1.9E+04	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	1.8E+04		1.9E+04	1.0E+03 <sup>b,c</sup>		1.9E+04	7.8E-03	1.0E+03 <sup>b,c</sup>
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzyl alcohol	100-51-6		7.34E+00				1.6E+05		1.6E+05	1.0E+03 <sup>b</sup>		1.6E+05		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	1.0E+03 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	1.0E+30		1.0E+30		1.0E+03 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	3.1E+04		3.1E+04	1.0E+03 <sup>b</sup>		3.1E+04	43	190
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	1.2E+07	1.0E+03 <sup>b</sup>	1.2E+07	1.0E+03 <sup>b</sup>		1.2E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bromomethane	74-83-9		3.43E-02		1.50E-02		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	2.2E+04		2.2E+04		1.0E+03 <sup>b,c</sup>	2.2E+04		0.88
Butanol n-	71-36-3		2.45E+00				1.6E+05		1.6E+05	1.0E+03 <sup>b</sup>		1.6E+05		
Butyl benzyl phthalate	85-68-7		4.90E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				1.3E+06	1.0E+03 <sup>b,c</sup>	1.4E+06	1.0E+03 <sup>b,c</sup>		1.4E+06		
Cadmium	7440-43-9	5.00E-03	1.22E-02					1.0 <sup>a</sup>		1.0 <sup>a</sup>				
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		2.4E+06		2.4E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.4E+06		
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04	1.0E+30	0.50 <sup>a</sup>	1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>	1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03	1.0E+30	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		1.8E+04		1.9E+04	1.0E+03 <sup>b</sup>	410	1.9E+04		
Chloroaniline p-	106-47-8		9.79E-02				3.4E+05		3.4E+05	1.0E+03 <sup>b</sup>		3.4E+05		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		3.3E+04	100 <sup>a</sup>	3.4E+04	100 <sup>a</sup>	100 <sup>a</sup>	3.4E+04		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	1.4E+06	1.0E+03 <sup>b</sup>	1.4E+06	1.0E+03 <sup>b</sup>		1.4E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		1.5E+04		1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		9.7E+04	6.0 <sup>a</sup>	9.7E+04	6.0 <sup>a</sup>	6.0 <sup>a</sup>	9.7E+04		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	1.5E+04		1.5E+04		1.0E+03 <sup>b</sup>	1.5E+04	110	90
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		1.9E+04		1.9E+04	1.0E+03 <sup>b</sup>	190	2.0E+04		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-3: Landfill Composite Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+30 <sup>b</sup>	1.0E+30		1.0E+30 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01				1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>					
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02				5.0 <sup>a</sup>		5.0 <sup>a</sup>					
Chrysene	218-01-9			8.05E-04		7.30E-03	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Cobalt	7440-48-4		4.90E-01						1.0E+03 <sup>b</sup>					
Copper	7440-50-8	1.30E+00					1.0E+03 <sup>b</sup>							
Cresol m-	108-39-4		1.22E+00		1.20E+03		1.9E+04		1.9E+04	200 <sup>a</sup>	200 <sup>a</sup>	1.9E+04		
Cresol o-	95-48-7		1.22E+00		8.80E+02		1.9E+04		1.9E+04	200 <sup>a</sup>	200 <sup>a</sup>	1.9E+04		
Cresol p-	106-44-5		1.22E-01		1.30E+03		1.9E+04		1.9E+04	200 <sup>a</sup>	200 <sup>a</sup>	1.9E+04		
Cresols	1319-77-3		1.22E+00		1.10E+03		2.3E+04		2.4E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.4E+04		
Cumene	98-82-8		2.45E+00		1.30E+00		2.9E+05		3.0E+05	1.0E+03 <sup>b,c</sup>	1.00E+03 <sup>b,c</sup>	3.0E+05		
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		1.7E+04		1.7E+04	7.0	6.6	1.7E+04		
Cyclohexanone	108-94-1		1.22E+02				6.1E+05		6.2E+05	1.0E+03 <sup>b</sup>		6.2E+05		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT p,p'	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
Dibenz[a,h]anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		9.4E+04	1.0E+03 <sup>b,c</sup>	9.5E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	9.5E+04		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	9.0E+04	7.5 <sup>a</sup>	9.1E+04		7.5 <sup>a</sup>	9.1E+04	7.5 <sup>a</sup>	7.5 <sup>a</sup>
Dichlorobenzidine 3,3'	91-94-1		2.15E-04		4.90E+00		3.7E+05		3.7E+05			3.8E+05	82 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		2.3E+04		2.3E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	2.3E+04		
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	1.0E+30	0.45 <sup>e</sup>	1.0E+30	0.45 <sup>d</sup>	0.45 <sup>d</sup>	1.0E+30	0.45 <sup>e</sup>	0.45 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	1.0E+30	0.32 <sup>d</sup>	1.0E+30	0.32 <sup>e</sup>	0.32 <sup>d</sup>	1.0E+30	0.32 <sup>d</sup>	0.32 <sup>d</sup>
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				4.0E+05	1.0E+03 <sup>b</sup>	4.1E+05	1.0E+03 <sup>b</sup>		4.1E+05		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				3.5E+05	1.0E+03 <sup>b</sup>	3.5E+05	1.0E+03 <sup>b</sup>		3.5E+05		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	1.8E+04	0.70 <sup>a</sup>	1.8E+04	0.70 <sup>a</sup>	0.70 <sup>a</sup>	1.9E+04	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Dichlorophenol 2,4-	120-83-2		7.34E-02				4.5E+07		4.6E+07	1.0E+03 <sup>b</sup>		5.0E+07		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				1.6E+05	0.4	1.6E+05		0.4	1.6E+05		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	1.7E+04		1.7E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.7E+04	17	50
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Diethylstilbestrol	56-53-1			2.05E-08			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
Dimethoate	60-51-5		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.00E+03 <sup>e</sup>	1.0E+30		
Dimethoxybenzidine 3,3'	119-90-4			6.90E-03			2.7E+05		2.7E+05			2.7E+05	1.0E+03 <sup>b,c</sup>	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		1.6E+04		1.6E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.6E+04		
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'	119-93-7			1.05E-05			8.8E+07		9.1E+07			9.5E+07	1.0E+03	
Dimethylphenol 2,4-	105-67-9		4.90E-01				8.7E+06		9.0E+06	1.0E+03 <sup>b</sup>		9.4E+06		
Di-n-butyl phthalate	84-74-2		2.45E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				2.2E+05		2.2E+05	540		2.2E+05		
Dinitrophenol 2,4-	51-28-5		4.90E-02				1.5E+05		1.5E+05	1.0E+03 <sup>b</sup>		1.5E+05		

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-3: Landfill Composite Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	2.0E+04		2.0E+04	0.13 <sup>a</sup>		2.0E+04	0.13 <sup>a</sup>	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			2.4E+05		2.4E+05	1.0E+03 <sup>b,c</sup>		2.4E+05	35	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	1.6E+04		1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04	140	1.0E+03 <sup>b</sup>
Diphenylamine	122-39-4		6.12E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	6.1E+04		6.1E+04			6.1E+04	7.4	1.0E+03 <sup>b,c</sup>
Disulfoton	298-04-4		9.79E-04				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Endrin	72-20-8	2.00E-03	7.34E-03				1.0E+30	0.020 <sup>a</sup>	1.0E+30	0.020 <sup>a</sup>		1.0E+30		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		1.6E+04		1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		1.6E+04		1.6E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.6E+04		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		1.7E+04		1.7E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.7E+04		
Ethyl acetate	141-78-6		2.20E+01				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Ethyl ether	60-29-7		4.9				1.6E+05		1.6E+05	1.0E+03 <sup>b</sup>		1.6E+05		
Ethyl methacrylate	97-63-2		2.20E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	8.0E+04	1.0E+03 <sup>b,c</sup>	8.1E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	8.1E+04		890 <sup>c</sup>
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		1.5E+04		1.5E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.5E+04		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	1.6E+04		1.6E+04			1.6E+04	14	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Fluoride	16984-48-8	4.00E+00	2.90E+00					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	1.4E+04		1.4E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.4E+04		1.0E+03 <sup>b</sup>
Formic acid	64-18-6		4.90E+01				1.4E+05		1.5E+05	1.0E+03 <sup>b</sup>		1.5E+05		
Furfural	98-01-1		7.34E-02		2.20E+01		1.6E+04		1.6E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.6E+04		
HCH beta-	319-85-7			5.36E-05		1.70E-02	3.5E+05		3.6E+05			3.6E+05	19 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	1.0E+30	0.4 <sup>a,b,c</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,e</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		0.196	1.53E-05		3.60E-04	1.0E+30	1.0E+03 <sup>b,e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.00E+03 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	2.5E+11		2.6E+11	0.50 <sup>a</sup>		2.6E+11	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	1.0E+30	0.13 <sup>a,c</sup>	1.0E+30	0.13 <sup>a,c</sup>		1.0E+30	0.13 <sup>a,c</sup>	0.13 <sup>a,c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.00E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	6.0E+05		6.0E+05	3.0 <sup>a</sup>		6.0E+05	3.0 <sup>a</sup>	3.0 <sup>a</sup>
Hexachlorophene	70-30-4		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Hexane n-	110-54-3		2.69E+02		6.60E-01		7.2E+04		7.3E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	7.3E+04		
Hydrogen Sulfide	7783-06-4		7.34E-02				1.4E+05		1.5E+05	1.0E+03 <sup>b</sup>		1.5E+05		
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				1.5E+05		1.5E+05	1.0E+03 <sup>b</sup>		1.5E+05		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		2.1E+04		2.2E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.2E+04	1.0E+03 <sup>b</sup>	
Kepone	143-50-0		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Lead	7439-92-1	1.50E-02						5.0 <sup>a</sup>						

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-3: Landfill Composite Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Manganese	7439-96-5		1.15E+00						1.0E+03 <sup>b</sup>						
Mercury	7439-97-6	2.00E-03	2.45E-03			7.00E-04		0.20 <sup>a,c</sup>		0.20 <sup>a,c</sup>					
Methacrylonitrile	126-98-7		2.45E-03			6.50E-03		9.8E+05	9.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	9.8E+05			
Methanol	67-56-1		1.22E+01			1.54E+03		1.4E+04	1.4E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.4E+04			
Methoxychlor	72-43-5	4.00E-02	1.22E-01					1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>	1.0E+30			
Methoxyethanol 2-	109-86-4		2.45E-02			4.40E+02		1.6E+04	1.6E+04	390	1.0E+03 <sup>b</sup>	1.6E+04			
Methoxyethanol acetate 2-	110-49-6		4.90E-02			5.10E+02		1.6E+04	1.7E+04	810	1.0E+03 <sup>b</sup>	1.7E+04			
Methyl ethyl ketone	78-93-3		1.47E+01			3.30E+01		1.6E+04	1.6E+04	200 <sup>a</sup>	200 <sup>a</sup>	1.6E+04			
Methyl isobutyl ketone	108-10-1		1.96E+00			1.20E+00		1.7E+04	1.7E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.7E+04			
Methyl methacrylate	80-62-6		3.43E+01			5.30E+00		1.0E+30	1.0E+30	1.0E+03 <sup>b,d</sup>	1.0E+03 <sup>b</sup>	1.0E+30			
Methyl parathion	298-00-0		6.12E-03					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>	1.00E+03 <sup>e</sup>	1.0E+30			
Methyl tert-butyl ether [MTBE]	1634-04-4					1.70E+01		1.7E+04	1.7E+04		1.0E+03 <sup>b</sup>	1.7E+04			
Methylcholanthrene 3-	56-49-5					1.20E-03		1.0E+30	1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>	
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01					2.0E+05	2.0E+05	1.0E+03 <sup>b</sup>		2.0E+05			
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02		6.2E+05	1.0E+03 <sup>b</sup>	6.3E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	6.3E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Molybdenum	7439-98-7		1.22E-01								1.0E+03 <sup>b</sup>				
Naphthalene	91-20-3		4.90E-01			1.90E-02		1.1E+05	1.1E+05	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.1E+05			
Nickel	7440-02-0		4.90E-01								1.0E+03 <sup>b</sup>				
Nitrobenzene	98-95-3		1.22E-02			1.50E-01		1.7E+04	1.8E+04	2.0 <sup>a</sup>	2.0 <sup>a</sup>	1.8E+04			
Nitropropane 2-	79-46-9					3.30E-01	2.30E-05	1.6E+04	1.6E+04		1.0E+03 <sup>b</sup>	1.6E+04			0.37
Nitrosodiethylamine N-	55-18-5			6.44E-07			4.30E-05	1.6E+04	1.6E+04			1.6E+04	0.010		0.70
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06			4.00E-04	1.6E+04	1.6E+04	3.1		1.6E+04	0.030		6.4
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05			2.00E-05	2.6E+04	2.6E+04			2.6E+04	0.47		0.52
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05			1.50E-03	1.7E+04	1.8E+04			1.8E+04	0.25		27
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02			5.20E-01	6.4E+04	6.5E+04	1.0E+03 <sup>b,c</sup>		6.6E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Nitrosomethylethylamine N-	10595-95-6			4.39E-06			4.50E-03	1.6E+04	1.6E+04			1.6E+04	0.072		74
Nitrosopiperidine N-	100-75-4						8.70E-03	1.6E+04	1.6E+04			1.6E+04			140
Nitrosopyrrolidine N-	930-55-2			4.60E-05			9.20E-01	1.6E+04	1.6E+04			1.6E+04	0.74		1.0E+03 <sup>b</sup>
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02					4.0E+06	4.0E+06	1.0E+03 <sup>b</sup>		4.0E+06			
Parathion (ethyl)	56-38-2		0.147					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30			
Pentachlorobenzene	608-93-5		1.96E-02					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30			
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09			6.29E-08	1.0E+30	1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10			6.00E-08	1.0E+30	1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04				1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>		
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01		9.7E+04	97	9.8E+04	100 <sup>a</sup>	9.9E+04	80		100 <sup>a</sup>
Phenol	108-95-2		1.47E+01			9.00E+02		1.6E+04	1.7E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.7E+04			
Phenyl mercuric acetate	62-38-4		1.96E-03					1.5E+05	1.5E+05	290		1.5E+05			
Phenylenediamine 1,3-	108-45-2		1.47E-01					1.5E+05	1.5E+05	1.0E+03 <sup>b</sup>		1.5E+05			
Phorate	298-02-2		4.90E-03					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30			
Phthalic anhydride	85-44-9		4.90E+01			1.30E+04		1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30			
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04		1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Pronamide	23950-58-5		1.84E+00					4.5E+09	4.6E+09	1.0E+03 <sup>b,c</sup>		4.7E+09			
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02		1.6E+04	1.7E+04		1.0E+03 <sup>b</sup>	1.7E+04	6.6		280
Pyrene	129-00-0		7.34E-01					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30			
Pyridine	110-86-1		2.45E-02			1.40E+00		1.6E+04	1.6E+04	5.0 <sup>a</sup>	5.0 <sup>a</sup>	1.6E+04			
Safrole	94-59-7			5.36E-04				1.3E+07	1.3E+07			1.4E+07	1.0E+03 <sup>b,c</sup>		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-3: Landfill Composite Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Selenium	7782-49-2	5.00E-02	1.22E-01				1.0 <sup>a</sup>		1.0 <sup>a</sup>						
Silver	7440-22-4		1.22E-01						5.0 <sup>a</sup>						
Strychnine and salts	57-24-9		7.34E-03				7.7E+05		7.8E+05	1.0E+03 <sup>b,c</sup>			7.8E+05		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		5.4E+04	1.0E+03 <sup>b,c</sup>	5.5E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		5.5E+04		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Tetrachlorodibenzofuran, 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin, 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>			1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	0.64 <sup>e</sup>		1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	2.5E+04	0.70 <sup>a</sup>	2.5E+04	0.70 <sup>a</sup>	0.70 <sup>a</sup>		2.5E+04	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Tetrachlorophenol 2,3,4,6-	58-90-2		0.734				1.1E+07		1.1E+07	1.0E+03 <sup>b,c</sup>			1.2E+07		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>					
Thiram [Thiuram]	137-26-8		1.22E-01				3.0E+09		3.2E+09	1.0E+03 <sup>b,c</sup>			3.5E+09		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		2.9E+04	1.0E+03 <sup>b,c</sup>	2.9E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		2.9E+04		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	1.6E+04		1.6E+04				1.6E+04	0.50	1.0E+03 <sup>b</sup>
Toluidine o-	95-53-4			4.02E-04		3.60E-02	1.7E+04		1.7E+04				1.7E+04	6.9	620
Toluidine p-	106-49-0			5.08E-04			2.0E+05		2.1E+05				2.1E+05	100	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.0E+30	0.50 <sup>a</sup>	1.0E+30				1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	3.1E+05	1.0E+03 <sup>b</sup>	3.1E+05	1.0E+03 <sup>b</sup>			3.2E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Trichloro-1,1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		7.4E+04		7.4E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		7.5E+04		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		6.8E+06	1.0E+03 <sup>b,c</sup>	6.8E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		6.9E+06		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		1.0E+30	0.96 <sup>d</sup>	1.0E+30	0.96 <sup>d</sup>	0.96 <sup>d</sup>		1.0E+30	0.96 <sup>e</sup>	0.96 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03	1.4E+07	0.96 <sup>d</sup>	1.4E+07	0.96 <sup>d</sup>	0.96 <sup>e</sup>		1.4E+07	0.96 <sup>d</sup>	0.96 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	2.3E+04	0.50 <sup>a</sup>	2.3E+04	0.50 <sup>a</sup>	0.50 <sup>a</sup>		2.3E+04	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		2.3E+04		2.3E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.3E+04		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				3.8E+10		4.2E+10	400 <sup>a</sup>			4.2E+10		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	2.7E+04		2.7E+04				2.7E+04	2.0 <sup>a</sup>	2.0 <sup>a</sup>
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				4.3E+05	1.0 <sup>a</sup>	4.4E+05	1.0 <sup>a</sup>			4.4E+05		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				2.5E+05		2.5E+05	1.0E+03 <sup>b,c</sup>			2.5E+05		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	
Triethylamine	121-44-8				1.10E-01		1.8E+04		1.8E+04		1.0E+03 <sup>b</sup>		1.8E+04		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				1.7E+05		1.8E+05	1.0E+03 <sup>b,c</sup>			1.8E+05		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	
Vanadium	7440-62-2		1.71E-01							1.0E+03 <sup>b</sup>					
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		1.6E+04		1.6E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.6E+04		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	1.6E+04	0.20 <sup>a</sup>	1.6E+04	0.20 <sup>a</sup>	0.20 <sup>a</sup>		1.6E+04	0.20 <sup>a</sup>	0.20 <sup>a</sup>
Xylene m-	108-38-3		4.90E+01		1.30E+00		1.0E+05		1.0E+05	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.1E+05		
Xylene o-	95-47-6		4.90E+01		1.40E+00		8.4E+04		8.4E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		8.5E+04		
Xylene p-	106-42-3		4.90E+01		1.30E+00		1.1E+05		1.1E+05	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.1E+05		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		9.7E+04	1.0E+03 <sup>b,c</sup>	9.8E+04	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		9.9E+04		
Zinc	7440-66-6		7.34E+00							1.0E+03 <sup>b</sup>					

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-4: Surface Impoundment No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
				NC	C	NC			C		LCTV based on Ingestion			LCTV based on Inhalation	
Acenaphthene	83-32-9		1.47E+00				2.2		2.2	3.2		2.3			
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	1.3		1.3		0.29	1.5		6.2E-02	
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		1.3		1.3	3.2	1.0E+03 <sup>b</sup>	1.5			
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		1.3		1.3		4.1	1.5			
Acetophenone	98-86-2		2.45E+00				1.3		1.3	3.2		1.5			
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30			
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	1.3		1.4	6.9E-03		1.7	3.5E-05	8.4E+00	
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		1.3		1.3	16	20	1.5			
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	1.3		1.4	5.2E-03 <sup>d</sup>	0.051	1.6	2.7E-05 <sup>d</sup>	1.6E-03	
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	380		380	0.28 <sup>c</sup>		380	2.1E-03	3.8E-03	
Allyl alcohol	107-18-6		1.22E-01				1.3		1.3	0.16		1.5			
Aniline (benzeneamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	1.3		1.3		1.2	1.5	0.026	3.3E+00	
Anthracene	120-12-7		7.34E+00				3.6		3.6	27 <sup>c</sup>		3.8			
Antimony	7440-36-0	6.00E-03	9.79E-03					8.5E-03		0.014					
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				0.080		0.013			1.4E-04		
Barium	7440-39-3	2.00E+00	1.71E+00					2.7		2.4					
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	36		37			37	2.9E-03	0.66 <sup>c</sup>	
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	1.3	6.4E-03	1.3		0.25	1.6	2.7E-03	2.5E-03	
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	1.3		1.3	0.097		1.5	6.4E-07	4.0	
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	110	0.021 <sup>c</sup>	110			110	1.4E-03	0.57 <sup>c</sup>	
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	110		110			110	8.6E-03 <sup>c</sup>	0.067 <sup>c</sup>	
Benzyl alcohol	100-51-6		7.34E+00				1.3		1.3	9.7		1.5			
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	11 <sup>a</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Beryllium	7440-41-7	4.00E-03	4.90E-02					0.28		0.53					
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	2.1		2.2		1.0E+03 <sup>a</sup>	2.6	2.2E-04	2.8E-03	
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	1.3		1.4	1.3		1.6	2.2E-03	9.3E-03	
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	7.4E+10	1.0E+03 <sup>b,c</sup>	7.5E+10	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	7.5E+10	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	1.3	0.11	1.4	0.68		1.6	2.6E-03	1.3E-03	
Bromomethane	74-83-9		3.43E-02		1.50E-02		190		230	7.7	3.4	230			
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	1.3		1.3		0.080	1.6		6.2E-05	
Butanol n-	71-36-3		2.45E+00				1.3		1.3	3.2		1.5			
Butyl benzyl phthalate	85-68-7		4.90E+00				4.0		4.1	20 <sup>c</sup>		4.2			
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				1.3	8.9E-03	1.3	0.033		1.6			
Cadmium	7440-43-9	5.00E-03	1.22E-02					8.3E-03		0.021					
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		1.3		1.4	3.4	2.6	1.6			
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04	1.5	7.3E-03	1.5	0.025	0.031	1.7	1.3E-03	1.3E-03	
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03	130	0.030 <sup>a</sup>	140	0.030 <sup>a</sup>	0.030 <sup>a</sup>	140	0.030 <sup>a</sup>	0.030 <sup>a</sup>	
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		1.3		1.3	0.65	0.029	1.6			
Chloroaniline p-	106-47-8		9.79E-02				1.3		1.3	0.13		1.5			
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		1.3	0.13	1.4	0.67	0.27	1.6			
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	4.4		4.4	2.2		4.7	1.7E-03	5.6	
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	1.3	0.10	1.4	0.67		1.6	1.8E-03	1.2E-03	
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		1.3		1.3		40	1.5			
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		1.3	0.10	1.3	0.33	0.44	1.6			
Chloromethane	74-87-3			7.43E-03		5.90E-03	1.3		1.3		0.34	1.5	1.1E-02	9.0E-03	
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		1.3		1.3	0.16	0.013	1.6			
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	9.7E+05		9.8E+05		1.0E+03 <sup>b</sup>	2.2E+06		1.0E+03 <sup>b</sup>	
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					2.6		100					
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					0.69		0.55					
Chrysene	218-01-9			8.05E-04		7.30E-03	36		37			37	0.029 <sup>c</sup>	0.27 <sup>c</sup>	

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-4: Surface Impoundment No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Cobalt	7440-48-4		4.90E-01						1.2						
Copper	7440-50-8	1.30E+00					5.5								
Cresol m-	108-39-4		1.22E+00		1.20E+03		1.3		1.3	1.6	200 <sup>a</sup>	1.5			
Cresol o-	95-48-7		1.22E+00		8.80E+02		1.3		1.3	1.6	200 <sup>a</sup>	1.5			
Cresol p-	106-44-5		1.22E-01		1.30E+03		1.3		1.3	0.16	200 <sup>a</sup>	1.5			
Cresols	1319-77-3		1.22E+00		1.10E+03		1.3		1.3	1.6	1.0E+03 <sup>b</sup>	1.6			
Cumene	98-82-8		2.45E+00		1.30E+00		1.7		1.7	4.2	2.2	1.9			
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		1.3		1.3	5.5E-04	5.1E-04	1.5			
Cyclohexanone	108-94-1		1.22E+02				1.3		1.3	160		1.5			
DDD	72-54-8			4.02E-04			4.4E+08		4.4E+08			4.4E+08	1.0E+03 <sup>b,c</sup>		
DDE	72-55-9			2.84E-04			3.2E+04		3.2E+04			3.2E+04	9.0 <sup>c</sup>		
DDT p,p'	50-29-3		1.22E-02		2.84E-04	8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	10 <sup>d</sup>	1.0E+03 <sup>b,c</sup>	
Diallate	2303-16-4			1.58E-03			38		38			42	0.066		
Dibenz(a,h)anthracene	53-70-3			1.32E-05		3.80E-01	4.8E+03		4.9E+03			4.9E+03	0.064 <sup>c</sup>	1.0E+03 <sup>b,c</sup>	
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	1.4	2.8E-04	1.5		4.2E-03	1.7	1.2E-04	0.14	
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		1.5	0.88	1.5	3.3	1.1	1.7			
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	1.5	0.11	1.5		4.4	1.7	6.7E-03	2.2E-03	
Dichlorobenzidine 3,3'	91-94-1			2.15E-04		4.90E+00	1.6		1.6			1.8	3.9E-04	8.9 <sup>c</sup>	
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		1.3		1.3	6.6	0.78	1.6			
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	1.3	5.6E-03 <sup>e</sup>	1.4	0.22 <sup>d</sup>	0.45 <sup>d</sup>	1.6	4.6E-04 <sup>e</sup>	8.5E-03 <sup>d</sup>	
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	1.3	4.0E-03 <sup>d</sup>	1.4	0.15 <sup>e</sup>	0.32 <sup>d</sup>	1.6	3.2E-04 <sup>d</sup>	1.0E-03	
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				1.3	0.088	1.3	0.33		1.5			
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				1.3	0.13	1.3	0.65		1.5			
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	1.3	8.9E-03	1.3	0.29	0.28	1.6	2.5E-04	3.4E-04	
Dichlorophenol 2,4-	120-83-2		7.34E-02				1.3		1.4	0.10		1.6			
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				1.3	0.088	1.3	0.3		1.5			
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		1.5	7.5E-03	1.6	3.4	0.022	1.9	2.6E-03		
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	1.3		1.3	1.0	0.081	1.5	1.5E-03	4.4E-03	
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	5.3E+06		5.9E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.3E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	5.3E+06		5.9E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.3E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	3.3E+04		3.3E+04	40 <sup>c</sup>		3.3E+04	0.20 <sup>c</sup>	3.3 <sup>c</sup>	
Diethyl phthalate	84-66-2		1.96E+01				1.5		1.5	30		1.8			
Diethylstilbestrol	56-53-1			2.05E-08			3.1		3.1			3.2	6.6E-08		
Dimethoate	60-51-5		4.90E-03				10		11	0.054	1.0E+03 <sup>e</sup>	12			
Dimethoxybenzidine 3,3'	119-90-4			6.90E-03			1.3		1.3			1.5	0.010		
Dimethyl formamide N,N- [DMF]	68-12-2	2.45E+00			7.10E+02		1.3		1.3	3.2	940	1.5			
Dimethylbenz(a)anthracene 7,12-	57-97-6					3.00E-03	3.1E+04		3.1E+04			3.1E+04			94 <sup>c</sup>
Dimethylbenzidine 3,3'	119-93-7			1.05E-05			1.3		1.4			1.6	1.6E-05		
Dimethylphenol 2,4-	105-67-9		4.90E-01				1.3		1.3	0.66		1.6			
Di-n-butyl phthalate	84-74-2		2.45E+00				5.0		5.1	12 <sup>c</sup>		5.2			
Dinitrobenzene 1,3-	99-65-0		2.45E-03				1.3		1.3	3.2E-03		1.5			
Dinitrophenol 2,4-	51-28-5		4.90E-02				1.3		1.3	0.065		1.5			
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	1.3		1.3	0.065		1.5	2.2E-04	0.13 <sup>a</sup>	
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			1.3		1.3	0.032		1.5	2.2E-04		
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30			
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	1.3		1.3		1.0E+03 <sup>b</sup>	1.5	0.013	0.27	
Diphenylamine	122-39-4		6.12E-01				1.6		1.6	1.0		1.8			
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	1.4		1.4			1.6	1.9E-04	0.032	
Disulfoton	298-04-4		9.79E-04				150		160	0.15		200			

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-4: Surface Impoundment No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Endosulfan (Endosulfan I and II, mixture)	115-29-7		1.47E-01				1.8		1.9	0.27		2.1		
Endrin	72-20-8	2.00E-03	7.34E-03				150	0.020 <sup>a</sup>	150	0.020 <sup>a</sup>		150		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	7.6E+04		8.3E+04	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.8E+04	860	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		1.3		1.3		0.32	1.5		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		1.3		1.3	13	1.0E+03 <sup>b</sup>	1.5		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		1.3		1.3	9.7	400	1.5		
Ethyl acetate	141-78-6		2.20E+01				2.1		2.2	49		2.6		
Ethyl ether	60-29-7		4.9				1.3		1.3	6.5		1.5		
Ethyl methacrylate	97-63-2		2.20E+00				1.6		1.7	3.8		2.0		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	1.4	1.0	1.5	3.6	4.82	1.6		0.018
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	3.5	1.7E-04	3.8		3.7E-03	4.3	4.9E-06	3.6E-04
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		1.3		1.3	65	1.0E+03 <sup>b</sup>	1.5		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	7.3E+03		8.3E+03		1.0E+03 <sup>b</sup>	8.6E+03	0.81	4.5
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	1.3		1.3	2.6E-03		1.5	1.3E-03	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				7.7		7.7	7.5 <sup>c</sup>		7.8		
Fluoride	16984-48-8	4.00E+00	2.90E+00					4.9		3.8				
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	1.3		1.3	6.5	67	1.5		2.3
Formic acid	64-18-6		4.90E+01				1.3		1.3	65		1.5		
Furfural	98-01-1		7.34E-02		2.20E+01		1.3		1.3	0.097	29	1.5		
HCH beta-	319-85-7			5.36E-05		1.70E-02	1.7		1.7			1.9	1.0E-04	0.0
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	220	0.044	230	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>	290	0.021	0.4 <sup>a</sup>
HCH alpha-	319-84-6		0.196	1.53E-05		3.60E-04	280	0.29 <sup>e</sup>	280	0.64 <sup>d</sup>	3.5 <sup>e</sup>	350	5.3E-03	0.13
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	3.3E+03	0.66 <sup>c</sup>	3.3E+03	1.1 <sup>c</sup>		3.4E+03	0.036	9.6E-01 <sup>c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	5.6		5.6	0.041		5.7	7.1E-03	3.5E-03
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	43	0.043 <sup>c</sup>	43	0.13 <sup>a,c</sup>		43	2.6E-03	1.5E-03
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01			6.90E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	4.9E+08		4.9E+08			5.0E+08	3.1 <sup>c</sup>	71 <sup>c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.8E+03		1.8E+03			1.8E+03	1.1E-05 <sup>c</sup>	2.6E-04 <sup>c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	1.9		1.9	0.047		2.2	0.015	7.1E-03
Hexachlorophene	70-30-4		7.34E-03				17		17	0.13		17		
Hexane n-	110-54-3		2.69E+02		6.60E-01		1.4		1.4	390 <sup>c</sup>	0.95	1.6		
Hydrogen Sulfide	7783-06-4		7.34E-02				1.3		1.3	0.097		1.5		
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	550		550			550	0.044 <sup>c</sup>	2.1E+01 <sup>c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				1.3		1.3	9.7		1.5		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		1.3		1.3	6.5	710	1.6	0.16	
Kepone	143-50-0		1.22E-02				3.4		3.4	0.041		3.5		
Lead	7439-92-1	1.50E-02						0.078						
Manganese	7439-96-5		1.15E+00							1.6				
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			2.5E-03		3.3E-03	9.4E-04			
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		1.3		1.4	3.3E-03	8.8E-03	1.6		
Methanol	67-56-1		1.22E+01		1.54E+03		1.3		1.3	16	1.0E+03 <sup>b</sup>	1.5		
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.1E+20	10 <sup>a,c</sup>	1.8E+20	1.0E+01 <sup>a,c</sup>		1.8E+20		
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		1.3		1.3	0.065	670	1.5		
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		1.3		1.3	0.032	580	1.5		
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		1.3		1.3	19	44	1.5		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		1.3		1.3	2.6	1.6	1.5		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		1.7		1.8	50 <sup>a</sup>	9.8	2.1		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-4: Surface Impoundment No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Methyl parathion	298-00-0		6.12E-03				68		75	0.46		83		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		1.3		1.3		22	1.5		
Methylcholanthrene 3-	56-49-5					1.20E-03	4.9E+08		4.9E+08			5.0E+08		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				1.3		1.3	0.32		1.5		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	1.3	6.3E-03	1.3	2.0	13	1.5	0.020	0.043
Molybdenum	7439-98-7		1.22E-01							0.16				
Naphthalene	91-20-3		4.90E-01		1.90E-02		1.5		1.5	0.74	0.029	1.7		
Nickel	7440-02-0		4.90E-01							0.77				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		1.3		1.3	0.016	0.20	1.5		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	1.3		1.3		0.44	1.5		3.5E-05
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	1.3		1.3			1.5	9.8E-07	6.5E-05
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	1.3		1.3	2.6E-04		1.5	2.9E-06	6.1E-04
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	1.3		1.3			1.6	2.8E-05	3.1E-05
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	1.3		1.3			1.5	2.1E-05	2.3E-03
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	1.4		1.4	0.69		1.6	0.032	0.84
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	1.3		1.3			1.5	6.7E-06	6.8E-03
Nitrosopiperidine N-	100-75-4					8.70E-03	1.3		1.3			1.5		0.013
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	1.3		1.3			1.5	7.0E-05	1.4
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				1.3		1.4	0.066		1.6		
Parathion (ethyl)	56-38-2		0.147				930		960	140 <sup>c</sup>		1.2E+03		
Pentachlorobenzene	608-93-5		1.96E-02				41		41	0.80		41		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	15		15			15	1.8E-08	9.2E-07
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	680		680			680	4.3E-07	4.1E-05
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			6.8		6.8	0.50		7.0	2.6E-03	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	1.5	1.5E-03	1.5	1.1		1.7	1.3E-03	90
Phenol	108-95-2		1.47E+01		9.00E+02		1.3		1.3	19	1.0E+03 <sup>b</sup>	1.5		
Phenyl mercuric acetate	62-38-4		1.96E-03				1.3		1.3	2.6E-03		1.5		
Phenylenediamine 1,3-	108-45-2		1.47E-01				1.3		1.3	0.19		1.5		
Phorate	298-02-2		4.90E-03				6.7E+19		1.2E+20	1.0E+03 <sup>b,c</sup>		1.6E+20		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	390	0.20 <sup>c</sup>	390	0.19 <sup>c</sup>		390	0.095 <sup>c</sup>	0.055
Pronamide	23950-58-5		1.84E+00				1.4		1.4	2.6		1.6		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	1.3		1.3		0.65	1.5	6.1E-04	0.026
Pyrene	129-00-0		7.34E-01				14		14	11 <sup>c</sup>		14		
Pyridine	110-86-1		2.45E-02		1.40E+00		1.3		1.3	0.032	1.8	1.5		
Safrole	94-59-7			5.36E-04			1.3		1.3			1.6	8.4E-04	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.063		0.16				
Silver	7440-22-4		1.22E-01							0.17				
Strychnine and salts	57-24-9		7.34E-03				1.3		1.3	0.010		1.6		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		1.4	0.14	1.4	6.9	5.1	1.6		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				4.1		4.1	0.030		4.3		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	2.0E+04		2.0E+04			2.0E+04	1.3E-04	2.0E-03 <sup>c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	2.7E+02	8.1E-06 <sup>c</sup>	2.7E+02	6.6E-06		2.7E+02	1.7E-07	6.0E-07
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	1.5	8.2E-03 <sup>a</sup>	1.6	1.1		1.8	6.7E-03	3.4E-03
Tetrachloroethane 1,1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	3.0	8.2E-03 <sup>a</sup>	3.2	4.7	0.64 <sup>a</sup>	3.8	1.8E-03	1.9E-03
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	1.3	6.4E-03	1.3	0.33	0.70 <sup>a</sup>	1.6	2.9E-03	0.033
Tetrachlorophenol 2,3,4,6-	58-90-2		0.734				1.3		1.3	0.98		1.6		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					2.5E-03		2.6E-03				
Thiram [Thiuram]	137-26-8		1.22E-01				1.4		1.4	0.17		1.6		

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-4: Surface Impoundment No-Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		1.3		1.4		1.8		1.6		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00		1.3		1.3			1.5	4.6E-05	11
Toluidine o-	95-53-4			4.02E-04		3.60E-02		1.3		1.3			1.5	6.1E-04	0.055
Toluidine p-	106-49-0			5.08E-04				1.3		1.3			1.5	7.7E-04	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03		42	0.13	42			44	3.9E-03	0.16
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02		1.3	0.10	1.4	0.66		1.6	0.019	0.030
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01			1.4		1.5	1.0E+03 <sup>b,c</sup>	140	1.6		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01			2.6	0.18	2.6	0.64		2.2	2.8	
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00			5.9	0.012 <sup>d</sup>	6.4	0.40 <sup>d</sup>	0.38 <sup>d</sup>	7.4	3.4E-04 <sup>e</sup>	4.7E-04 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03		1.3	6.7E-03	1.4	0.14	0.38 <sup>e</sup>	1.6	3.4E-04 <sup>d</sup>	4.7E-04 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03		1.3	6.4E-03	1.3		0.50 <sup>a</sup>	1.6	0.014	0.011
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00			1.3		1.3	9.8		2.8	1.6	
Trichlorophenol 2,4,5-	95-95-4		2.45E+00					1.4		1.4	3.5			1.6	
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01		1.3		1.3				1.6	0.014
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01					1.3	0.063	1.3	0.26			1.5	
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01					1.3		1.3	0.32			1.5	
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02			1.4		1.4	0.21	0.048		1.7	2.3E-05
Triethylamine	121-44-8				1.10E-01			1.3		1.3		0.15		1.5	
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01					1.3		1.3	1.0			1.5	
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06				3.5		3.5				4.2	4.1E-05
Vanadium	7440-62-2		1.71E-01								2.6				
Vinyl acetate	108-05-4		2.45E+01		1.20E+00			1.3		1.3	32	1.6		1.5	
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03		1.3	2.5E-03	1.3	0.10	0.20 <sup>a</sup>		1.5	2.0E-04
Xylene m-	108-38-3		4.90E+01		1.30E+00			1.5		1.5	74	2.0		1.7	
Xylene o-	95-47-6		4.90E+01		1.40E+00			1.4		1.5	72	2.1		1.7	
Xylene p-	106-42-3		4.90E+01		1.30E+00			1.5		1.5	74	2.0		1.7	
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00			1.5	15	1.5	73	2.1		1.7	
Zinc	7440-66-6		7.34E+00								13				

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-5: Surface Impoundment Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Acenaphthene	83-32-9		1.47E+00				17		17		25 <sup>c</sup>		17		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	3.9		4.0		0.87		4.5		0.18
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		3.9		4.0	9.7	1.0E+03 <sup>b</sup>		4.5		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		4.0		4.0		12		4.5		
Acetophenone	98-86-2		2.45E+00				3.9		4.0	9.7			4.5		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	4.8		4.8	0.024			5.6	1.2E-04	29
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		3.9		4.0	48	59		4.5		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	4.1		4.2	0.018 <sup>d</sup>	0.16		4.8	9.0E-05 <sup>d</sup>	4.8E-03
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	3.7E+08		3.7E+08	1.0E+03 <sup>b,c</sup>			3.7E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01				3.9		4.0	0.48			4.5		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	3.9		4.0		3.7		4.5	7.6E-02	9.9
Anthracene	120-12-7		7.34E+00				42.4		43	310 <sup>c</sup>			43		
Antimony	7440-36-0	6.00E-03	9.79E-03					0.026		0.047					
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				0.26		0.048				1.1E-03	
Barium	7440-39-3	2.00E+00	1.71E+00					7.3		7.0					
Benz[a]anthracene	56-55-3			8.05E-05		1.80E-02	910		910				910	0.073 <sup>c</sup>	16 <sup>c</sup>
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	4.1	0.020	4.1		0.50 <sup>a</sup>		4.7	8.2E-03	7.5E-03
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	3.9		4.0	0.29			4.5	1.9E-06	12
Benzo[a]pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	2.6E+04	5.2 <sup>c</sup>	2.7E+04				2.7E+04	0.35 <sup>c</sup>	140 <sup>c</sup>
Benzo[b]fluoranthene	205-99-2			8.05E-05		6.30E-04	2.6E+04		2.6E+04				2.6E+04	2.1 <sup>c</sup>	17 <sup>c</sup>
Benzyl alcohol	100-51-6		7.34E+00				3.9		4.0	29			4.5		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	34 <sup>e</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					4.5		8.7					
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	17		17		1.0E+03 <sup>e</sup>		21	1.9E-03	0.023
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	4.5		4.5	4.4			5.0	6.9E-03	0.030
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	4.6	0.37	4.7	2.3			5.3	8.2E-03	4.2E-03
Bromomethane	74-83-9		3.43E-02		1.50E-02		1.5E+08		1.5E+08	140 <sup>d</sup>		1.0E+03 <sup>b</sup>	2.6E+08		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	4.2		4.3		0.26		4.8		1.9E-04
Butanol n-	71-36-3		2.45E+00				3.9		4.0	9.7			4.5		
Butyl benzyl phthalate	85-68-7		4.90E+00				55		55	270 <sup>c</sup>			55		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				4.2	0.029	4.2	0.10			4.7		
Cadmium	7440-43-9	5.00E-03	1.22E-02					0.029		0.069					
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		4.5		4.5	11			5.1		
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04	6.0	0.030	6.1	0.10	0.13		6.8	5.0E-03	5.2E-03
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03	1.1E+05	0.030 <sup>a</sup>	1.1E+05	0.030 <sup>a</sup>	0.030 <sup>a</sup>		1.1E+05	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		4.1		4.1	2.0	0.090		4.6		
Chloroaniline p-	106-47-8		9.79E-02				3.9		4.0	0.39			4.5		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		4.8	0.48	4.9	2.4	1.0		5.3		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	87		87	43 <sup>c</sup>			87	3.1E-02	100 <sup>c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	4.4	0.35	4.5	2.2			5.1	5.8E-03	3.8E-03
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		3.9		4.0		120		4.5		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		4.1	0.32	4.1	1.0	1.3		4.7		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	3.9		4.0		1.0		4.5	3.3E-02	0.027
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		4.1		4.1	0.50	0.040		4.7		
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>		1.0E+30		1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					57		450					
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					5.0 <sup>a</sup>		5.0 <sup>a</sup>					

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-5: Surface Impoundment Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Chrysene	218-01-9			8.05E-04		7.30E-03	910		910			910	0.73 <sup>c</sup>	6.6 <sup>c</sup>
Cobalt	7440-48-4		4.90E-01						8.0					
Copper	7440-50-8	1.30E+00						61						
Cresol m-	108-39-4		1.22E+00			1.20E+03	4.0		4.1	5.0	200 <sup>a</sup>	4.6		
Cresol o-	95-48-7		1.22E+00			8.80E+02	4.1		4.1	5.0	200 <sup>a</sup>	4.6		
Cresol p-	106-44-5		1.22E-01			1.30E+03	4.0		4.1	0.50	200 <sup>a</sup>	4.6		
Cresols	1319-77-3		1.22E+00			1.10E+03	4.3		4.3	5.2	1.0E+03 <sup>b</sup>	4.8		
Cumene	98-82-8		2.45E+00			1.30E+00	9.8		9.8	24	13	10		
Cyclohexanol	108-93-0		4.16E-04			3.90E-04	3.9		4.0	1.6E-03	1.5E-03	4.5		
Cyclohexanone	108-94-1		1.22E+02				4.1		4.1	500		4.6		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT p,p'	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			1.9E+05		1.9E+05			1.9E+05	310 <sup>c</sup>	
Dibenz[a,h]anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	5.5	1.1E-03	5.5		0.016	6.4	4.4E-04	0.50
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		6.7	4.0	6.8	15	5.2	7.2		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	6.6	0.49	6.6		7.5 <sup>a</sup>	7.0	2.8E-02	9.1E-03
Dichlorobenzidine 3,3'	91-94-1			2.15E-04		4.90E+00	8.7		8.7			9.1	2.0E-03	45 <sup>c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		4.3		4.3	21	2.5	4.9		
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	4.5	0.018 <sup>e</sup>	4.6	0.45 <sup>d</sup>	0.45 <sup>d</sup>	5.3	1.4E-03 <sup>e</sup>	0.025 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	4.4	0.012 <sup>d</sup>	4.5	0.32 <sup>e</sup>	0.32 <sup>d</sup>	5.2	9.6E-04 <sup>d</sup>	3.3E-03
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				4.0	0.28	4.1	1.0		4.6		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				3.9	0.39	4.0	1.9		4.5		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	4.1	0.028	4.1	0.70 <sup>a</sup>	0.70 <sup>a</sup>	4.7	7.5E-04	1.0E-03
Dichlorophenol 2,4-	120-83-2		7.34E-02				4.6		4.7	0.34		5.1		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				3.9	0.27	4.0	1.0		4.5		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		6.5	0.033	6.6	14	0.092	7.6	0.011	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	3.9		4.0	2.9	0.24	4.5	4.3E-03	0.013
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				6.1		6.2	120		7.0		
Diethylstilbestrol	56-53-1			2.05E-08			33		33			34	6.9E-07	
Dimethoate	60-51-5		4.90E-03				2.8E+03		2.9E+03	0.98 <sup>d</sup>	1.0E+03 <sup>e</sup>	3.7E+03		
Dimethoxybenzidine 3,3'	119-90-4			6.90E-03			3.9		4.0			4.5	3.1E-02	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		3.9		4.0	9.7	1.0E+03 <sup>b</sup>	4.5		
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'	119-93-7			1.05E-05			4.7		4.8			5.2	5.5E-05	
Dimethylphenol 2,4-	105-67-9		4.90E-01				4.4		4.4	2.2		4.9		
Di-n-butyl phthalate	84-74-2		2.45E+00				75		75	180 <sup>c</sup>		75		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				3.9		4.0	9.7E-03		4.5		
Dinitrophenol 2,4-	51-28-5		4.90E-02				3.9		4.0	0.19		4.5		
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	3.9		4.0	0.13 <sup>a</sup>		4.5	6.4E-04	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			3.9		4.0	0.10		4.5	6.4E-04	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	3.9		4.0		1.0E+03 <sup>b</sup>	4.5	4.0E-02	0.81
Diphenylamine	122-39-4		6.12E-01				8.4		8.5	5.2		8.8		

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-5: Surface Impoundment Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	5.5		5.5				5.9	7.2E-04	0.12
Disulfoton	298-04-4		9.79E-04				4.0E+07		4.0E+07	1.0E+03 <sup>b,c</sup>			4.6E+07		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				12		12	1.8 <sup>c</sup>			12		
Endrin	72-20-8	2.00E-03	7.34E-03				6.5E+06	0.020 <sup>a</sup>	6.6E+06	0.020 <sup>a</sup>			6.6E+06		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		3.9		4.0		1.0		4.5		
Ethoxyethanol 2-	110-80-5		9.79E+00			2.90E+03	3.9		4.0	39	1.0E+03 <sup>b</sup>		4.5		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00			3.00E+02	3.9		4.0	29	1.0E+03 <sup>b</sup>		4.5		
Ethyl acetate	141-78-6		2.20E+01				18		18	400			22		
Ethyl ether	60-29-7		4.9				3.9		4.0	19			4.5		
Ethyl methacrylate	97-63-2		2.20E+00				7.7		7.9	17			9.1		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	6.3	4.4	6.4	16	21		6.8		0.074
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	79	4.0E-03	82		0.080		100	1.1E-04	8.4E-03
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		3.9		4.0	190	1.0E+03 <sup>b</sup>		4.5		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	3.9		4.0	7.8E-03			4.5	4.0E-03	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				110		110	110 <sup>c</sup>			110		
Fluoride	16984-48-8	4.00E+00	2.90E+00					14		11					
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	3.9		4.0	19	200		4.5		6.8
Formic acid	64-18-6		4.90E+01				3.9		4.0	190			4.5		
Furfural	98-01-1		7.34E-02		2.20E+01		3.9		4.0	0.29		87	4.5		
HCH beta-	319-85-7			5.36E-05		1.70E-02	10		10				11	5.6E-04	0.18
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	5.8E+07	0.4 <sup>a,d</sup>	5.8E+07	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>		6.4E+07	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		0.196	1.53E-05		3.60E-04	1.2E+08	2.9 <sup>e</sup>	1.2E+08	6.4 <sup>c,d</sup>	35 <sup>c,e</sup>		1.3E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	4.2E+15	1.0E+03 <sup>b,c</sup>	4.2E+15	1.0E+03 <sup>b,c</sup>		4.2E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	76		76	0.50 <sup>a</sup>			76	0.095	0.047
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	1.2E+03	0.13 <sup>a,c</sup>	1.2E+03	0.13 <sup>a,c</sup>			1.2E+03	0.073 <sup>c</sup>	0.043 <sup>c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	5.2E+14		5.2E+14				5.2E+14	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	14		14	0.34			14	0.097	0.046
Hexachlorophene	70-30-4		7.34E-03				270		270	2.0			270		
Hexane n-	110-54-3		2.69E+02		6.60E-01		6.1		6.1	1.0E+03 <sup>b,c</sup>	4.0		6.5		
Hydrogen Sulfide	7783-06-4		7.34E-02				3.9		4.0	0.29			4.5		
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	2.3E+10		2.3E+10				2.3E+10	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				3.9		4.0	29			4.5		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		4.1		4.2	20	1.0E+03 <sup>b</sup>		4.7	0.477	
Kepone	143-50-0		1.22E-02				38		38	0.46			38		
Lead	7439-92-1	1.50E-02						0.78							
Manganese	7439-96-5		1.15E+00							4.9					
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			6.9E-03		9.4E-03	2.7E-03				
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		4.1		4.2	0.010	0.027		4.8		
Methanol	67-56-1		1.22E+01		1.54E+03		3.9		4.0	48	1.0E+03 <sup>b</sup>		4.5		
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>			1.0E+30		
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		3.9		4.0	0.19	1.0E+03 <sup>b</sup>		4.5		
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		3.9		4.0	0.10	1.0E+03 <sup>b</sup>		4.5		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-5: Surface Impoundment Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)			Carcinogenic Effect (C)		
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		3.9		4.0	58	130	4.5		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		3.9		4.0	7.8	4.8	4.5		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		9.3		9.4	150 <sup>d</sup>	50	11		
Methyl parathion	298-00-0		6.12E-03				7.7E+06		7.9E+06	2.3 <sup>d</sup>	1.0E+03 <sup>e</sup>	9.0E+06		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		3.9		4.0		67	4.5		
Methylcholanthrene 3-	56-49-5					1.20E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				3.9		4.0	1.0		4.5		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	4.0	0.020	4.1	6.0	41	4.6	0.059	0.13
Molybdenum	7439-98-7		1.22E-01							0.44				
Naphthalene	91-20-3		4.90E-01		1.90E-02		7.0		7.0	3.4	0.13	7.3		
Nickel	7440-02-0		4.90E-01							2.5				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		3.9		4.0	0.048	0.59	4.5		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	3.9		4.0		1.3	4.5		1.0E-04
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	3.9		4.0			4.5	2.9E-06	1.9E-04
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	3.9		4.0	7.8E-04		4.5	8.5E-06	1.8E-03
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	4.2		4.3			4.8	8.5E-05	9.5E-05
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	3.9		4.0			4.5	6.2E-05	6.8E-03
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	5.6		5.6	2.7		6.0	0.12	3.1
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	3.9		4.0			4.5	2.0E-05	0.020
Nitrosopiperidine N-	100-75-4					8.70E-03	3.9		4.0			4.5		0.039
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	3.9		4.0			4.5	2.1E-04	4.1
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				4.2		4.2	0.21		4.8		
Parathion (ethyl)	56-38-2		0.147				1.7E+14		1.7E+14	1.0E+03 <sup>b,c</sup>		1.8E+14		
Pentachlorobenzene	608-93-5		1.96E-02				1.1E+03		1.1E+03	21 <sup>c</sup>		1.1E+03		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	230		230		230	2.9E-07		1.5E-05
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	3.9E+11		3.9E+11			3.9E+11	240 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			95		96	7.0 <sup>c</sup>		96	0.036	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	6.6	6.6E-03	6.7	4.9		7.0	5.7E-03	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01			9.00E+02	3.9		4.0	58	1.0E+03 <sup>b</sup>	4.5		
Phenyl mercuric acetate	62-38-4		1.96E-03				3.9		4.0	7.8E-03		4.5		
Phenylenediamine 1,3-	108-45-2		1.47E-01				3.9		4.0	0.58		4.5		
Phorate	298-02-2		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	5.5E+08	1.0E+03 <sup>b,c</sup>	5.5E+08	1.0E+03 <sup>b,c</sup>		5.6E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00				5.1		5.1	9.4		5.6		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	3.9		4.0		1.9	4.5	1.8E-03	0.077
Pyrene	129-00-0		7.34E-01				220		220	160 <sup>c</sup>		220		
Pyridine	110-86-1		2.45E-02		1.40E+00		3.9		4.0	0.10	5.0 <sup>a</sup>	4.5		
Safrole	94-59-7			5.36E-04			4.4		4.4			5.0	2.7E-03	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.17		0.43				
Silver	7440-22-4		1.22E-01							0.61				
Strychnine and salts	57-24-9		7.34E-03				4.1		4.1	0.030		4.7		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		5.6	0.56	5.6	27	20	6.0		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				50		51	0.37		51		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	2.9E+07	0.86 <sup>c</sup>	2.9E+07	0.71 <sup>c</sup>		2.9E+07	0.019 <sup>c</sup>	0.064 <sup>c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	7.3	0.027 <sup>e</sup>	7.3	5.4		8.0	0.030	0.015
Tetrachloroethane 1,1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	46	0.027 <sup>e</sup>	46	68	0.64 <sup>e</sup>	54	0.026	0.027
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	4.3	0.022	4.4	0.70 <sup>a</sup>	0.70 <sup>a</sup>	4.9	9.1E-03	0.10

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-5: Surface Impoundment Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Tetrachlorophenol 2,3,4,6-	58-90-2			0.734			4.4		4.4	3.3		4.9		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					6.6E-03		7.4E-03				
Thiram [Thiuram]	137-26-8		1.22E-01				5.5		5.5	0.67		5.9		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		4.6	4.6	4.6	23	6.0	5.1		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	3.9		4.0			4.5	1.4E-04	34
Toluidine o-	95-53-4			4.02E-04		3.60E-02	3.9		4.0			4.5	1.8E-03	0.16
Toluidine p-	106-49-0			5.08E-04			3.9		4.0			4.5	2.3E-03	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.7E+05	0.50 <sup>a</sup>	1.7E+05			1.7E+05	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	4.4	0.35	4.4	2.1		4.9	0.060	0.094
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		6.2		6.2	1.0E+03 <sup>b,c</sup>	590 <sup>c</sup>	6.6		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		26	1.8	26	6.4	22	26		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		390	0.039 <sup>d</sup>	400	0.96 <sup>d</sup>	0.96 <sup>d</sup>	490	1.0E-03 <sup>e</sup>	1.4E-03 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03	4.6	0.023	4.6	0.45	0.96 <sup>e</sup>	5.3	1.0E-03 <sup>d</sup>	1.4E-03 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	4.2	0.021	4.3		0.50 <sup>a</sup>	4.8	0.042	0.033
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		4.3		4.3	32	9.0	4.8		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				5.9		5.9	14		6.3		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	4.4		4.4			4.9	0.043	1.4
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				4.0	0.20	4.1	0.80		4.6		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				3.9		4.0	1.0		4.5		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		5.0		5.1	0.75	0.17	5.9	8.1E-05	
Triethylamine	121-44-8				1.10E-01		3.9		4.0		0.44	4.5		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				3.9		4.0	2.9		4.5		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			83		84			89	8.8E-04	
Vanadium	7440-62-2		1.71E-01							41				
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		3.9		4.0	97	4.8	4.5		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	3.9	7.8E-03	4.0	0.20 <sup>a</sup>	0.20 <sup>a</sup>	4.5	6.0E-04	0.011
Xylene m-	108-38-3		4.90E+01		1.30E+00		6.8		6.8	340 <sup>c</sup>	8.9	7.2		
Xylene o-	95-47-6		4.90E+01		1.40E+00		6.4		6.5	320 <sup>c</sup>	9.0	6.9		
Xylene p-	106-42-3		4.90E+01		1.30E+00		7.1		7.1	350 <sup>c</sup>	9.2	7.4		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		6.7	67	6.8	330 <sup>c</sup>	9.5	7.2		
Zinc	7440-66-6		7.34E+00							68				

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-6: Surface Impoundment Composite Liners LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Acenaphthene	83-32-9		1.47E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	2.7E+05		2.7E+05		1.0E+03 <sup>b</sup>	2.9E+05		1.0E+03 <sup>b</sup>
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		2.8E+05		2.8E+05		1.0E+03 <sup>b</sup>	3.0E+05		
Acetophenone	98-86-2		2.45E+00				2.4E+05		2.4E+05	1.0E+03 <sup>b</sup>		2.4E+05		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	2.9E+08		2.9E+08	1.0E+03 <sup>b</sup>		3.2E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	9.2E+05		9.3E+05	740 <sup>d</sup>	740 <sup>d</sup>	9.7E+05	170	750 <sup>d</sup>
Aldrin	309-00-2		7.34E-04	5.68E-06			1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01				2.6E+05		2.6E+05	1.0E+03 <sup>b</sup>		2.6E+05		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	2.7E+05		2.8E+05		1.0E+03 <sup>b</sup>	2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Anthracene	120-12-7		7.34E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Antimony	7440-36-0	6.00E-03	9.79E-03					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				5.0 <sup>a</sup>		5.0 <sup>a</sup>			5.0 <sup>a</sup>	
Barium	7440-39-3	2.00E+00	1.71E+00					100 <sup>a</sup>		100 <sup>a</sup>				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	3.4E+05	0.50 <sup>a</sup>	3.5E+05		0.50 <sup>a</sup>	3.6E+05	0.501 <sup>a</sup>	0.50 <sup>a</sup>
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	2.9E+05		2.9E+05	1.0E+03 <sup>b,c</sup>		3.0E+05	0.13	1.0E+03 <sup>b,c</sup>
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzyl alcohol	100-51-6		7.34E+00				2.3E+05		2.3E+05	1.0E+03 <sup>b</sup>		2.3E+05		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	1.0E+03 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	1.0E+30		1.0E+30		1.0E+03 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	5.4E+05		5.5E+05	1.0E+03 <sup>b</sup>		5.6E+05	780	1.0E+03 <sup>b</sup>
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	2.5E+06	1.0E+03 <sup>b</sup>	2.6E+06	1.0E+03 <sup>b</sup>		2.6E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bromomethane	74-83-9		3.43E-02		1.50E-02		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	3.9E+05		3.94E+05		1.0E+03 <sup>b,c</sup>	4.1E+05		16.4
Butanol n-	71-36-3		2.45E+00				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>		2.2E+05		
Butyl benzyl phthalate	85-68-7		4.90E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				3.8E+05	1.0E+03 <sup>b,c</sup>	3.8E+05	1.0E+03 <sup>b,c</sup>		3.8E+05		
Cadmium	7440-43-9	5.00E-03	1.22E-02					1.0 <sup>a</sup>		1.0 <sup>a</sup>				
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		1.7E+06		1.7E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.8E+06		
Carbon tetrachloride	56-23-5	5.00E-03	0.0171	7.43E-04	0.021	7.60E-04	9.1E+11	0.50 <sup>a</sup>	9.4E+11	0.50 <sup>a</sup>	0.50 <sup>a</sup>	9.4E+11	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Chlordane	57-74-9	2.00E-03	0.0122	2.76E-04	2.80E-02	1.50E-03	1.0E+30	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		3.4E+05		3.5E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.6E+05		
Chloroaniline p-	106-47-8		9.79E-02				2.8E+05		2.8E+05	1.0E+03 <sup>b</sup>		2.8E+05		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		6.6E+05	100 <sup>a</sup>	6.7E+05	100 <sup>a</sup>	100 <sup>a</sup>	6.9E+05		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	1.5E+06	1.0E+03 <sup>b</sup>	1.5E+06	1.0E+03 <sup>b</sup>		1.5E+06	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		2.7E+05		2.8E+05		1.0E+03 <sup>b</sup>	2.9E+05		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		5.5E+05	6.0 <sup>a</sup>	5.5E+05	6.0 <sup>a</sup>	6.0 <sup>a</sup>	5.7E+05		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	2.8E+05		2.9E+05		1.0E+03 <sup>b</sup>	3.0E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		3.5E+05		3.5E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.7E+05		

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-6: Surface Impoundment Composite Liners LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner												
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)								
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation					
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30												
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>									
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					5.0 <sup>a</sup>		5.0 <sup>a</sup>									
Chrysene	218-01-9			8.05E-04		7.30E-03	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+03 <sup>b,c</sup>			
Cobalt	7440-48-4		4.90E-01							1.0E+03 <sup>b</sup>									
Copper	7440-50-8	1.30E+00						1.0E+03 <sup>b</sup>											
Cresol m-	108-39-4		1.22E+00		1.20E+03		3.3E+05		3.3E+05	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	3.6E+05					
Cresol o-	95-48-7		1.22E+00		8.80E+02		3.4E+05		3.4E+05	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	3.6E+05					
Cresol p-	106-44-5		1.22E-01		1.30E+03		3.3E+05		3.3E+05	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	200 <sup>a</sup>	3.6E+05					
Cresols	1319-77-3		1.22E+00		1.10E+03		4.1E+05		4.1E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	4.2E+05					
Cumene	98-82-8		2.45E+00		1.30E+00		4.0E+06		4.0E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.1E+06					
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		2.8E+05		2.8E+05	120	110.37	120	110.37	3.0E+05					
Cyclohexanone	108-94-1		1.22E+02				3.3E+05		3.3E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.3E+05					
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30					1.0E+30	1.0E+03 <sup>b,c</sup>				
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30					1.0E+30	1.0E+03 <sup>b,c</sup>				
DDT p,p'-	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			1.0E+30		1.0E+30					1.0E+30	1.0E+03 <sup>b,c</sup>				
Dibenz(a,h)anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30					1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	2.2E+08	1.0E+03 <sup>b</sup>	2.2E+08			1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.3E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		1.7E+06	1.0E+03 <sup>b,c</sup>	1.7E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.7E+06					
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	1.6E+06	7.5 <sup>a</sup>	1.6E+06			7.5 <sup>a</sup>	7.5 <sup>a</sup>	1.6E+06	7.5 <sup>a</sup>	7.5 <sup>a</sup>	7.5 <sup>a</sup>	7.5 <sup>a</sup>	7.5 <sup>a</sup>
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	3.6E+06		3.7E+06					3.8E+06	810 <sup>c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		4.3E+05		4.4E+05	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.4E+05					
Dichloroethane 1,1-	75-34-3		2.45		1.6	7.40E-03	6.4E+07	0.45 <sup>e</sup>	6.4E+07	0.45 <sup>d</sup>	0.45 <sup>d</sup>	0.45 <sup>d</sup>	0.45 <sup>d</sup>	6.7E+07	0.45 <sup>e</sup>	0.45 <sup>e</sup>	0.45 <sup>e</sup>	0.45 <sup>e</sup>	0.45 <sup>e</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	3.8E+07	0.32 <sup>d</sup>	3.9E+07	0.32 <sup>e</sup>	0.32 <sup>d</sup>	0.32 <sup>d</sup>	0.32 <sup>d</sup>	4.0E+07	0.32 <sup>d</sup>	0.32 <sup>d</sup>	0.32 <sup>d</sup>	0.32 <sup>d</sup>	0.32 <sup>d</sup>
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				3.0E+05	1.0E+03 <sup>b</sup>	3.0E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.0E+05					
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				2.8E+05	1.0E+03 <sup>b</sup>	2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05					
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	3.4E+05	0.70 <sup>a</sup>	3.4E+05	0.70 <sup>a</sup>	0.70 <sup>a</sup>	0.70 <sup>a</sup>	0.70 <sup>a</sup>	3.6E+05	0.70 <sup>a</sup>	0.70 <sup>a</sup>	0.70 <sup>a</sup>	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Dichlorophenol 2,4-	120-83-2		7.34E-02				8.7E+05		8.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.7E+05					
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				2.3E+05	10 <sup>a</sup>	2.3E+05	10.00 AM	10.00 AM	10.00 AM	10.00 AM	2.3E+05					
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	3.0E+05		3.0E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.1E+05	300	900	300	900	300
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				4.1E+09		4.1E+09	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	4.1E+09					
Diethylstilbestrol	56-53-1			2.05E-08			1.0E+30		1.0E+30					1.0E+30	1.0E+03 <sup>b,c</sup>				
Dimethoate	60-51-5		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>				
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			2.6E+05		2.7E+05					2.7E+05	1.0E+03 <sup>b,c</sup>				
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05					
Dimethylbenz(a)anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30					1.0E+30				1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			1.0E+06		1.0E+06					1.0E+06	11				
Dimethylphenol 2,4-	105-67-9		4.90E-01				5.6E+05		5.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	5.7E+05					
Di-n-butyl phthalate	84-74-2		2.45E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30					
Dinitrobenzene 1,3-	99-65-0		2.45E-03				2.4E+05		2.5E+05	610	610	610	610	2.5E+05					
Dinitrophenol 2,4-	51-28-5		4.90E-02				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.2E+05					

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-6: Surface Impoundment Composite Liners LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	3.2E+05		3.3E+05	0.13 <sup>a</sup>			3.4E+05	0.13 <sup>a</sup>	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			2.6E+05		2.6E+05	1.0E+03 <sup>b,c</sup>			2.6E+05	36	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	2.7E+05		2.7E+05		1.0E+03 <sup>b</sup>		2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Diphenylamine	122-39-4		6.12E-01				2.4E+09		2.5E+09	1.0E+03 <sup>b,c</sup>			2.7E+09		
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	1.0E+06		1.0E+06			1.1E+06	130 <sup>c</sup>	1.0E+03 <sup>b,c</sup>	
Disulfoton	298-04-4		9.79E-04				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Endrin	72-20-8	2.00E-03	7.34E-03				1.0E+30	0.02 <sup>a</sup>	1.0E+30	0.020 <sup>a</sup>			1.0E+30		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		2.8E+05		2.78E+05		1.0E+03 <sup>b</sup>		2.9E+05		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.7E+05		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.8E+05		
Ethyl acetate	141-78-6		2.20E+01				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>			1.0E+30		
Ethyl ether	60-29-7		4.9				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>			2.2E+05		
Ethyl methacrylate	97-63-2		2.20E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>			1.0E+30		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	1.4E+06	1.0E+03 <sup>b,c</sup>	1.4E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.5E+06		1.0E+03 <sup>b,c</sup>
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		2.7E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.9E+05		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	2.7E+05		2.7E+05	540			2.8E+05	240	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Fluoride	16984-48-8	4.00E+00	2.90E+00					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>					
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.5	2.8E+05		2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		3.0E+05		1.0E+03 <sup>b</sup>
Formic acid	64-18-6		4.90E+01				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>			2.2E+05		
Furfural	98-01-1		7.34E-02		2.20E+01		2.7E+05		2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.9E+05		
HCH beta-	319-85-7			5.36E-05		1.70E-02	4.5E+06		4.7E+06				4.7E+06	250 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	1.0E+30	0.4 <sup>a,b,c</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,e</sup>		1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		0.196	1.53E-05		3.60E-04	1.0E+30	1.0E+03 <sup>b,e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>			1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	4.7E+09		4.7E+09	0.50 <sup>a</sup>			4.8E+09	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	1.0E+30	0.13 <sup>a,c</sup>	1.0E+30	0.13 <sup>a,c</sup>			1.0E+30	0.13 <sup>a,c</sup>	0.13 <sup>a,c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	7.4E+06		7.4E+06	3.0 <sup>a</sup>			7.5E+06	3.0 <sup>a</sup>	3.0 <sup>a</sup>
Hexachlorophene	70-30-4		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Hexane n-	110-54-3		2.69E+02		6.60E-01		1.3E+06		1.3E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.4E+06		
Hydrogen Sulfide	7783-06-4		7.34E-02				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>			2.2E+05		
Indeno(1,2,3-cd)pyrene	193-39-5			8.05E-05		3.80E-02	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				2.2E+05		2.2E+05	1.0E+03 <sup>b</sup>			2.2E+05		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		3.5E+05		3.5E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		3.7E+05	1.0E+03 <sup>b</sup>	
Kepone	143-50-0		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Lead	7439-92-1	1.50E-02						5.0 <sup>a</sup>							

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-6: Surface Impoundment Composite Liners LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner									
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)					
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Manganese	7439-96-5		1.15E+00						1.0E+03 <sup>b</sup>							
Mercury	7439-97-6	2.00E-03	2.45E-03			7.00E-04		0.20 <sup>a,c</sup>	0.20 <sup>a,c</sup>	0.20 <sup>a,c</sup>						
Methacrylonitrile	126-98-7		2.45E-03			6.50E-03		9.2E+05	9.2E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	9.7E+05				
Methanol	67-56-1		1.22E+01			1.54E+03		2.8E+05	2.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.9E+05				
Methoxychlor	72-43-5	4.00E-02	1.22E-01					1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>	1.0E+30				
Methoxyethanol acetate 2-	110-49-6		4.90E-02			5.10E+02		2.7E+05	2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05				
Methoxyethanol 2-	109-86-4		2.45E-02			4.40E+02		2.8E+05	2.9E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.9E+05				
Methyl ethyl ketone	78-93-3		1.47E+01			3.30E+01		2.7E+05	2.7E+05	200 <sup>a</sup>	200 <sup>a</sup>	2.8E+05				
Methyl isobutyl ketone	108-10-1		1.96E+00			1.20E+00		2.7E+05	2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	2.8E+05				
Methyl methacrylate	80-62-6		3.43E+01			5.30E+00		6.8E+10	7.0E+10	1.0E+03 <sup>b,d</sup>	1.0E+03 <sup>b</sup>	7.5E+10				
Methyl parathion	298-00-0		6.12E-03					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>e</sup>	1.0E+30				
Methyl tert-butyl ether [MTBE]	1634-04-4					1.70E+01		2.7E+05	2.8E+05		1.0E+03 <sup>b</sup>	2.9E+05				
Methylcholanthrene 3-	56-49-5					1.20E-03		1.0E+30	1.0E+30			1.0E+30			1.0E+03 <sup>b,c</sup>	
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01					2.4E+05	2.4E+05	1.0E+03 <sup>b</sup>		2.4E+05				
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02		6.8E+05	1.0E+03 <sup>b</sup>	6.8E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.0E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Molybdenum	7439-98-7		1.22E-01								1.0E+03 <sup>b</sup>					
Naphthalene	91-20-3		4.90E-01			1.90E-02		1.8E+06	1.8E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.9E+06				
Nickel	7440-02-0		4.90E-01								1.0E+03 <sup>b</sup>					
Nitrobenzene	98-95-3		1.22E-02			1.50E-01		3.0E+05	3.0E+05		2.0 <sup>a</sup>	2.0 <sup>a</sup>	3.2E+05			
Nitropropane 2-	79-46-9					3.30E-01	2.30E-05	2.7E+05	2.7E+05			1.0E+03 <sup>b</sup>	2.8E+05			6.463
Nitrosodiethylamine N-	55-18-5			6.44E-07			4.30E-05	2.7E+05	2.7E+05				2.8E+05	0.18	12.04	
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06			4.00E-04	2.7E+05	2.7E+05		53		2.9E+05	0.54	110	
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05			2.00E-05	4.0E+05	4.1E+05				4.2E+05	7.5	8.4	
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05			1.50E-03	2.7E+05	2.7E+05				2.9E+05	3.9	430	
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02			5.20E-01	1.1E+06	1.1E+06	1.0E+03 <sup>b,c</sup>		1.1E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		
Nitrosomethylethylamine N-	10595-95-6			4.39E-06			4.50E-03	2.8E+05	2.8E+05				2.9E+05	1.3	1.0E+03 <sup>b</sup>	
Nitrosopiperidine N-	100-75-4					8.70E-03		2.7E+05	2.7E+05				2.8E+05		1.0E+03 <sup>b</sup>	
Nitrosopyrrolidine N-	930-55-2			4.60E-05			9.20E-01	2.7E+05	2.7E+05				2.8E+05	13	1.0E+03 <sup>b</sup>	
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02					7.0E+05	7.0E+05	1.0E+03 <sup>b</sup>		7.0E+05				
Parathion (ethyl)	56-38-2		0.147					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Pentachlorobenzene	608-93-5		1.96E-02					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08		1.0E+30	1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08		1.0E+30	1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04				1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		1.0E+03 <sup>b,c</sup>		
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01		1.6E+06	100 <sup>a</sup>	1.6E+06	100 <sup>a</sup>	1.7E+06	100 <sup>a</sup>	100 <sup>a</sup>		
Phenol	108-95-2		1.47E+01			9.00E+02		2.9E+05	2.9E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.0E+05				
Phenyl mercuric acetate	62-38-4		1.96E-03					2.2E+05	2.2E+05		430		2.2E+05			
Phenylenediamine 1,3-	108-45-2		1.47E-01					2.2E+05	2.2E+05	1.0E+03 <sup>b</sup>		2.2E+05				
Phorate	298-02-2		4.90E-03					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Phthalic anhydride	85-44-9		4.90E+01			1.30E+04		1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30				
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		
Pronamide	23950-58-5		1.84E+00					4.4E+06	4.4E+06	1.0E+03 <sup>b,c</sup>		4.4E+06				
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02		3.0E+05	3.1E+05			1.0E+03 <sup>b</sup>	3.1E+05	120	1.0E+03 <sup>b</sup>	
Pyrene	129-00-0		7.34E-01					1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Pyridine	110-86-1		2.45E-02			1.40E+00		2.7E+05	2.8E+05		5.0 <sup>a</sup>	5.0 <sup>a</sup>	2.9E+05			
Safrole	94-59-7			5.36E-04				6.2E+05	6.3E+05				6.3E+05	340		

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-6: Surface Impoundment Composite Liners LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Selenium	7782-49-2	5.00E-02	1.22E-01				1.0 <sup>a</sup>		1.0 <sup>a</sup>						
Silver	7440-22-4		1.22E-01						5.0 <sup>a</sup>						
Strychnine and salts	57-24-9		7.34E-03				3.4E+05		3.5E+05	1.0E+03 <sup>b,c</sup>			3.5E+05		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		1.0E+06	1.0E+03 <sup>b,c</sup>	1.0E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.1E+06		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.00E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>			1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	0.64 <sup>e</sup>		1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	4.5E+05	0.70 <sup>a</sup>	4.5E+05	0.70 <sup>a</sup>	0.70 <sup>a</sup>		4.5E+05	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Tetrachlorophenol 2,3,4,6-	58-90-2		0.734				5.9E+05		6.0E+05	1.0E+03 <sup>b,c</sup>			6.0E+05		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					380			570				
Thiram [Thiuram]	137-26-8		1.22E-01				3.6E+06		3.6E+06	1.0E+03 <sup>b,c</sup>			3.6E+06		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		5.5E+05	1.0E+03 <sup>b,c</sup>	5.6E+05	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		5.7E+05		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	2.6E+05		2.7E+05				2.8E+05	8.4	1.0E+03 <sup>b</sup>
Toluidine o-	95-53-4			4.02E-04		3.60E-02	2.8E+05		2.9E+05				3.0E+05	120	1.0E+03 <sup>b</sup>
Toluidine p-	106-49-0			5.08E-04			2.4E+05		2.5E+05				2.5E+05	120	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.0E+30	0.50 <sup>a</sup>	1.0E+30				1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	9.3E+05	1.0E+03 <sup>b</sup>	9.5E+05	1.0E+03 <sup>b</sup>			9.9E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02			9.50E+01	1.3E+06		1.3E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.4E+06		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		3.2E+07	1.0E+03 <sup>b,c</sup>	3.2E+07	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		3.3E+07		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		1.0E+30	0.96 <sup>d</sup>	1.0E+30	0.96 <sup>d</sup>	0.96 <sup>d</sup>		1.0E+30	0.96 <sup>e</sup>	0.96 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	0.0979	1.69E-03		1.10E-03	3.0E+06	0.96 <sup>d</sup>	3.0E+06	0.96 <sup>d</sup>	0.96 <sup>d</sup>		3.1E+06	0.96 <sup>d</sup>	0.96 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	4.0E+05	0.50 <sup>a</sup>	4.1E+05		0.50 <sup>a</sup>		4.2E+05	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		4.1E+05		4.1E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		4.3E+05		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				7.3E+06		7.3E+06	400 <sup>a</sup>			7.3E+06		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	4.6E+05		4.6E+05				4.9E+05	2.0 <sup>a</sup>	2.0 <sup>a</sup>
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				3.1E+05	1.0 <sup>a</sup>	3.1E+05	1.0 <sup>a</sup>			3.1E+05		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				2.6E+05		2.6E+05	1.0E+03 <sup>b,c</sup>			2.6E+05		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		1.3E+09		1.3E+09	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.5E+09	1.0E+03 <sup>b</sup>	
Triethylamine	121-44-8				1.10E-01		2.9E+05		2.9E+05		1.0E+03 <sup>b</sup>		3.0E+05		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				2.3E+05		2.4E+05	1.0E+03 <sup>b,c</sup>			2.4E+05		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	
Vanadium	7440-62-2		1.71E-01							1.0E+03 <sup>b</sup>					
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		2.6E+05		2.7E+05	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		2.8E+05		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	2.8E+05	0.20 <sup>a</sup>	2.8E+05	0.20 <sup>a</sup>	0.20 <sup>a</sup>		3.0E+05	0.20 <sup>a</sup>	0.20 <sup>a</sup>
Xylene m-	108-38-3		4.90E+01	1.30E+00			1.7E+06		1.7E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.8E+06		
Xylene o-	95-47-6		4.90E+01		1.40E+00		1.5E+06		1.5E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.6E+06		
Xylene p-	106-42-3		4.90E+01		1.30E+00		1.9E+06		1.9E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.9E+06		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		1.6E+06	1.0E+03 <sup>b,c</sup>	1.6E+06	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.7E+06		
Zinc	7440-66-6		7.34E+00							1.0E+03 <sup>b</sup>					

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-7: Waste Pile No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Acenaphthene	83-32-9		1.47E+00		2.20E-01	4.10E-02	65		66	97 <sup>c</sup>		70			
Acetaldehyde [Ethanal]	75-07-0						10		11		2.4	15			0.62
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		10		11	27	1.0E+03 <sup>b</sup>	15			
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		10		11		34	15			
Acetophenone	98-86-2		2.45E+00				10		11	27		15			
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30			
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	12		12	0.061		17	3.7E-04		88
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		10		11	130	170	15			
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	11		12	0.045 <sup>d</sup>	0.44	16	2.8E-04 <sup>d</sup>		0.016
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	1.1E+07		1.1E+07	1.0E+03 <sup>b,c</sup>		1.1E+07	63 <sup>c</sup>		110 <sup>c</sup>
Allyl alcohol	107-18-6		1.22E-01				10		11	1.3		15			
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	10		11		10	15	0.26		33
Anthracene	120-12-7		7.34E+00				170		170	1.0E+03 <sup>b,c</sup>		174			
Antimony	7440-36-0	6.00E-03	9.79E-03					0.087		0.16					
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				1.0		0.2			5.5E-04		
Barium	7440-39-3	2.00E+00	1.71E+00					24		24					
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	3.3E+03		3.3E+03			3.3E+03	0.26 <sup>c</sup>		59 <sup>c</sup>
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	11	0.055	12		0.50 <sup>a</sup>	16	0.03		0.025
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	10		11	0.81		15	6.3E-06		39
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	4.6E+04	9.1 <sup>c</sup>	4.6E+04			4.6E+04	0.61 <sup>c</sup>		250 <sup>c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	4.6E+04		4.6E+04			4.6E+04	3.7 <sup>c</sup>		29 <sup>c</sup>
Benzyl alcohol	100-51-6		7.34E+00				10		11	81		15			
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	95 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					8.1		16					
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	33		35		1.0E+03 <sup>e</sup>	49	4.3E-03		0.054
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	12		13	12		17	0.024		0.10
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	12	0.95	12	6.1		17	0.027		0.014
Bromomethane	74-83-9		3.43E-02			1.50E-02	8.6E+06		8.9E+06	400 <sup>d</sup>	1.0E+03 <sup>b</sup>	2.7E+07			
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	11		12		0.71	16			6.5E-04
Butanol n-	71-36-3		2.45E+00				10		11	27		15			
Butyl benzyl phthalate	85-68-7		4.90E+00				210		210	1.0E+03 <sup>b,c</sup>		210			
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				11	0.078	12	0.29		16			
Cadmium	7440-43-9	5.00E-03	1.22E-02					0.10		0.26					
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		12		12	30		23			17
Carbon tetrachloride	56-23-5	5.00E-03	1.71E-02	7.43E-04	2.10E-02	7.60E-04	15	0.077	16	0.27	0.33	21	0.016		0.016
Chlordane	57-74-9	2.00E-03	1.22E-02	2.76E-04	2.80E-02	1.50E-03	1.1E+05	0.030 <sup>a</sup>	1.1E+05	0.030 <sup>a</sup>	0.030 <sup>a</sup>	1.1E+05	0.030 <sup>a</sup>		0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		11		11	5.6	0.25	16			
Chloroaniline p-	106-47-8		9.79E-02				10		11	1.1		15			
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		14	1.4	14	6.9	2.8	19			
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	330		330	160 <sup>c</sup>		340	0.12		400 <sup>c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	12	0.94	12	6		17	0.020		0.013
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		10		11		330	15			
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		11	0.86	11	2.8	3.7	16			
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	10		11		2.9	15	0.11		0.089
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		11		12	1.4	0.11	16			
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30			1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					67		1.0E+03 <sup>b</sup>					

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-7: Waste Pile No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil									
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)					
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					5.0 <sup>a</sup>		5.0 <sup>a</sup>						
Chrysene	218-01-9			8.05E-04		7.30E-03	3.3E+03			3.3E+03				3.3E+03	2.6 <sup>c</sup>	24 <sup>c</sup>
Cobalt	7440-48-4		4.90E-01								27					
Copper	7440-50-8	1.30E+00						150								
Cresol m-	108-39-4		1.22E+00		1.20E+03		11		11	14	200 <sup>a</sup>	16				
Cresol o-	95-48-7		1.22E+00		8.80E+02		11		11	14	200 <sup>a</sup>	16				
Cresol p-	106-44-5		1.22E-01		1.30E+03		11		11	1.4	200 <sup>a</sup>	16				
Cresols	1319-77-3		1.22E+00		1.10E+03		12		12	15	1.0E+03 <sup>b</sup>	17				
Cumene	98-82-8		2.45E+00		1.30E+00		35		35	85 <sup>c</sup>	45	39				
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		10		11	4.60E-03	0.0043	15				
Cyclohexanone	108-94-1		1.22E+02				11		12	1.0E+03 <sup>b</sup>		16				
DDD	72-54-8			4.02E-04			1.0E+30			1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>		
DDE	72-55-9			2.84E-04			6.7E+17			6.7E+17			6.7E+17	1.0E+03 <sup>b,c</sup>		
DDT p,p'-	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Diallate	2303-16-4			1.58E-03			1.5E+05		1.5E+05				1.5E+05	240 <sup>c</sup>		
Dibenz[a,h]anthracene	53-70-3			1.32E-05		3.80E-01	1.8E+12		1.8E+12				1.8E+12	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	13	2.7E-03	14		0.040	19	1.3E-03		1.5	
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		22	13	22	48	17	27				
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	21	1.6	21		7.5 <sup>a</sup>	26	0.10		0.034	
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	30		31			35	7.5E-03		170 <sup>c</sup>	
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		12		12	59	7.0	17				
Dichloroethane 1,1-	75-34-3		2.45E+00		1.60E+00	7.40E-03	12	0.046 <sup>e</sup>	12	0.45 <sup>d</sup>	0.45 <sup>d</sup>	17	4.6E-03 <sup>e</sup>		0.085 <sup>d</sup>	
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	11	0.033 <sup>d</sup>	12	0.32 <sup>e</sup>	0.32 <sup>d</sup>	16	3.2E-03 <sup>d</sup>		0.010	
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				11	0.76	11	2.8		16				
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				10	1.0	11	5.4		15				
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	11	0.076	11	0.70 <sup>a</sup>	0.70 <sup>a</sup>	16	2.5E-03		3.5E-03	
Dichlorophenol 2,4-	120-83-2		7.34E-02				13		13	1		18				
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				10	0.72	11	2.7		15				
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		15	0.075	16	35	0.022	22	0.031			
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	10		11	8.1	0.67	15	0.015		0.044	
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	6.5E+13		6.5E+13	1.0E+03 <sup>b,c</sup>		6.5E+13	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	
Diethyl phthalate	84-66-2		1.96E+01				15		15	300		22				
Diethylstilbestrol	56-53-1			2.05E-08			130		130			137	2.8E-06			
Dimethoate	60-51-5		4.90E-03				3.1E+03		3.4E+03	2.7 <sup>d</sup>	1.0E+03 <sup>e</sup>	4.7E+03				
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			10		11			15	0.10			
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		10		11	27	1.0E+03 <sup>b</sup>	15				
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	6.0E+16		6.1E+16			6.1E+16		1.0E+03 <sup>b,c</sup>		
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			13		14			18	1.9E-04			
Dimethylphenol 2,4-	105-67-9		4.90E-01				12		12	6.1		17				
Di-n-butyl phthalate	84-74-2		2.45E+00				290		290	700 <sup>c</sup>		290				
Dinitrobenzene 1,3-	99-65-0		2.45E-03				10		11	0.027		15				
Dinitrophenol 2,4-	51-28-5		4.90E-02				10		11	0.54		15				
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	10		11	0.13 <sup>a</sup>		15	2.1E-03		0.13 <sup>a</sup>	
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			10		11	0.27		15	2.1E-03			
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30				
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	10		11		1.0E+03 <sup>b</sup>	15	0.13		2.72	

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-7: Waste Pile No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Diphenylamine	122-39-4		6.12E-01				29		29	18		33		
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	16		17			21	2.5E-03	0.42
Disulfoton	298-04-4		9.79E-04				2.8E+06		2.8E+06	1.0E+03 <sup>b,c</sup>		4.7E+06		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				45		45	6.6 <sup>c</sup>		49		
Endrin	72-20-8	2.00E-03	7.34E-03				2.4E+06	0.020 <sup>a</sup>	2.4E+06	0.020 <sup>a</sup>		2.4E+06		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		10		11		2.6	15		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		10		11	110	1.0E+03 <sup>b</sup>	15		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		10		11	81	1.0E+03 <sup>b</sup>	15		
Ethyl acetate	141-78-6		2.20E+01				43		45	990		64		
Ethyl ether	60-29-7		4.90E+00				10		11	54		15		
Ethyl methacrylate	97-63-2		2.20E+00				20		21	47		30		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	20	14	20	49	66	25		0.27
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	150	7.4E-03	150		0.15	220	2.5E-04	0.019
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		10		11	540	1.0E+03 <sup>b</sup>	15		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.2E+12		1.4E+12		1.0E+03 <sup>b</sup>	3.4E+12	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	10		11	0.022		15	0.013	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				450		450	440 <sup>c</sup>		450		
Fluoride	16984-48-8	4.00E+00	2.90E+00					38			32			
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.50E+00	10		11	54	560	15		23
Formic acid	64-18-6		4.90E+01				10		11	540		15		
Furfural	98-01-1		7.34E-02		2.20E+01		10		11	0.81	240	15		
HCH beta-	319-85-7			5.36E-05		1.70E-02	37		37			41	2.2E-03	0.69 <sup>c</sup>
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	5.9E+06	0.4 <sup>a,d</sup>	6.0E+06	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>	8.6E+06	0.4 <sup>a,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		1.96E-01	1.53E-05		3.60E-04	9.2E+06	11 <sup>e</sup>	9.4E+06	25 <sup>c,d</sup>	140 <sup>e</sup>	1.3E+07	210 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	4.2E+09	1.0E+03 <sup>b,c</sup>	4.3E+09	1.0E+03 <sup>b,c</sup>		4.3E+09	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	310		310	0.50 <sup>a</sup>		310	0.38	0.19
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	4.3E+03	0.13 <sup>a,c</sup>	4.3E+03	0.13 <sup>a,c</sup>		4.3E+03	0.13 <sup>a,c</sup>	0.13 <sup>a,c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01			6.90E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	4.6E+09		4.7E+09			4.7E+09	29 <sup>c</sup>	670 <sup>c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	51		51	1.3		55	0.38	0.18
Hexachlorophene	70-30-4		7.34E-03				1.1E+03		1.1E+03	8.2		1.1E+03		
Hexane n-	110-54-3		2.69E+02		6.60E-01		19		19	1.0E+03 <sup>b,c</sup>	13 <sup>c</sup>	24		
Hydrogen Sulfide	7783-06-4		7.34E-02				10		11	0.81		15		
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	9.9E+07		1.0E+08			1.0E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				10		11	81		15		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		11		12	56	1.0E+03 <sup>b</sup>	16	1.6	
Kepone	143-50-0		1.22E-02				150		150	1.8		160		
Lead	7439-92-1	1.50E-02						3.9						
Manganese	7439-96-5		1.15E+00								17			
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			0.020		0.027	0.0084			
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		11		12	0.028	0.075	16		
Methanol	67-56-1		1.22E+01		1.54E+03		10		11	130	1.0E+03 <sup>b</sup>	15		
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>		1.0E+30		
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		10		11	0.54	1.0E+03 <sup>b</sup>	15		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-7: Waste Pile No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		10		11	0.27	1.0E+03 <sup>b</sup>	15		
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		10		11	160	200 <sup>a</sup>	15		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		10		11	22	13	15		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		26		26	420 <sup>d</sup>	140	36		
Methyl parathion	298-00-0		6.12E-03				2.0E+05		2.1E+05	6.2 <sup>d</sup>	1.0E+03 <sup>e</sup>	3.1E+05		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		10		11		190	15		
Methylcholanthrene 3-	56-49-5					1.20E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				10		11	2.7		15		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	10	0.052	11	16	110	15	0.20	0.43
Molybdenum	7439-98-7		1.22E-01							1.2				
Naphthalene	91-20-3		4.90E-01		1.90E-02		22		23	11	0.43	27		
Nickel	7440-02-0		4.90E-01							9.9				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		10		11	0.13	1.7	15		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	10		11		3.6	15		3.5E-04
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	10		11			15	9.7E-06	6.5E-04
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	10		11	2.2E-03		15	2.9E-05	6.0E-03
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	11		12			16	2.9E-04	3.3E-04
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	10		11			15	2.1E-04	0.023
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	17		17	8.3		21	0.42	11
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	10		11			15	6.6E-05	0.068
Nitrosopiperidine N-	100-75-4					8.70E-03	10		11			15		0.13
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	10		11			15	6.9E-04	14
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				11		12	0.57		16		
Parathion (ethyl)	56-38-2		1.47E-01				2.1E+08		2.1E+08	1.0E+03 <sup>b,c</sup>		3.4E+08		
Pentachlorobenzene	608-93-5		1.96E-02				3.9E+03		3.9E+03	76 <sup>c</sup>		3.9E+03		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	940		940			940	1.2E-06	5.9E-05
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	3.2E+08		3.3E+08			3.3E+08	0.21 <sup>c</sup>	20 <sup>c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			390		390	29 <sup>c</sup>		390	0.14	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	21	0.021	21	16		26	0.021	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01		9.00E+02		10		11	160	1.0E+03 <sup>b</sup>	15		
Phenyl mercuric acetate	62-38-4		1.96E-03				10		11	0.022		15		
Phenylenediamine 1,3-	108-45-2		1.47E-01				10		11	1.6		15		
Phorate	298-02-2		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	1.4E+07	1.0E+03 <sup>b,c</sup>	1.4E+07	1.0E+03 <sup>b,c</sup>		1.4E+07	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00				14		15	27		19		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	10		11		5.4	15	6.1E-03	0.26
Pyrene	129-00-0		7.34E-01				910		910	670 <sup>c</sup>		910		
Pyridine	110-86-1		2.45E-02		1.40E+00		10		11	0.27	5.0 <sup>a</sup>	15		
Safrole	94-59-7			5.36E-04			12		13			17	9.1E-03	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.46		1.0 <sup>a</sup>				
Silver	7440-22-4		1.22E-01							2				
Strychnine and salts	57-24-9		7.34E-03				11		12	0.085		16		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		17	1.7	17	83	61	21		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				200		200	1.5 <sup>c</sup>		210		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	2.3E+15		2.3E+15			2.3E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	2.0E+06	0.059 <sup>c</sup>	2.0E+06	0.049 <sup>c</sup>		2.0E+06	1.3E-03 <sup>c</sup>	4.4E-03 <sup>c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		7.34E-01	3.71E-03		1.90E-03	19	0.073 <sup>e</sup>	20	14		26	0.095	0.048
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	120	0.073 <sup>e</sup>	130	190	0.64 <sup>e</sup>	180	0.085	0.088

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-7: Waste Pile No-Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	12	0.059	12	0.70 <sup>a</sup>	0.70 <sup>a</sup>	17	0.031	0.35
Tetrachlorophenol 2,3,4,6-	58-90-2		7.34E-01				12		13	9.2		17		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					0.019		0.021				
Thiram [Thiuram]	137-26-8		1.22E-01				16		17	2		21		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		13	13	13	64	17	18		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	10		11			15	4.6E-04	110
Toluidine o-	95-53-4			4.02E-04		3.60E-02	10		11			15	6.1E-03	0.54
Toluidine p-	106-49-0			5.08E-04			10		11			15	7.7E-03	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.6E+05	0.50 <sup>a</sup>	1.6E+05			1.7E+05	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	12	0.94	12	5.9		17	0.20	0.32
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		19		20	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	24		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		100	7.1	100	25.2	86 <sup>c</sup>	110		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		610	0.11 <sup>d</sup>	640	0.96 <sup>d</sup>	0.96 <sup>d</sup>	920	3.5E-03 <sup>e</sup>	4.8E-03 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	9.79E-02	1.69E-03		1.10E-03	12	0.060	12	0.96 <sup>d</sup>	0.96 <sup>e</sup>	17	3.5E-03 <sup>d</sup>	4.8E-03 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	11	0.057	12		0.50 <sup>a</sup>	16	0.14	0.11
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		12		12	88	25	16		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				18		18	45		23		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	12		12			17	0.15	2.0 <sup>a</sup>
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				11	0.54	11	1.0 <sup>a</sup>		16		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				10		11	2.7		15		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		12		13	1.9	0.44	18	2.5E-04	
Triethylamine	121-44-8				1.10E-01		10		11		1.2	15		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				10		11	8.1		15		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			200		210			260	2.5E-03	
Vanadium	7440-62-2		1.71E-01							57				
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		10		11	270	13	15		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	10	0.021	11	0.20 <sup>a</sup>	0.20 <sup>a</sup>	15	2.0E-03	0.038
Xylene m-	108-38-3		4.90E+01		1.30E+00		22		22	1.0E+03 <sup>b,c</sup>		29		
Xylene o-	95-47-6		4.90E+01		1.40E+00		20		21	1.0E+03 <sup>b,c</sup>		29		
Xylene p-	106-42-3		4.90E+01		1.30E+00		23		23	1.0E+03 <sup>b,c</sup>		30		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		21	210 <sup>c</sup>	22	1.0E+03 <sup>b,c</sup>		30		
Zinc	7440-66-6		7.34E+00							180				

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-8: Waste Pile Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Acenaphthene	83-32-9		1.47E+00				210		210	300 <sup>c</sup>		210		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	24		24		5.3	33		1.4
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		24		24	60	1.0E+03 <sup>b</sup>	33		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		24		25		76	34		
Acetophenone	98-86-2		2.45E+00				24		24	60		33		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	29		30	0.15		41	8.9E-04	210
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		24		24	300	360	33		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	25		26	0.11 <sup>d</sup>	0.98	36	6.6E-04 <sup>d</sup>	0.036
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	2.6E+11		2.6E+11	1.0E+03 <sup>b,c</sup>		2.6E+11	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01				24		24	3		33		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	24		24		23	33	0.56	73
Anthracene	120-12-7		7.34E+00				560		560	1.0E+03 <sup>b,c</sup>		560		
Antimony	7440-36-0	6.00E-03	9.79E-03					0.16		0.34				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				2.0		0.38			0.012	
Barium	7440-39-3	2.00E+00	1.71E+00					48		50				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	2.2E+04		2.2E+04			2.2E+04	1.7 <sup>c</sup>	390 <sup>c</sup>
Benzene	71-43-2	5.00E-03		1.76E-03	1.90E-01	1.60E-03	26	0.13	27		0.50 <sup>a</sup>	35	0.06	0.056
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	24		24	1.8		33	1.4E-05	87
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	1.5E+06	290 <sup>c</sup>	1.5E+06			1.5E+06	19 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	1.5E+06		1.5E+06			1.5E+06	120 <sup>c</sup>	950 <sup>c</sup>
Benzyl alcohol	100-51-6		7.34E+00				24		24	180		33		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	210 <sup>a</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					21		52				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	120		130		1.0E+03 <sup>a</sup>	180	0.016	0.20
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	32		33	32		42	0.058	0.25
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	29	2.3	30	15		40	0.063	0.032
Bromomethane	74-83-9		3.43E-02		1.50E-02		7.9E+09		8.0E+09	880 <sup>d</sup>	1.0E+03 <sup>b</sup>	1.7E+10		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	28		28		1.7	37		1.5E-03
Butanol n-	71-36-3		2.45E+00				24		24	60		33		
Butyl benzyl phthalate	85-68-7		4.90E+00				760		760	1.0E+03 <sup>b,c</sup>		760		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				27	0.19	28	0.68		36		
Cadmium	7440-43-9	5.00E-03	1.22E-02					0.20		0.67				
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		29		29	72		40		
Carbon tetrachloride	56-23-5	5.00E-03	1.71E-02	7.43E-04	2.10E-02	7.60E-04	42	0.21	43	0.50 <sup>a</sup>	0.50 <sup>a</sup>	57	0.043	0.044
Chlordane	57-74-9	2.00E-03	1.22E-02	2.76E-04	2.80E-02	1.50E-03	9.2E+06	0.030 <sup>a</sup>	9.5E+06	0.030 <sup>a</sup>	0.030 <sup>a</sup>	9.5E+06	0.030 <sup>a</sup>	
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		26		26	13	0.58	35		
Chloroaniline p-	106-47-8		9.79E-02				24		24	2.4		33		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		37	3.7	37	18	7.4	47		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	1.6E+03		1.6E+03	760 <sup>c</sup>		1.6E+03	0.56	1.0E+03 <sup>b,c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	29	2.3	29	14		40	0.046	0.030
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		24		24		730	33		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		26	2.0	26	6.0 <sup>a</sup>	6.0 <sup>a</sup>	35		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	24		24		6.3	33	0.25	0.20
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		26		27	3.3	0.26	35		
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					160		1.0E+03 <sup>b</sup>				
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					5.0 <sup>a</sup>		5.0 <sup>a</sup>				

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-8: Waste Pile Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Chrysene	218-01-9			8.05E-04		7.30E-03	2.2E+04		2.2E+04			2.2E+04	17 <sup>c</sup>	160 <sup>c</sup>
Cobalt	7440-48-4		4.90E-01							73				
Copper	7440-50-8	1.30E+00						370						
Cresol m-	108-39-4		1.22E+00		1.20E+03		26		26	32	200 <sup>a</sup>	35		
Cresol o-	95-48-7		1.22E+00		8.80E+02		26		26	32	200 <sup>a</sup>	35		
Cresol p-	106-44-5		1.22E-01		1.30E+03		26		26	3.2	200 <sup>a</sup>	35		
Cresols	1319-77-3		1.22E+00		1.10E+03		29		29	36	1.0E+03 <sup>b</sup>	38		
Cumene	98-82-8		2.45E+00		1.30E+00		110		110	260 <sup>c</sup>	140 <sup>c</sup>	120		
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		24		24	0.01	9.5E-03	33		
Cyclohexanone	108-94-1		1.22E+02				26		26	1.0E+03 <sup>b</sup>		35		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT, p,p'	50-29-3		1.22E-02		2.84E-04	8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			1.1E+07		1.1E+07			1.1E+07	1.0E+03 <sup>b,c</sup>	
Dibenz[a,h]anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	35	7.1E-03	36		0.11	50	3.4E-03	3.9
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		64	38	64	140	49	73		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	61	4.6	61		7.5 <sup>a</sup>	70	0.28	0.091
Dichlorobenzidine 3,3'	91-94-1			2.15E-04		4.90E+00	92		93			100	0.022	500 <sup>c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		29		30	150	17	38		
Dichloroethane 1,1-	75-34-3		2.45E+00		1.60E+00	7.40E-03	28	0.11 <sup>e</sup>	29	0.45 <sup>d</sup>	0.45 <sup>d</sup>	40	0.010 <sup>e</sup>	0.19 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	27	0.075 <sup>d</sup>	28	0.32 <sup>a</sup>	0.32 <sup>d</sup>	38	7.1E-03 <sup>d</sup>	0.024
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				25	1.8	26	6.3		35		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				24	2.4	24	12		33		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	26	0.18	27	0.70 <sup>a</sup>	0.70 <sup>a</sup>	35	5.7E-03	7.8E-03
Dichlorophenol 2,4-	120-83-2		7.34E-02				34		35	2.6		44		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				24	1.7	24	6		33		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		40	0.20	41	91	0.58	58	0.083	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	24		24	18	1.5	33	0.032	0.10
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				40		41	800		55		
Diethylstilbestrol	56-53-1			2.05E-08			430		430			430	8.9E-06	
Dimethoate	60-51-5		4.90E-03				5.0E+04		5.3E+04	6.0 <sup>d</sup>	1.0E+03 <sup>e</sup>	7.6E+04		
Dimethoxybenzidine 3,3'	119-90-4			6.90E-03			24		24			33	0.23	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		24		24	60	1.0E+03 <sup>b</sup>	33		
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'	119-93-7			1.05E-05			35		36			46	4.8E-04	
Dimethylphenol 2,4-	105-67-9		4.90E-01				31		31	15		39		
Di-n-butyl phthalate	84-74-2		2.45E+00				1.0E+03		1.0E+03	1.0E+03 <sup>b,c</sup>		1.0E+03		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				24		24	0.06		33		
Dinitrophenol 2,4-	51-28-5		4.90E-02				24		24	1.2		33		
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	24		24	0.13 <sup>a</sup>		33	4.7E-03	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			24		24	0.6		33	4.7E-03	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	24		24		1.0E+03 <sup>b</sup>	33	0.29	6.0
Diphenylamine	122-39-4		6.12E-01				87		89	54 <sup>c</sup>		95		

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
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d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-8: Waste Pile Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner										
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)						
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation			
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	45			45				56	0.007		1.1
Disulfoton	298-04-4		9.79E-04				1.6E+09		1.6E+09	1.0E+03 <sup>b,c</sup>				2.4E+09			
Endosulfan (Endosulfan I and II, mixture)	115-29-7		1.47E-01				138		139	20 <sup>c</sup>				150			
Endrin	72-20-8	2.00E-03	7.34E-03				5.5E+08	0.020 <sup>a</sup>	5.6E+08	0.020 <sup>a</sup>				5.6E+08			
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Epoxybutane 1, 2-	106-88-7				2.40E-01		24		24		5.8		33				
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		24		24	240	1.0E+03 <sup>b</sup>		33				
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		24		24	180	1.0E+03 <sup>b</sup>		33				
Ethyl acetate	141-78-6		2.20E+01				150		150	1.0E+03 <sup>b</sup>			214				
Ethyl ether	60-29-7		4.90E+00				24		24	120			33				
Ethyl methacrylate	97-63-2		2.20E+00				58		60	130			82				
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b</sup>			
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	57	39.6	57	140	190 <sup>c</sup>		66				0.72
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	900	0.045	930		0.91		1.4E+03	1.6E-03			0.11
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		24		24	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		33				
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	24		24	0.048			33	0.029			1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				1.5E+03		1.5E+03	1.0E+03 <sup>b,c</sup>			1.5E+03				
Fluoride	16984-48-8	4.00E+00	2.90E+00					72		66							
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.50E+00	24		24	120	1.0E+03 <sup>b</sup>		33				50
Formic acid	64-18-6		4.90E+01				24		24	1.0E+03 <sup>b</sup>			33				
Furfural	98-01-1		7.34E-02		2.20E+01		24		24	1.8	530		33				
HCH beta-	319-85-7			5.36E-05		1.70E-02	110		110				120	6.5E-03			2.1 <sup>c</sup>
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	6.0E+09	0.4 <sup>a,d</sup>	6.1E+09	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>		8.1E+09	0.4 <sup>a,b,c</sup>			0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		1.96E-01	1.53E-05		3.60E-04	1.3E+10	38 <sup>e</sup>	1.4E+10	83 <sup>c,d</sup>	450 <sup>c,e</sup>		1.9E+10	1.0E+03 <sup>b,c</sup>			1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>			1.0E+30	8.0E-03 <sup>a</sup>			8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	1.1E+03		1.1E+03	0.50 <sup>a</sup>			1.1E+03	0.50 <sup>a</sup>			0.50 <sup>a</sup>
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	3.4E+04	0.13 <sup>a,c</sup>	3.4E+04	0.13 <sup>a,c</sup>			3.4E+04	0.13 <sup>a,c</sup>			0.13 <sup>a,c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01			6.90E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>		1.0E+30				
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	160		160	3.0 <sup>a</sup>			170	1.2			0.55
Hexachlorophene	70-30-4		7.34E-03				4.6E+03		4.6E+03	34			4.6E+03				
Hexane n-	110-54-3		2.69E+02		6.60E-01		53		53	1.0E+03 <sup>b,c</sup>	35 <sup>c</sup>		63				
Hydrogen Sulfide	7783-06-4		7.34E-02				24		24	1.8			33				
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	1.7E+14		1.7E+14				1.7E+14	1.0E+03 <sup>b,c</sup>			1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				24		24	180			33				
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		27		27	130	1.0E+03 <sup>b</sup>		36	3.6			
Kepone	143-50-0		1.22E-02				490		490	6			500				
Lead	7439-92-1	1.50E-02						5.0 <sup>a</sup>									
Manganese	7439-96-5		1.15E+00							37							
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			0.039		0.058	0.019						
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		25		26	0.063	0.17		36				
Methanol	67-56-1		1.22E+01		1.54E+03		24		24	300	1.0E+03 <sup>b</sup>		33				
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>			1.0E+30				
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		24		24	1.2	1.0E+03 <sup>b</sup>		33				

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
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Table F-8: Waste Pile Single Clay Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		24		24	0.6	1.0E+03 <sup>b</sup>	33		
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		24		24	200 <sup>a</sup>	200 <sup>a</sup>	33		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		24		24	48	29	33		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		73		75	930 <sup>b,d</sup>	400	110		
Methyl parathion	298-00-0		6.12E-03				2.7E+07		2.8E+07	9.2 <sup>d</sup>	1.0E+03 <sup>a</sup>	4.5E+07		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		24		24		410	33		
Methylcholanthrene 3-	56-49-5					1.20E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				24		24	6		33		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	25	0.12	25	37	250	34	0.44	1.0
Molybdenum	7439-98-7		1.22E-01							2.8				
Naphthalene	91-20-3		4.90E-01		1.90E-02		66		67	33 <sup>c</sup>	1.3	76		
Nickel	7440-02-0		4.90E-01							22				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		24		24	0.3	2.0 <sup>a</sup>	33		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	24		24		8.0	33		7.7E-04
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	24		24			33	2.2E-05	1.4E-03
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	24		24	4.80E-03		33	6.3E-05	0.013
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	28		29			37	6.7E-04	7.4E-04
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	24		24			33	4.6E-04	0.050
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	46		47	23		57	1.1	30
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	24		24			33	1.5E-04	0.15
Nitrosopiperidine N-	100-75-4					8.70E-03	24		24			33		0.29
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	24		24			33	1.5E-03	31
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				26		27	1.3		37		
Parathion (ethyl)	56-38-2		1.47E-01				6.6E+17		7.0E+17	1.0E+03 <sup>b,c</sup>		9.4E+17		
Pentachlorobenzene	608-93-5		1.96E-02				2.9E+04		2.9E+04	560 <sup>c</sup>		2.9E+04		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	3.8E+03		3.8E+03			3.8E+03	4.7E-06	2.4E-04 <sup>c</sup>
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	3.6E+17		3.6E+17			3.6E+17	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			1.3E+03		1.3E+03	97 <sup>c</sup>		1.3E+03	0.49	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	61	0.061	62	46		71	0.057	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01		9.00E+02		24		24	360	1.0E+03 <sup>b</sup>	33		
Phenyl mercuric acetate	62-38-4		1.96E-03				24		24	0.048		33		
Phenylenediamine 1,3-	108-45-2		1.47E-01				24		24	3.6		33		
Phorate	298-02-2		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	4.3E+11	1.0E+03 <sup>b,c</sup>	4.3E+11	1.0E+03 <sup>b,c</sup>		4.4E+11	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00				39		40	73 <sup>c</sup>		51		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	24		24		11.9	33	0.013	0.57
Pyrene	129-00-0		7.34E-01				3.6E+03		3.6E+03	1.0E+03 <sup>b,c</sup>		3.6E+03		
Pyridine	110-86-1		2.45E-02		1.40E+00		24		24	0.6	5.0 <sup>a</sup>	33		
Safrole	94-59-7			5.36E-04			31		32			40	0.022	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.87		1.0 <sup>a</sup>				
Silver	7440-22-4		1.22E-01							3.8				
Strychnine and salts	57-24-9		7.34E-03				26		27	0.2		36		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		47	4.7	47	230	170	57		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				670		670	4.9 <sup>c</sup>		670		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	8.9E+09		9.0E+09	220 <sup>c</sup>		9.0E+09	5.8 <sup>c</sup>	20 <sup>c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		7.34E-01	3.71E-03		1.90E-03	58	0.18 <sup>a</sup>	59	43		72	0.27	0.14

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

**Table F-8: Waste Pile Single Clay Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Compacted Clay Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	510	0.18 <sup>a</sup>	520	770	0.64 <sup>a</sup>	710	0.34	0.32 <sup>d</sup>
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	30	0.15	30	0.70 <sup>a</sup>	0.70 <sup>a</sup>	39	0.072	0.70 <sup>a</sup>
Tetrachlorophenol 2,3,4,6-	58-90-2		7.34E-01				31		32	23		40		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					0.035		0.046				
Thiram [Thiuram]	137-26-8		1.22E-01				45		45	5.5		56		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		33	33	34	170	44	43		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	24		24			33	1.0E-03	250
Toluidine o-	95-53-4			4.02E-04		3.60E-02	24		24			33	0.013	1.2
Toluidine p-	106-49-0			5.08E-04			24		24			33	0.017	
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	9.5E+06	0.50 <sup>a</sup>	9.7E+06			9.7E+06	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	29	2.3	29	14		39	0.47	0.74
Trichloro-1,2,2-trifluoro-ethane 1,1,2-	76-13-1		7.34E+02			9.50E+01	54		55	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	64		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01			8.30E-01	340	24	340	83 <sup>c</sup>	280 <sup>c</sup>	340		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00			6.90E+00	5.8E+03	0.25 <sup>d</sup>	6.0E+03	0.96 <sup>d</sup>	0.96 <sup>d</sup>	8.7E+03	7.8E-03 <sup>a</sup>	0.11 <sup>a</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	9.79E-02	1.69E-03		1.10E-03	29	0.14	30	0.96 <sup>d</sup>	0.96 <sup>a</sup>	40	7.8E-03 <sup>d</sup>	0.011 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	28	0.14	29		0.50 <sup>a</sup>	37	0.33	0.25
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00			2.10E+00	29		29	210	61	38		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				50		51	120		61		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	30		31			40	0.35	2.0 <sup>a</sup>
Trichlorophenoxy)propionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				26	1.0 <sup>a</sup>	26	1.0 <sup>a</sup>		35		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				24		24	6		33		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		32		32	4.8	1.1	44	6.1E-04	
Triethylamine	121-44-8					1.10E-01	24		24		2.7	33		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				24		24	18		33		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			1.2E+03		1.2E+03			1.4E+03	0.014	
Vanadium	7440-62-2		1.71E-01							170				
Vinyl acetate	108-05-4		2.45E+01			1.20E+00	24		24	600	29	33		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	24	0.048	24	0.2 <sup>a</sup>	0.20 <sup>a</sup>	33	4.5E-03	0.084
Xylene m-	108-38-3		4.90E+01			1.30E+00	65		65	1.0E+03 <sup>b,c</sup>		84	74	
Xylene o-	95-47-6		4.90E+01			1.40E+00	58		59	1.0E+03 <sup>b,c</sup>		83	68	
Xylene p-	106-42-3		4.90E+01			1.30E+00	67		68	1.0E+03 <sup>b,c</sup>		88	77	
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01			1.40E+00	64	640 <sup>c</sup>	64	1.0E+03 <sup>b,c</sup>		89	73	
Zinc	7440-66-6		7.34E+00							430				

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-9: Waste Pile Composite Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Acenaphthene	83-32-9		1.47E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	7.3E+07		7.3E+07		1.0E+03 <sup>b</sup>	7.9E+07		1.0E+03 <sup>b</sup>
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		6.9E+07		7.1E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.6E+07		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		7.4E+07		7.7E+07		1.0E+03 <sup>b</sup>	8.1E+07		
Acetophenone	98-86-2		2.45E+00				4.0E+08		4.0E+08	1.0E+03 <sup>b</sup>		4.0E+08		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		7.1E+07		7.2E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.4E+07		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	5.9E+08		6.0E+08	740 <sup>b</sup>	740 <sup>d</sup>	6.2E+08	750 <sup>d</sup>	750 <sup>d</sup>
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Allyl alcohol	107-18-6		1.22E-01				4.7E+08		4.8E+08	1.0E+03 <sup>b</sup>		4.8E+08		
Aniline (benzenamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	7.3E+07		7.4E+07		1.0E+03 <sup>b</sup>	7.8E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Anthracene	120-12-7		7.34E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Antimony	7440-36-0	6.00E-03	9.79E-03					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				5.0 <sup>a</sup>		5.0 <sup>a</sup>		5.0 <sup>a</sup>		
Barium	7440-39-3	2.00E+00	1.71E+00					100 <sup>a</sup>		100 <sup>a</sup>				
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzene	71-43-2	5.00E-03	1.76E-03	1.90E-01	1.60E-03		9.2E+07	0.50 <sup>a</sup>	9.4E+07		0.50 <sup>a</sup>	9.7E+07	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	8.3E+07		8.3E+07	1.0E+03 <sup>b,c</sup>		8.7E+07	36	1.0E+03 <sup>b,c</sup>
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Benzyl alcohol	100-51-6		7.34E+00				3.2E+08		3.2E+08	1.0E+03 <sup>b</sup>		3.2E+08		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	1.0E+03 <sup>e</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	1.0E+30		1.0E+30		1.0E+03 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	1.7E+08		1.7E+08	1.0E+03 <sup>b</sup>		1.8E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	2.3E+09	1.0E+03 <sup>b</sup>	2.3E+09	1.0E+03 <sup>b</sup>		2.3E+09	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Bromomethane	74-83-9		3.43E-02		1.50E-02		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	1.1E+08		1.1E+08		1.0E+03 <sup>b,c</sup>	1.2E+08		1.0E+03 <sup>b,c</sup>
Butanol n-	71-36-3		2.45E+00				3.0E+08		3.1E+08	1.0E+03 <sup>b</sup>		3.1E+08		
Butyl benzyl phthalate	85-68-7		4.90E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				1.8E+09	1.0E+03 <sup>b,c</sup>	1.8E+09	1.0E+03 <sup>b,c</sup>		1.8E+09		
Cadmium	7440-43-9	5.00E-03	1.22E-02					1.0 <sup>a</sup>		1.0 <sup>a</sup>				
Carbon disulfide	75-15-0		2.45E+00		1.00E+01		1.2E+09		1.2E+09	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.2E+09		
Carbon tetrachloride	56-23-5	5.00E-03	1.71E-02	7.43E-04	2.10E-02	7.60E-04	1.0E+30	0.50 <sup>a</sup>	1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>	1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Chlordane	57-74-9	2.00E-03	1.22E-02	2.76E-04	2.80E-02	1.50E-03	1.0E+30	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>	1.0E+30	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		9.2E+07		9.3E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	9.6E+07		
Chloroaniline p-	106-47-8		9.79E-02				6.0E+08		6.0E+08	1.0E+03 <sup>b</sup>		6.0E+08		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		1.9E+08	100 <sup>a</sup>	2.0E+08	100 <sup>a</sup>	100 <sup>a</sup>	2.0E+08		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	9.5E+08	1.0E+03 <sup>b</sup>	1.0E+09	1.0E+03 <sup>b</sup>		1.0E+09	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		7.5E+07		7.6E+07		1.0E+03 <sup>b</sup>	7.8E+07		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		2.2E+08	6.0 <sup>a</sup>	2.2E+08	6.0 <sup>a</sup>	6.0 <sup>a</sup>	2.3E+08		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	7.2E+07		7.3E+07		1.0E+03 <sup>b</sup>	7.7E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		9.6E+07		9.8E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	9.9E+07		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-9: Waste Pile Composite Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+30 <sup>b</sup>	1.0E+30		1.0E+30 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01				1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>					
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02				5.0 <sup>a</sup>		5.0 <sup>a</sup>					
Chrysene	218-01-9			8.05E-04		7.30E-03	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Cobalt	7440-48-4		4.90E-01						1.0E+03 <sup>b</sup>					
Copper	7440-50-8	1.30E+00					1.0E+03 <sup>b</sup>							
Cresol m-	108-39-4		1.22E+00		1.20E+03		9.1E+07		9.1E+07	200 <sup>a</sup>	200 <sup>a</sup>	9.6E+07		
Cresol o-	95-48-7		1.22E+00		8.80E+02		9.1E+07		9.2E+07	200 <sup>a</sup>	200 <sup>a</sup>	9.6E+07		
Cresol p-	106-44-5		1.22E-01		1.30E+03		9.1E+07		9.1E+07	200 <sup>a</sup>	200 <sup>a</sup>	9.6E+07		
Cresols	1319-77-3		1.22E+00		1.10E+03		1.2E+08		1.2E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.2E+08		
Cumene	98-82-8		2.45E+00		1.30E+00		1.2E+09		1.2E+09	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.3E+09		
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		7.7E+07		7.8E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.3E+07		
Cyclohexanone	108-94-1		1.22E+02				8.7E+08		8.8E+08	1.0E+03 <sup>b</sup>		8.8E+08		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT p,p'-	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
Dibenz(a,h)anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		4.5E+08	1.0E+03 <sup>b,c</sup>	4.6E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.7E+08		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	4.3E+08	7.5 <sup>a</sup>	4.3E+08		7.5 <sup>a</sup>	4.5E+08	7.5 <sup>a</sup>	7.5 <sup>a</sup>
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	1.3E+09		1.4E+09			1.4E+09	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		1.2E+08		1.2E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.3E+08		
Dichloroethane 1,1-	75-34-3		2.45E+00		1.60E+00	7.40E-03	3.4E+14	0.45 <sup>e</sup>	3.5E+14	0.45 <sup>d</sup>	0.45 <sup>d</sup>	4.2E+14	0.45 <sup>e</sup>	0.45 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	3.0E+21	0.32 <sup>d</sup>	3.0E+21	0.32 <sup>e</sup>	0.32 <sup>d</sup>	3.0E+21	0.32 <sup>d</sup>	0.32 <sup>d</sup>
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				7.3E+08	1.0E+03 <sup>b</sup>	7.4E+08	1.0E+03 <sup>b</sup>		7.4E+08		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				5.8E+08	1.0E+03 <sup>b</sup>	5.8E+08	1.0E+03 <sup>b</sup>		5.8E+08		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	8.5E+07	0.70 <sup>a</sup>	8.7E+07	0.70 <sup>a</sup>	0.70 <sup>a</sup>	9.3E+07	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Dichlorophenol 2,4-	120-83-2		7.34E-02				1.3E+11		1.3E+11	1.0E+03 <sup>b</sup>		1.3E+11		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				3.1E+08		3.1E+08	10 <sup>a</sup>		3.1E+08		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	8.3E+07		8.5E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.8E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Diethylstilbestrol	56-53-1			2.05E-08			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
Dimethoate	60-51-5		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>e</sup>	1.0E+30		
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			4.7E+08		4.9E+08			4.9E+08	1.0E+03 <sup>b,c</sup>	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		7.2E+07		7.2E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.7E+07		
Dimethylbenz[a]anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			8.9E+11		9.1E+11			9.3E+11	1.0E+03 <sup>b</sup>	
Dimethylphenol 2,4-	105-67-9		4.90E-01				9.2E+09		9.4E+09	1.0E+03 <sup>b</sup>		9.4E+09		
Di-n-butyl phthalate	84-74-2		2.45E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				4.0E+08		4.0E+08	1.0E+03 <sup>b,c</sup>		4.0E+08		
Dinitrophenol 2,4-	51-28-5		4.90E-02				2.9E+08		2.9E+08	1.0E+03 <sup>b</sup>		2.9E+08		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

Table F-9: Waste Pile Composite Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	8.9E+07		9.1E+07	0.13 <sup>a</sup>		9.5E+07	0.13 <sup>a</sup>	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			4.4E+08		4.5E+08	1.0E+03 <sup>b,c</sup>		4.5E+08	1.0E+03 <sup>b,c</sup>	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	7.2E+07		7.2E+07		1.0E+03 <sup>b</sup>	7.6E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Diphenylamine	122-39-4		6.12E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	3.0E+08		3.0E+08			3.1E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Disulfoton	298-04-4		9.79E-04				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Endrin	72-20-8	2.00E-03	7.34E-03				1.0E+30	0.020 <sup>a</sup>	1.0E+30	0.020 <sup>a</sup>		1.0E+30		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane 1, 2-	106-88-7				2.40E-01		7.3E+07		7.3E+07		1.0E+03 <sup>b</sup>	7.8E+07		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		7.3E+07		7.4E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.7E+07		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		7.8E+07		8.0E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.2E+07		
Ethyl acetate	141-78-6		2.20E+01				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Ethyl ether	60-29-7		4.90E+00				3.0E+08		3.0E+08	1.0E+03 <sup>b</sup>		3.0E+08		
Ethyl methacrylate	97-63-2		2.20E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	4.0E+08	1.0E+03 <sup>b,c</sup>	4.0E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.2E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		7.3E+07		7.3E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.9E+07		
Ethylene oxide	75-21-8			9.47E-05	1.00E+01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	7.5E+07		7.5E+07	1.0E+03 <sup>b</sup>		7.8E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Fluoride	16984-48-8	4.00E+00	2.90E+00					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.50E+00	7.4E+07		7.4E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.8E+07		1.0E+03 <sup>b</sup>
Formic acid	64-18-6		4.90E+01				2.9E+08		2.9E+08	1.0E+03 <sup>b</sup>		2.9E+08		
Furfural	98-01-1		7.34E-02		2.20E+01		7.5E+07		7.6E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.0E+07		
HCH beta-	319-85-7			5.36E-05		1.70E-02	1.4E+09		1.4E+09			1.5E+09	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	1.0E+30	0.4 <sup>a,b,c</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,e</sup>	1.0E+30	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>
HCH alpha-	319-84-6		1.96E-01	1.53E-05		3.60E-04	1.0E+30	1.0E+03 <sup>b,e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>c,e</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>		1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	1.0E+30		1.0E+30	0.50 <sup>a</sup>		1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	1.0E+30	0.13 <sup>a,c</sup>	1.0E+30	0.13 <sup>a,c</sup>		1.0E+30	0.13 <sup>a,c</sup>	0.13 <sup>a,c</sup>
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30		
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	2.1E+09		2.1E+09	3.0 <sup>a</sup>		2.1E+09	3.0 <sup>a</sup>	3.0 <sup>a</sup>
Hexachlorophene	70-30-4		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Hexane n-	110-54-3		2.69E+02		6.60E-01		3.8E+08		3.9E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.0E+08		
Hydrogen Sulfide	7783-06-4		7.34E-02				2.9E+08		2.9E+08	1.0E+03 <sup>b</sup>		2.9E+08		
Indeno[1,2,3-cd]pyrene	193-39-5			8.05E-05		3.80E-02	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				3.0E+08		3.0E+08	1.0E+03 <sup>b</sup>		3.0E+08		
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		1.0E+08		1.1E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.1E+08	1.0E+03 <sup>b</sup>	
Kepone	143-50-0		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Lead	7439-92-1	1.50E-02						5.0 <sup>a</sup>						

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter

Table F-9: Waste Pile Composite Liner LCTVs

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Manganese	7439-96-5		1.15E+00						1.0E+03 <sup>b</sup>					
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04		0.20 <sup>a,c</sup>		0.20 <sup>a,c</sup>	0.20 <sup>a,c</sup>				
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		6.2E+08		6.2E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	6.4E+08		
Methanol	67-56-1		1.22E+01		1.54E+03		7.3E+07		7.5E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.8E+07		
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	10 <sup>a,c</sup>		1.0E+30		
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		7.1E+07		7.2E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.4E+07		
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		7.4E+07		7.6E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.0E+07		
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		7.1E+07		7.2E+07	200 <sup>a</sup>	200 <sup>a</sup>	7.6E+07		
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		7.9E+07		8.1E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.3E+07		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		1.0E+30		1.0E+30	1.0E+03 <sup>b,d</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Methyl parathion	298-00-0		6.12E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>e</sup>	1.0E+30		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		7.6E+07		7.7E+07		1.0E+03 <sup>b</sup>	8.0E+07		
Methylcholanthrene 3-	56-49-5				1.20E-03		1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				3.8E+08		3.8E+08	1.0E+03 <sup>b</sup>		3.8E+08		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	3.7E+08	1.0E+03 <sup>b</sup>	3.7E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	3.9E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Molybdenum	7439-98-7		1.22E-01							1.0E+03 <sup>b</sup>				
Naphthalene	91-20-3		4.90E-01		1.90E-02		5.1E+08		5.1E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	5.2E+08		
Nickel	7440-02-0		4.90E-01							1.0E+03 <sup>b</sup>				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		8.1E+07		8.4E+07	2.0 <sup>a</sup>	2.0 <sup>a</sup>	8.7E+07		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	7.4E+07		7.6E+07		1.0E+03 <sup>b</sup>	8.0E+07		1.0E+03 <sup>b</sup>
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	7.4E+07		7.5E+07			7.8E+07	50	1.0E+03 <sup>b</sup>
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	7.3E+07		7.5E+07	1.0E+03 <sup>b</sup>		7.8E+07	150	1.0E+03 <sup>b</sup>
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	1.2E+08		1.2E+08			1.3E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	8.0E+07		8.0E+07			8.2E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	3.2E+08		3.2E+08	1.0E+03 <sup>b,c</sup>		3.3E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	7.4E+07		7.5E+07			7.7E+07	340	1.0E+03 <sup>b</sup>
Nitrosopiperidine N-	100-75-4					8.70E-03	7.3E+07		7.3E+07			7.7E+07		1.0E+03 <sup>b</sup>
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	7.1E+07		7.2E+07			7.6E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				3.1E+09		3.1E+09	1.0E+03 <sup>b</sup>		3.1E+09		
Parathion (ethyl)	56-38-2		1.47E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Pentachlorobenzene	608-93-5		1.96E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	4.6E+08	100 <sup>a</sup>	4.6E+08	100 <sup>a</sup>		4.8E+08	100 <sup>a</sup>	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01		9.00E+02		7.9E+07		8.0E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	8.4E+07		
Phenyl mercuric acetate	62-38-4		1.96E-03				2.9E+08		3.0E+08	1.0E+03 <sup>b</sup>		3.0E+08		
Phenylenediamine 1,3-	108-45-2		1.47E-01				2.9E+08		2.9E+08	1.0E+03 <sup>b</sup>		2.9E+08		
Phorate	298-02-2		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	8.4E+07		8.5E+07		1.0E+03 <sup>b</sup>	8.9E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Pyrene	129-00-0		7.34E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Pyridine	110-86-1		2.45E-02		1.40E+00		7.5E+07		7.5E+07	5.0 <sup>a</sup>	5.0 <sup>a</sup>	8.0E+07		
Safrole	94-59-7			5.36E-04			1.6E+10		1.6E+10			1.6E+10	1.0E+03 <sup>b,c</sup>	

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-9: Waste Pile Composite Liner LCTVs**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				Composite Liner							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Selenium	7782-49-2	5.00E-02	1.22E-01				1.0 <sup>a</sup>		1.0 <sup>a</sup>					
Silver	7440-22-4		1.22E-01						5.0 <sup>a</sup>					
Strychnine and salts	57-24-9		7.34E-03				1.1E+09		1.2E+09	1.0E+03 <sup>b,c</sup>		1.2E+09		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		3.0E+08	1.0E+03 <sup>b,c</sup>	3.0E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	3.1E+08		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		7.34E-01	3.71E-03		1.90E-03	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>		1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	1.0E+30	0.64 <sup>e</sup>	1.0E+30	1.0E+03 <sup>b</sup>	0.64 <sup>e</sup>	1.0E+30	0.64 <sup>d</sup>	0.64 <sup>d</sup>
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	1.3E+08	0.70 <sup>a</sup>	1.3E+08	0.70 <sup>a</sup>	0.70 <sup>a</sup>	1.3E+08	0.70 <sup>a</sup>	0.70 <sup>a</sup>
Tetrachlorophenol 2,3,4,6-	58-90-2		7.34E-01				1.3E+10		1.3E+10	1.0E+03 <sup>b,c</sup>		1.3E+10		
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					1.0E+03 <sup>b</sup>		1.0E+03 <sup>b</sup>				
Thiram [Thiuram]	137-26-8		1.22E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		1.7E+08	1.0E+03 <sup>b,c</sup>	1.7E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.7E+08		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	7.1E+07		7.3E+07			7.5E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Toluidine o-	95-53-4			4.02E-04		3.60E-02	8.3E+07		8.3E+07			8.6E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Toluidine p-	106-49-0			5.08E-04			3.9E+08		3.9E+08			3.9E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b</sup>
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	1.0E+30	0.50 <sup>a</sup>	1.0E+30			1.0E+30	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	4.4E+08	1.0E+03 <sup>b</sup>	4.4E+08	1.0E+03 <sup>b</sup>		4.7E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		3.7E+08		3.8E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	3.8E+08		
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		1.6E+10	1.0E+03 <sup>b,c</sup>	1.6E+10	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.6E+10		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		1.0E+30	0.96 <sup>d</sup>	1.0E+30	0.96 <sup>d</sup>	0.96 <sup>d</sup>	1.0E+30	0.96 <sup>e</sup>	0.96 <sup>e</sup>
Trichloroethane 1,1,2-	79-00-5	5.00E-03	9.79E-02	1.69E-03		1.10E-03	3.3E+09	0.96 <sup>d</sup>	3.3E+09	0.96 <sup>d</sup>	0.96 <sup>e</sup>	3.5E+09	0.96 <sup>d</sup>	0.96 <sup>d</sup>
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	1.1E+08	0.50 <sup>a</sup>	1.1E+08		0.50 <sup>a</sup>	1.2E+08	0.50 <sup>a</sup>	0.50 <sup>a</sup>
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		1.1E+08		1.1E+08	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.2E+08		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				1.0E+30		1.0E+30	400 <sup>a</sup>		1.0E+30		
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	1.4E+08		1.4E+08			1.5E+08	2.0 <sup>a</sup>	2.0 <sup>a</sup>
Trichlorophenoxypropionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				7.5E+08	1.0 <sup>a</sup>	7.5E+08	1.0 <sup>a</sup>		7.5E+08		
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				4.7E+08		4.7E+08	1.0E+03 <sup>b,c</sup>		4.7E+08		
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+03 <sup>b</sup>	
Triethylamine	121-44-8				1.10E-01		8.2E+07		8.5E+07		1.0E+03 <sup>b</sup>	8.8E+07		
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				3.5E+08		3.5E+08	1.0E+03 <sup>b,c</sup>		3.5E+08		
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	
Vanadium	7440-62-2		1.71E-01							1.0E+03 <sup>b</sup>				
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		7.4E+07		7.5E+07	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	7.8E+07		
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	7.6E+07	0.20 <sup>a</sup>	7.8E+07	0.20 <sup>a</sup>	0.20 <sup>a</sup>	8.1E+07	0.20 <sup>a</sup>	0.20 <sup>a</sup>
Xylene m-	108-38-3		4.90E+01		1.30E+00		4.6E+08		4.7E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.8E+08		
Xylene o-	95-47-6		4.90E+01		1.40E+00		4.1E+08		4.1E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.2E+08		
Xylene p-	106-42-3		4.90E+01		1.30E+00		5.0E+08		5.2E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	5.2E+08		
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		4.8E+08	1.0E+03 <sup>b,c</sup>	4.8E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	4.9E+08		
Zinc	7440-66-6		7.34E+00							1.0E+03 <sup>b</sup>				

KEY:  
a - TC Rule cap                      d - Capped by daughter LCTV  
b - 1,000 mg/L cap                  e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-10: Land Application Unit LCTVs (No-Liner)**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Acenaphthene	83-32-9		1.47E+00				8.5		8.5	13 <sup>c</sup>		8.8		
Acetaldehyde [Ethanal]	75-07-0				2.20E-01	4.10E-02	1.9		1.9		0.42	2.2		0.090
Acetone (2-propanone)	67-64-1		2.45E+00		1.50E+03		1.9		1.9	4.7	1.0E+03 <sup>b</sup>	2.2		
Acetonitrile (methyl cyanide)	75-05-8				3.10E+00		1.9		1.9		6.0	2.2		
Acetophenone	98-86-2		2.45E+00				1.9		1.9	4.7		2.2		
Acrolein	107-02-8		4.90E-01		3.30E-04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Acrylamide	79-06-1		4.90E-03	2.15E-05		5.10E+00	2.2		2.2	0.011		2.6	5.6E-05	13
Acrylic acid [propenoic acid]	79-10-7		1.22E+01		1.50E+01		1.9		1.9	23	29	2.2		
Acrylonitrile	107-13-1		2.45E-02	1.79E-04	3.80E-02	1.00E-03	2.0		2.0	8.2E-03 <sup>d</sup>	0.076	2.3	4.2E-05 <sup>d</sup>	2.3E-03
Aldrin	309-00-2		7.34E-04	5.68E-06		1.00E-05	7.6E+07		7.7E+07	1.0E+03 <sup>b,c</sup>		7.8E+07	440 <sup>c</sup>	780 <sup>c</sup>
Allyl alcohol	107-18-6		1.22E-01				1.9		1.9	0.23		2.2		
Aniline (benzeneamine)	62-53-3			1.69E-02	9.30E-01	2.20E+00	1.9		1.9		1.8	2.2	0.037	4.8
Anthracene	120-12-7		7.34E+00				21		22	160 <sup>c</sup>		22		
Antimony	7440-36-0	6.00E-03	9.79E-03					0.013			0.024			
Arsenic	7440-38-2	5.00E-02	7.34E-03	6.44E-05				0.13			0.026		5.6E-04	
Barium	7440-39-3	2.00E+00	1.71E+00					3.5			3.6			
Benz(a)anthracene	56-55-3			8.05E-05		1.80E-02	370		370			370	0.030 <sup>c</sup>	6.7 <sup>c</sup>
Benzene	71-43-2	5.00E-03	1.76E-03	1.90E-01	1.60E-03		2.0	9.9E-03	2.0		0.38	2.3	4.0E-03	3.7E-03
Benzidine	92-87-5		7.34E-02	4.20E-07		2.60E+00	1.9		1.9	0.14		2.2	9.2E-07	5.7
Benzo(a)pyrene	50-32-8	2.00E-04		1.32E-05		5.40E-03	9.2E+03	1.8 <sup>c</sup>	9.3E+03			9.3E+03	0.12 <sup>c</sup>	50 <sup>c</sup>
Benzo(b)fluoranthene	205-99-2			8.05E-05		6.30E-04	9.5E+03		9.5E+03			9.5E+03	0.77 <sup>c</sup>	6.0 <sup>c</sup>
Benzyl alcohol	100-51-6		7.34E+00				1.9		1.9	14		2.2		
Benzyl chloride	100-44-7			5.68E-04		5.20E-04	1.0E+30		1.0E+30	16 <sup>a</sup>		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Beryllium	7440-41-7	4.00E-03	4.90E-02					5.0		9.8				
Bis(2-chloroethyl)ether	111-44-4			8.78E-05		1.10E-03	6.8		7.0		1.0E+03 <sup>a</sup>	8.2	7.2E-04	9.0E-03
Bis(2-chloroisopropyl)ether	39638-32-9		9.79E-01	1.38E-03		5.90E-03	2.2		2.2	2.2		2.5	3.4E-03	0.015
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	4.90E-01	6.90E-03	1.80E+02	2.80E+01	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Bromodichloromethane	75-27-4	8.00E-02	4.90E-01	1.56E-03		8.00E-04	2.2	0.17	2.2	1.1		2.5	3.9E-03	2.0E-03
Bromomethane	74-83-9		3.43E-02		1.50E-02		6.9E+07		6.9E+07	69 <sup>d</sup>	1.0E+03 <sup>b</sup>	1.2E+08		
Butadiene 1, 3-	106-99-0				6.00E-02	4.00E-05	2.0		2.1		0.12	2.3		9.3E-05
Butanol n-	71-36-3		2.45E+00				1.9		1.9	4.7		2.2		
Butyl benzyl phthalate	85-68-7		4.90E+00				26		26	130 <sup>c</sup>		27		
Butyl-4,6-dinitrophenol,2-sec-(Dinoseb)	88-85-7	7.00E-03	2.45E-02				2.0	0.014	2.0	0.049		2.3		
Cadmium	7440-43-9	5.00E-03	1.22E-02					0.015		0.038				
Carbon disulfide	75-15-0		2.45E+00		1.90E+00		2.1		2.2	5.3	4.1	2.5		
Carbon tetrachloride	56-23-5	5.00E-03	1.71E-02	7.43E-04	2.10E-02	7.60E-04	2.8	0.014	2.8	0.048	0.059	3.2	2.4E-03	2.4E-03
Chlordane	57-74-9	2.00E-03	1.22E-02	2.76E-04	2.80E-02	1.50E-03	3.5E+04	0.030 <sup>a</sup>	3.6E+04	0.030 <sup>a</sup>	0.030 <sup>a</sup>	3.6E+04	0.030 <sup>a</sup>	0.030 <sup>a</sup>
Chloro-1,3-butadiene 2-(Chloroprene)	126-99-8		4.90E-01		2.20E-02		2.0		2.0	0.98	0.044	2.3		
Chloroaniline p-	106-47-8		9.79E-02				1.9		1.9	0.19		2.2		
Chlorobenzene	108-90-7	1.00E-01	4.90E-01		2.00E-01		2.4	0.24	2.4	1.2	0.48	2.7		
Chlorobenzilate	510-15-6		4.90E-01	3.58E-04		1.20E+00	39		39	19 <sup>c</sup>		40	0.014	48 <sup>c</sup>
Chlorodibromomethane	124-48-1	8.00E-02	4.90E-01	1.15E-03		7.50E-04	2.1	0.17	2.2	1.1		2.5	2.8E-03	1.9E-03
Chloroethane [Ethyl chloride]	75-00-3				3.00E+01		1.9		1.9		57	2.2		
Chloroform	67-66-3	8.00E-02	2.45E-01		3.30E-01		2.0	0.16	2.0	0.49	0.66	2.3		
Chloromethane	74-87-3			7.43E-03	2.60E-01	5.90E-03	1.9		1.9		0.50	2.2	0.016	0.013
Chlorophenol 2-	95-57-8		1.22E-01		9.70E-03		2.0		2.0	0.24	0.019	2.3		
Chloropropene 3- (Allyl Chloride)	107-05-1				3.00E-03	1.90E-03	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30		1.0E+03 <sup>b</sup>
Chromium (III) (Chromic Ion)	16065-83-1	1.00E-01	3.67E+01					43		260				
Chromium (VI)	18540-29-9	1.00E-01	7.34E-02					5.0 <sup>a</sup>		5.0 <sup>a</sup>				

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**Table F-10: Land Application Unit LCTVs (No-Liner)**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)			Carcinogenic Effect (C)			
			NC	C	NC	C			7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	
Chrysene	218-01-9			8.05E-04		7.30E-03	370			370			370	0.30 <sup>c</sup>	2.7 <sup>c</sup>
Cobalt	7440-48-4		4.90E-01							5					
Copper	7440-50-8	1.30E+00						61							
Cresol m-	108-39-4		1.22E+00		1.20E+03		2.0		2.0	2.4	200 <sup>a</sup>		2.3		
Cresol o-	95-48-7		1.22E+00		8.80E+02		2.0		2.0	2.4	200 <sup>a</sup>		2.3		
Cresol p-	106-44-5		1.22E-01		1.30E+03		2.0		2.0	0.24	200 <sup>a</sup>		2.3		
Cresols	1319-77-3		1.22E+00		1.10E+03		2.1		2.1	2.5	1.0E+03 <sup>b</sup>		2.4		
Cumene	98-82-8		2.45E+00		1.30E+00		5.0		5.0	12	6.5		5.2		
Cyclohexanol	108-93-0		4.16E-04		3.90E-04		1.9		1.9	8.0E-04	7.5E-04		2.2		
Cyclohexanone	108-94-1		1.22E+02				2.0		2.0	240			2.3		
DDD	72-54-8			4.02E-04			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	
DDE	72-55-9			2.84E-04			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	
DDT p,p'-	50-29-3		1.22E-02	2.84E-04		8.80E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diallate	2303-16-4			1.58E-03			6.8E+04		6.9E+04				7.1E+04	110 <sup>c</sup>	
Dibenz(a,h)anthracene	53-70-3			1.32E-05		3.80E-01	1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Dibromo-3-chloropropane 1,2-	96-12-8	2.00E-04		6.90E-05	2.90E-03	7.90E-02	2.5	4.9E-04	2.5		7.2E-03		2.8	2.0E-04	0.22
Dichlorobenzene 1,2-	95-50-1	6.00E-01	2.20E+00		7.70E-01		3.4	2.0	3.4	7.4	2.6		3.7		
Dichlorobenzene 1,4-	106-46-7	7.50E-02		4.02E-03	3.00E+00	1.30E-03	3.3	0.25	3.3		7.5 <sup>a</sup>		3.6	0.014	4.6E-03
Dichlorobenzidine 3,3'-	91-94-1			2.15E-04		4.90E+00	4.4		4.4				4.7	1.0E-03	23 <sup>c</sup>
Dichlorodifluoromethane (Freon 12)	75-71-8		4.90E+00		5.80E-01		2.1		2.1	10	1.2		2.4		
Dichloroethane 1,1-	75-34-3		2.45E+00		1.60E+00	7.40E-03	2.1	8.5E-03 <sup>a</sup>	2.2	0.32 <sup>d</sup>	0.45 <sup>d</sup>		2.5	6.6E-04 <sup>a</sup>	0.012 <sup>d</sup>
Dichloroethane 1,2-	107-06-2	5.00E-03		1.06E-03	1.00E+01	6.30E-04	2.1	6.0E-03 <sup>a</sup>	2.1	0.22 <sup>a</sup>	0.32 <sup>d</sup>		2.4	4.7E-04 <sup>d</sup>	1.5E-03
Dichloroethylene cis-1,2-	156-59-2	7.00E-02	2.45E-01				1.9	0.14	2.0	0.48			2.3		
Dichloroethylene trans-1,2-	156-60-5	1.00E-01	4.90E-01				1.9	0.19	1.9	0.94			2.2		
Dichloroethylene 1,1-	75-35-4	7.00E-03	2.20E-01	1.61E-04	2.10E-01	2.20E-04	2.0	0.014	2.0	0.44	0.42		2.3	3.7E-04	5.0E-04
Dichlorophenol 2,4-	120-83-2		7.34E-02				2.3		2.3	0.17			2.6		
Dichlorophenoxyacetic acid 2,4-(2,4-D)	94-75-7	7.00E-02	2.45E-01				1.9	0.13	1.9	0.47			2.2		
Dichloropropane 1,2-	78-87-5	5.00E-03	2.20E+00	1.42E-03	1.40E-02		3.0	0.015	3.0	6.6	0.042		3.4	4.8E-03	
Dichloropropene 1,3-(mixture of isomers)	542-75-6		7.34E-01	9.66E-04	6.10E-02	2.90E-03	1.9		1.9	1.4	0.12		2.2	2.1E-03	6.4E-03
Dichloropropene cis-1,3-	10061-01-5		7.34E-01	9.66E-04	7.00E-02	3.30E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dichloropropene trans-1,3-	10061-02-6		7.34E-01	9.66E-04	7.50E-02	3.50E-03	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Dieldrin	60-57-1		1.22E-03	6.04E-06		1.00E-04	1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Diethyl phthalate	84-66-2		1.96E+01				2.7		2.7	53			3.1		
Diethylstilbestrol	56-53-1			2.05E-08			17		17				17	3.5E-07	
Dimethoate	60-51-5		4.90E-03				1.3E+03		1.3E+03	0.47 <sup>d</sup>	1.0E+03 <sup>a</sup>		1.6E+03		
Dimethoxybenzidine 3,3'-	119-90-4			6.90E-03			1.9		1.9				2.2	0.015	
Dimethyl formamide N,N- [DMF]	68-12-2		2.45E+00		7.10E+02		1.9		1.9	4.7	1.0E+03 <sup>b</sup>		2.2		
Dimethylbenz(a)anthracene 7,12-	57-97-6					3.00E-03	1.0E+30		1.0E+30				1.0E+30		1.0E+03 <sup>b,c</sup>
Dimethylbenzidine 3,3'-	119-93-7			1.05E-05			2.3		2.3				2.6	2.7E-05	
Dimethylphenol 2,4-	105-67-9		4.90E-01				2.1		2.1	1.1			2.4		
Di-n-butyl phthalate	84-74-2		2.45E+00				36		36	88 <sup>c</sup>			36		
Dinitrobenzene 1,3-	99-65-0		2.45E-03				1.9		1.9	4.7E-03			2.2		
Dinitrophenol 2,4-	51-28-5		4.90E-02				1.9		1.9	0.094			2.2		
Dinitrotoluene 2,4-	121-14-2		4.90E-02	1.42E-04		8.12E-01	1.9		1.9	0.094			2.2	3.1E-04	0.13 <sup>a</sup>
Dinitrotoluene 2,6-	606-20-2		2.45E-02	1.42E-04			1.9		1.9	0.047			2.2	3.1E-04	
Di-n-octyl phthalate	117-84-0		4.90E-01				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Dioxane 1,4-	123-91-1			8.78E-03	1.09E+03	1.80E-01	1.9		1.9		1.0E+03 <sup>b</sup>		2.2	0.019	0.39
Diphenylamine	122-39-4		6.12E-01				4.3		4.3	2.6			4.5		

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Table F-10: Land Application Unit LCTVs (No-Liner)

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Diphenylhydrazine 1, 2-	122-66-7			1.21E-04		2.00E-02	2.7			2.7			3.0	3.6E-04	0.060
Disulfoton	298-04-4		9.79E-04				1.3E+07		1.3E+07	1.0E+03 <sup>b,c</sup>			1.5E+07		
Endosulfan (Endosulfan I and II,mixture)	115-29-7		1.47E-01				6.1		6.1	0.90 <sup>c</sup>			6.4		
Endrin	72-20-8	2.00E-03	7.34E-03				2.0E+06	0.020 <sup>a</sup>	2.0E+06	0.020 <sup>a</sup>			2.0E+06		
Epichlorohydrin	106-89-8		4.90E-02	9.75E-03	6.00E-02	1.90E-01	1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Epoxybutane, 1, 2-	106-88-7				2.40E-01		1.9		1.9		0.46		2.2		
Ethoxyethanol 2-	110-80-5		9.79E+00		2.90E+03		1.9		1.9	19	1.0E+03 <sup>b</sup>		2.2		
Ethoxyethanol acetate 2-	111-15-9		7.34E+00		3.00E+02		1.9		1.9	14	570		2.2		
Ethyl acetate	141-78-6		2.20E+01				6.7		6.8	150			8.0		
Ethyl ether	60-29-7		4.90E+00				1.9		1.9	9.4			2.2		
Ethyl methacrylate	97-63-2		2.20E+00				3.4		3.4	7.6			4.0		
Ethyl methanesulfonate	62-50-0			3.30E-07			1.0E+30		1.0E+30				1.0E+30	1.0E+03 <sup>b</sup>	
Ethylbenzene	100-41-4	7.00E-01	2.45E+00		3.30E+00	1.10E-02	3.1	2.2	3.2	7.7	10		3.4		0.038
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	5.00E-05		1.14E-06	9.80E-04	8.40E-05	31	1.5E-03	32		0.031		38	4.4E-05	3.2E-03
Ethylene glycol	107-21-1		4.90E+01		1.20E+04		1.9		1.9	94	1.0E+03 <sup>b</sup>		2.2		
Ethylene oxide	75-21-8			9.47E-05	4.10E-01	5.20E-04	1.0E+30		1.0E+30		1.0E+03 <sup>b</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>
Ethylene thiourea	96-45-7		1.96E-03	8.78E-04		1.60E+03	1.9		1.9	3.7E-03			2.2	1.9E-03	1.0E+03 <sup>b</sup>
Fluoranthene	206-44-0		9.79E-01				55		55	54 <sup>c</sup>			55		
Fluoride	16984-48-8	4.00E+00	2.90E+00					6.2		5.2					
Formaldehyde	50-00-0		4.90E+00		5.10E+01	1.50E+00	1.9		1.9	9.4	97		2.2		3.3
Formic acid	64-18-6		4.90E+01				1.9		1.9	94			2.2		
Furfural	98-01-1		7.34E-02		2.20E+01		1.9		1.9	0.14	42		2.2		
HCH beta-	319-85-7			5.36E-05		1.70E-02	5.2		5.3				5.5	2.9E-04	0.093
HCH (Lindane) gamma-	58-89-9	2.00E-04	7.34E-03	7.43E-05		1.60E-03	2.1E+07	0.4 <sup>a,d</sup>	2.1E+07	0.4 <sup>a,d</sup>	0.4 <sup>a,e</sup>	2.3E+07	0.4 <sup>a,b,c</sup>	0.4 <sup>a,b,c</sup>	
HCH alpha-	319-84-6		1.96E-01	1.53E-05		3.60E-04	4.1E+07	1.5 <sup>e</sup>	4.1E+07	3.3 <sup>c,d</sup>	18 <sup>c,e</sup>	4.4E+07	680 <sup>c</sup>	1.0E+03 <sup>b,c</sup>	
Heptachlor	76-44-8	4.00E-04	1.22E-02	2.15E-05		1.50E-05	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	8.0E-03 <sup>a</sup>	1.0E+30	1.0E+30	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>	8.0E-03 <sup>a</sup>
Heptachlor epoxide	1024-57-3	2.00E-04	3.18E-04	1.06E-05		2.80E-04	2.8E+15	1.0E+03 <sup>b,c</sup>	2.8E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	2.8E+15	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloro-1,3-butadiene	87-68-3		7.34E-03	1.24E-03		6.10E-04	39		39	0.29		39	0.049	0.024	
Hexachlorobenzene	118-74-1	1.00E-03	1.96E-02	6.04E-05		3.60E-05	500	0.13 <sup>a,c</sup>	500	0.13 <sup>a,c</sup>		500	0.030 <sup>c</sup>	0.018 <sup>c</sup>	
Hexachlorocyclopentadiene	77-47-4	5.00E-02	1.47E-01		6.90E-04		1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+30	1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzofurans [HxCDFs]	55684-94-1			6.19E-09		1.44E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachlorodibenzo-p-dioxins [HxCDDs]	34465-46-8			6.19E-09		1.43E-07	2.0E+14		2.0E+14			2.0E+14	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Hexachloroethane	67-72-1		2.45E-02	6.90E-03		3.30E-03	6.9		6.9	0.17		7.2	0.050	0.024	
Hexachlorophene	70-30-4		7.34E-03				130		130	0.95		130			
Hexane n-	110-54-3		2.69E+02		6.60E-01		3.0		3.0	820 <sup>c</sup>	2.0	3.3			
Hydrogen Sulfide	7783-06-4		7.34E-02				1.9		1.9	0.14		2.2			
Indeno(1,2,3-cd)pyrene	193-39-5			8.05E-05		3.80E-02	3.0E+09		3.1E+09			3.1E+09	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Isobutyl alcohol	78-83-1		7.34E+00				1.9		1.9	14		2.2			
Isophorone	78-59-1		4.90E+00	1.02E-01	5.33E+02		2.0		2.0	9.8	1.0E+03 <sup>b</sup>	2.3	0.23		
Kepone	143-50-0		1.22E-02				19		19	0.23		19			
Lead	7439-92-1	1.50E-02						0.25							
Manganese	7439-96-5		1.15E+00							2.4					
Mercury	7439-97-6	2.00E-03	2.45E-03		7.00E-04			3.3E-03		4.4E-03	1.3E-03				
Methacrylonitrile	126-98-7		2.45E-03		6.50E-03		2.0		2.0	4.9E-03	0.013	2.3			
Methanol	67-56-1		1.22E+01		1.54E+03		1.9		1.9	23	1.0E+03 <sup>b</sup>	2.2			
Methoxychlor	72-43-5	4.00E-02	1.22E-01				1.0E+30	10 <sup>a,c</sup>	1.0E+30	1.0E+01 <sup>a,c</sup>		1.0E+30			
Methoxyethanol acetate 2-	110-49-6		4.90E-02		5.10E+02		1.9		1.9	0.094	970	2.2			
Methoxyethanol 2-	109-86-4		2.45E-02		4.40E+02		1.9		1.9	0.047	840	2.2			
Methyl ethyl ketone	78-93-3		1.47E+01		3.30E+01		1.9		1.9	28	63	2.2			

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-10: Land Application Unit LCTVs (No-Liner)**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil							
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)			
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion
Methyl isobutyl ketone	108-10-1		1.96E+00		1.20E+00		1.9		1.9	3.7	2.3	2.2		
Methyl methacrylate	80-62-6		3.43E+01		5.30E+00		4.0		4.1	73 <sup>d</sup>	22	4.7		
Methyl parathion	298-00-0		6.12E-03				3.6E+05		3.7E+05	1.1 <sup>d</sup>	1.0E+03 <sup>e</sup>	3.8E+05		
Methyl tert-butyl ether [MTBE]	1634-04-4				1.70E+01		1.9		1.9		33	2.2		
Methylcholanthrene 3-	56-49-5					1.20E-03	1.0E+30		1.0E+30			1.0E+30		1.0E+03 <sup>b,c</sup>
Methylene bromide (Dibromomethane)	74-95-3		2.45E-01				1.9		1.9	0.47		2.2		
Methylene Chloride (Dichloromethane)	75-09-2	5.00E-03	1.47E+00	1.29E-02	1.00E+01	2.80E-02	1.9	9.7E-03	2.0	2.9	20	2.2	0.029	0.063
Molybdenum	7439-98-7		1.22E-01							0.22				
Naphthalene	91-20-3		4.90E-01		1.90E-02		3.5		3.5	1.7	0.066	3.8		
Nickel	7440-02-0		4.90E-01							1.2				
Nitrobenzene	98-95-3		1.22E-02		1.50E-01		1.9		1.9	0.023	0.29	2.2		
Nitropropane 2-	79-46-9				3.30E-01	2.30E-05	1.9		1.9		0.63	2.2		5.0E-05
Nitrosodiethylamine N-	55-18-5			6.44E-07		4.30E-05	1.9		1.9			2.2	1.4E-06	9.4E-05
Nitrosodimethylamine N-	62-75-9		1.96E-04	1.89E-06		4.00E-04	1.9		1.9	3.7E-04		2.2	4.1E-06	8.8E-04
Nitroso-di-n-butylamine N-	924-16-3			1.79E-05		2.00E-05	2.0		2.1			2.3	4.2E-05	4.7E-05
Nitroso-di-n-propylamine N-	621-64-7			1.38E-05		1.50E-03	1.9		1.9			2.2	3.0E-05	3.3E-03
Nitrosodiphenylamine N-	86-30-6		4.90E-01	1.97E-02		5.20E-01	2.8		2.8	1.4		3.0	0.060	1.6
Nitrosomethylethylamine N-	10595-95-6			4.39E-06		4.50E-03	1.9		1.9			2.2	9.6E-06	9.9E-03
Nitrosopiperidine N-	100-75-4					8.70E-03	1.9		1.9			2.2		0.019
Nitrosopyrrolidine N-	930-55-2			4.60E-05		9.20E-01	1.9		1.9			2.2	1.0E-04	2.0
Octamethyl pyrophosphoramidate	152-16-9		4.90E-02				2.0		2.0	0.098		2.3		
Parathion (ethyl)	56-38-2		1.47E-01				3.1E+12		3.1E+12	1.0E+03 <sup>b,c</sup>		3.4E+12		
Pentachlorobenzene	608-93-5		1.96E-02				440		440	8.6 <sup>c</sup>		440		
Pentachlorodibenzofurans [PeCDFs]	30402-15-4			1.24E-09		6.29E-08	110		110			110	1.5E-07	7.1E-06
Pentachlorodibenzo-p-dioxins [PeCDDs]	36088-22-9			6.19E-10		6.00E-08	3.0E+10		3.1E+10			3.1E+10	20 <sup>c</sup>	1.0E+03 <sup>b,c</sup>
Pentachloronitrobenzene (PCNB)	82-68-8		7.34E-02	3.71E-04			48		48	3.6 <sup>c</sup>		48	0.018	
Pentachlorophenol	87-86-5	1.00E-03	7.34E-01	8.05E-04		5.40E+01	3.3	3.3E-03	3.3	2.4		3.6	2.9E-03	100 <sup>a</sup>
Phenol	108-95-2		1.47E+01		9.00E+02		1.9		1.9	28	1.0E+03 <sup>b</sup>	2.2		
Phenyl mercuric acetate	62-38-4		1.96E-03				1.9		1.9	3.7E-03		2.2		
Phenylenediamine 1,3-	108-45-2		1.47E-01				1.9		1.9	0.28		2.2		
Phorate	298-02-2		4.90E-03				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>		1.0E+30		
Phthalic anhydride	85-44-9		4.90E+01		1.30E+04		1.0E+30		1.0E+30	1.0E+03 <sup>b</sup>	1.0E+03 <sup>b</sup>	1.0E+30		
Polychlorinated biphenyls (Aroclors)	1336-36-3	5.00E-04	4.90E-04	2.41E-04		1.40E-04	1.1E+08	1.0E+03 <sup>b,c</sup>	1.1E+08	1.0E+03 <sup>b,c</sup>		1.1E+08	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Pronamide	23950-58-5		1.84E+00				2.5		2.5	4.6		2.8		
Propylene oxide [1,2-Epoxypropane]	75-56-9			4.02E-04	4.90E-01	1.70E-02	1.9		1.9		0.94	2.2	8.8E-04	0.037
Pyrene	129-00-0		7.34E-01				110		110	79 <sup>c</sup>		110		
Pyridine	110-86-1		2.45E-02		1.40E+00		1.9		1.9	0.047	2.7	2.2		
Safrole	94-59-7			5.36E-04			2.2		2.2			2.4	1.3E-03	
Selenium	7782-49-2	5.00E-02	1.22E-01					0.078		0.21				
Silver	7440-22-4		1.22E-01							0.26				
Strychnine and salts	57-24-9		7.34E-03				2.0		2.0	0.015		2.3		
Styrene	100-42-5	1.00E-01	4.90E+00		3.60E+00		2.8	0.28	2.8	14	10.0	3.0		
Tetrachlorobenzene 1,2,4,5-	95-94-3		7.34E-03				25		26	0.19		26		
Tetrachlorodibenzofuran 2,3,7,8-	51207-31-9			6.19E-09		1.00E-07	1.0E+30		1.0E+30			1.0E+30	1.0E+03 <sup>b,c</sup>	1.0E+03 <sup>b,c</sup>
Tetrachlorodibenzo-p-dioxin 2,3,7,8-	1746-01-6	3.00E-08	2.45E-08	6.44E-10		2.20E-09	6.6E+06	0.20 <sup>c</sup>	6.6E+06	0.16 <sup>c</sup>		6.7E+06	4.3E-03 <sup>c</sup>	0.015 <sup>c</sup>
Tetrachloroethane 1,1,1,2-	630-20-6		0.734	3.71E-03		1.90E-03	3.3	0.013 <sup>e</sup>	3.3	2.5		3.7	0.014	7.1E-03
Tetrachloroethane 1,1,2,2-	79-34-5		1.47E+00	4.83E-04		5.00E-04	18	0.013 <sup>e</sup>	18	26	0.64 <sup>e</sup>	21	1.0E-02	0.010
Tetrachloroethylene	127-18-4	5.00E-03	2.45E-01	1.86E-03	9.40E-01	2.10E-02	2.1	0.011	2.1	0.52	0.70 <sup>a</sup>	2.4	4.5E-03	0.050
Tetrachlorophenol 2,3,4,6-	58-90-2		7.34E-01				2.1		2.2	1.6		2.4		

KEY:  
a - TC Rule cap      d - Capped by daughter LCTV  
b - 1,000 mg/L cap    e - Constituent has no RGC; LCTV from daughter  
c - Exceeds solubility

**Table F-10: Land Application Unit LCTVs (No-Liner)**

Common Name	CAS#	MCL (mg/L)	HBN (mg/L)				No Liner/In-Situ Soil								
			Ingestion		Inhalation		Peak DAF	LCTV based on MCL (mg/L)	Non-Carcinogenic Effect (NC)		Carcinogenic Effect (C)				
			Ingestion	NC	C	NC			C	7-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation	30-yr Avg DAF	LCTV based on Ingestion	LCTV based on Inhalation
Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5		1.22E-02				1.0E+30		1.0E+30	1.0E+03 <sup>b,c</sup>			1.0E+30		
Thallium	7440-28-0	2.00E-03	1.96E-03					3.2E-03			3.7E-03				
Thiram [Thiuram]	137-26-8		1.22E-01				2.7		2.7	0.33			3.0		
Toluene	108-88-3	1.00E+00	4.90E+00		1.30E+00		2.2	2.2	2.3	11	2.9	2.5	2.5		
Toluenediamine 2,4-	95-80-7			3.02E-05		7.50E+00	1.9		1.9			2.2	6.6E-05		16
Toluidine o-	95-53-4			4.02E-04		3.60E-02	1.9		1.9			2.2	8.8E-04		0.079
Toluidine p-	106-49-0			5.08E-04			1.9		1.9			2.2	1.1E-03		
Toxaphene (chlorinated camphenes)	8001-35-2	3.00E-03		8.78E-05		3.60E-03	6.7E+04	0.50 <sup>a</sup>	6.7E+04			6.8E+04	0.50 <sup>a</sup>		0.50 <sup>a</sup>
Tribromomethane (Bromoform)	75-25-2	8.00E-02	4.90E-01	1.22E-02		1.90E-02	2.1	0.17	2.1	1		2.4	0.030		0.046
Trichloro-1,2,2-trifluoro- ethane 1,1,2-	76-13-1		7.34E+02		9.50E+01		3.1		3.1	1.0E+03 <sup>b,c</sup>	290 <sup>c</sup>	3.3			
Trichlorobenzene 1,2,4-	120-82-1	7.00E-02	2.45E-01		8.30E-01		13	0.93	13	3.3		11	14		
Trichloroethane 1,1,1-	71-55-6	2.00E-01	6.85E+00		6.90E+00		150	0.019 <sup>d</sup>	150	0.61 <sup>d</sup>	0.58 <sup>d</sup>	170	5.1E-04 <sup>e</sup>	6.9E-04 <sup>e</sup>	
Trichloroethane 1,1,2-	79-00-5	5.00E-03	9.79E-02	1.69E-03		1.10E-03	2.2	0.011	2.2	0.21	0.58 <sup>a</sup>	2.5	5.1E-04 <sup>d</sup>	6.9E-04 <sup>d</sup>	
Trichloroethylene (1,1,2-Trichloroethylene)	79-01-6	5.00E-03		8.78E-03	1.90E+00	6.80E-03	2.0	0.010	2.1		0.50 <sup>a</sup>	2.3	0.021		0.016
Trichlorofluoromethane (Freon 11)	75-69-4		7.34E+00		2.10E+00		2.0		2.1	15		4.4	2.4		
Trichlorophenol 2,4,5-	95-95-4		2.45E+00				2.9		2.9	7.2		3.2			
Trichlorophenol 2,4,6-	88-06-2			8.78E-03		2.80E-01	2.1		2.1			2.4	0.021		0.68
Trichlorophenoxy)propionic acid 2-(2,4,5- (Silvex)	93-72-1	5.00E-02	1.96E-01				2.0	0.098	2.0	0.39		2.3			
Trichlorophenoxyacetic acid 2,4,5-	93-76-5		2.45E-01				1.9		1.9	0.47		2.2			
Trichloropropane 1,2,3-	96-18-4		1.47E-01	1.38E-05	3.40E-02		2.3		2.4	0.35	0.080	2.7	3.7E-05		
Triethylamine	121-44-8				1.10E-01		1.9		1.9		0.21	2.2			
Trinitrobenzene (1,3,5-Trinitrobenzene) sym-	99-35-4		7.34E-01				1.9		1.9	1.4		2.2			
Tris(2,3-dibromopropyl)phosphate	126-72-7			9.89E-06			29		29			31	3.1E-04		
Vanadium	7440-62-2		1.71E-01							34					
Vinyl acetate	108-05-4		2.45E+01		1.20E+00		1.9		1.9	47	2.3	2.2			
Vinyl chloride	75-01-4	2.00E-03	7.34E-02	1.34E-04	2.90E-01	2.50E-03	1.9	3.8E-03	1.9	0.14	0.20 <sup>a</sup>	2.2	2.9E-04	5.5E-03	
Xylene m-	108-38-3		4.90E+01		1.30E+00		3.4		3.4	170 <sup>c</sup>	4.4	3.7			
Xylene o-	95-47-6		4.90E+01		1.40E+00		3.2		3.2	160	4.5	3.5			
Xylene p-	106-42-3		4.90E+01		1.30E+00		3.5		3.5	170	4.6	3.8			
Xylenes (total)	1330-20-7	1.00E+01	4.90E+01		1.40E+00		3.4	34	3.4	170	4.7	3.7			
Zinc	7440-66-6		7.34E+00							45					

KEY:  
a - TC Rule cap  
b - 1,000 mg/L cap  
c - Exceeds solubility  
d - Capped by daughter LCTV  
e - Constituent has no RGC; LCTV from daughter