F039/UNDERLYING HAZARDOUS CONSTITUENT FORM(UTS)

Generator Name: GEORGIA GULF CHEMICAL VINYLS
Profile Number: CV8558 - EME

Manifest Doc. No.: _____
State Manifest No.: _____

If D001-D043 requires treatment to 268.48 standards, then each underlying hazardous constituent present in the waste at the point of generation, and at a level above the UTS constituent specific treatment standard, must be listed. Write the letter (A, B1, B3, or C which corresponds to the letter on form CWM-2005-A) beside each constituent present, to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to the 268.49 standards, then each UHC in the waste at the point of generation, and at a level above 10 x the UTS must be listed. Write the letter (A.1, B.5, D, or E) which corresponds to the letter on form CWM-2005-E beside each constituent present.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/Kg)	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/Kg)
Treater will monitor all UHCs (no dioxin		1	1	Butyl benzyl phthalate		0.017	28
Acenaphthylene		0.059	3.4	Butylate		2 0.042	2 1.4
Acenaphthene		0.059	3.4	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)		0.066	2.5
Acetone		0.28	160	Carbon disulfide		3.8	1,2 4.8
Acetonitrile		5.6	2 38	Carbaryl		2 0.006	2 0.14
Acetophenone		0.010	9.7	Carbendazim		2 0.056	2 1.4
2-Acetylaminofluorene		0.059	140	Carbofuran		2 0.006	2 0.14
Acrolein		0.29	NA	Carbofuran phenol		2 0.056	2 1.4
Acrylamide		2 19	2 23	Carbon tetrachloride		0.057	6.0
Acrylonitrile		0.24	84	Carbosulfan		2 0.028	2 1.4
Aldicarb Sulfone		2 0.056	2 0.28	Chlordane (alpha & gamma)		0.0033	0.26
Aldrin		0.021	0.066	p-Chloroaniline		0.46	16
4-Aminobiphenyl		0.13	NA	Chlorobenzene		0.057	6.0
Aniline		0.81	14	Chlorobenzilate		0.10	NA
Anthracene		0.059	3.4	2-chloro-1,3-butadiene		0.057	2 0.28
Aramite		0.36	NA	Chlorodibromomethane		0.057	15
alpha-BHC		0.00014	0.066	Chloroethane		0.27	6.0
beta-BHC		0.00014	0.066	bis-(2-Chloroethoxy) methane		0.036	7.2
delta-BHC		0.023	0.066	bis-(2-Chloroethyl) ether		0.033	6.0
gamma-BHC (Lindane)		0.0017	0.066	Chloroform		0.046	6.0
Barban		2 0.056	2 1.4	bis-(2-Chloroisopropyl) ether		0.055	7.2
Bendiocarb		2 0.056	2 1.4	p-Chloro-m-cresol		0.018	14
Benomyl		2 0.056	2 1.4	2-Chloroethyl Vinyl ether		2 0.062	2 NA
Benzene		0.14	10	Chloromethane (methyl chloride)		0.19	30
Benzo (a) anthracene		0.059	3.4	2-Chloronaphthalene		0.055	5.6
Benzal chloride		2 0.055	2 6.0	2-Chlorophenol		0.044	5.7
Benzo (b) fluoranthene	4	0.11	6.8	3-Chloropropylene		0.036	30
Benzo (k) fluoranthene	4	0.11	6.8	Chrysene		0.059	3.4
Benzo (g,h,i) perylene		0.0055	1.8	o-Cresol		0.11	5.6
Benzo (a) pyrene		0.061	3.4	Cresol (m- and p- isomers)		0.77	5.6
Bromodichloromethane		0.35	15	m-Cumenyl methylcarbamate		2 0.056	2 1.4
Bromoform (Tribromomethane)		0.63	15	Cyclohexanone		0.36	1,2 0.75
Bromomethane (methyl bromide)		0.11	15	1,2-Dibromo-3-Chloropropane		0.11	15
4-Bromophenyl phenyl ether		0.055	15	1,2-Dibromoethane (Ethylene dibromide)		0.028	15
n-Butanol (n-butyl alcohol)		5.6	2.6	Dibromomethane		0.11	15

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2,4-Dichlorophenoxyacetic acid (2,4-D)		0.72	10	Endosulfan I		0.023	0.066
o,p-DDD		0.023	0.087	Endosulfan II		0.029	0.13
p,p-DDD		0.023	0.087	Endosulfan sulfate		0.029	0.13
o,p-DDE		0.031	0.087	Endrin		0.0028	0.13
p,p-DDE		0.031	0.087	Endrin aldehyde		0.025	0.13
o,p-DDT		0.0039	0.087	EPTC		0.042 [2]	1.4 [2]
p,p-DDT		0.0039	0.087	Ethyl acetate		0.34	33
Dibenzo (a,h) anthracene		0.055	8.2	Ethyl benzene		0.057	10
Dibenzo (a,e) pyrene		0.061	NA	Ethyl cyanide (Propanenitrile)		0.24	360
m-Dichlorobenzene		0.036	6.0	Ethyl ether		0.12	160
o-Dichlorobenzene		0.088	6.0	bis-(2-Ethylhexyl) phthalate		0.28	28
p-Dichlorobenzene		0.090	6.0	Ethyl methacrylate		0.14	160
Dichlorodifluoromethane		0.23	7.2	Ethylene oxide		0.12	NA
1,1-Dichloroethane		0.059	6.0	Famphur		0.017	15
1,2-Dichloroethane		0.21	6.0	Fluoranthene		0.068	3.4
1,1-Dichloroethylene		0.025	6.0	Fluorene		0.059	3.4
trans-1,2-Dichloroethylene		0.054	30	Formetanate hydrochloride		0.056 [2]	1.4 [2]
2,4-Dichlorophenol		0.044	14	Heptachlor		0.0012	0.066
2,6-Dichlorophenol		0.044	14	Heptachlor epoxide		0.016	0.066
1,2-Dichloropropane		0.85	18	Hexachlorobenzene		0.055	10
cis-1,3-Dichloropropene		0.036	18	Hexachlorobutadiene		0.055	5.6
trans-1,3-Dichloropropene		0.036	18	Hexachlorocyclopentadiene		0.057	2.4
Dieldrin		0.017	0.13	Hexachlorodibenzo-furans		0.000063	0.001
Diethyl phthalate		0.20	28	Hexachlorodibenzo-p-dioxins		0.000063	0.001
p-Dimethylaminoazobenzene		0.13 [2]	NA	Hexachloroethane		0.055	30
2,4-Dimethyl phenol		0.036	14	Hexachloropropylene		0.035	30
Dimethyl phthalate		0.047	28	Indeno (1,2,3-c,d) pyrene		0.0055	3.4
Di-n-butyl phthalate		0.057	28	Iodomethane		0.19	65
1,4-Dinitrobenzene		0.32	2.3	Isobutanol (Isobutyl Alcohol)		5.6	170
4,6-Dinitro-o-cresol		0.28	160	Isodrin		0.021	0.066
2,4-Dinitrophenol		0.12	160	Isosafrole		0.081	2.6
2,4-Dinitrotoluene		0.32	140	Kepone		0.0011	0.13
2,6-Dinitrotoluene		0.55	28	Methylacrylonitrile		0.24	84
Di-n-octyl phthalate		0.017	28	Methanol		5.6	0.75 [1,2]
Di-n-propylnitrosoamine		0.40	14	Methapyrilene		0.081	1.5
1,4-Dioxane		12	170	Methiocarb		0.056 [2]	1.4 [2]
Diphenyl amine [4]		0.92	13 [2]	Methomyl		0.028 [2]	0.14 [2]
Diphenylnitrosoamine [4]		0.92	13 [2]	Methoxychlor		0.25	0.18
1,2-Diphenyl hydrazine		0.087	NA	3-Methylcholanthrene		0.0055	15
Disulfoton		0.017	6.2	4,4-Methylene-bis-(2-chloroaniline)		0.50	30
Dithiocarbamates (total)		0.028 [2]	28 [2]	Methylene chloride		0.089	30

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Methyl ethyl ketone		0.28	36	Promecarb		0.056[2]	1.4[2]
Methyl isobutyl ketone		0.14	33	Pronamide		0.093	1.5
Methyl methacrylate		0.14	160	Propham		0.056[2]	1.4[2]
Methyl methanesulfonate		0.018	NA	Propoxur		0.056[2]	1.4[2]
Methyl parathion		0.014	4.6	Prosulfocarb		0.042[2]	1.4[2]
Metolcarb		0.056[2]	1.4[2]	Pyrene		0.067	8.2
Mexacarbate		0.056[2]	1.4[2]	Pyridine		0.014	16
Molinate		0.042[2]	1.4[2]	Safrole		0.081	22
Naphthalene		0.059	5.6	Silvex (2,4,5-TP)		0.72	7.9
2-Naphthylamine		0.52	NA	2,4,5-T		0.72	7.9
o-Nitroaniline		0.27[2]	14[2]	1,2,4,5-Tetrachlorobenzene		0.055	14
p-Nitroaniline		0.028	28	Tetrachlorodibenzo-furans		0.000063	0.001
Nitrobenzene		0.068	14	Tetrachlorodibenzo-p-dioxins		0.000063	0.001
5-Nitro-o-toluidine		0.32	28	1,1,1,2-Tetrachloroethane		0.057	6.0
o-Nitrophenol		0.028[2]	13[2]	1,1,2,2-Tetrachloroethane		0.057	6.0
p-Nitrophenol		0.12	29	Tetrachloroethylene		0.056	6.0
N-Nitrosodiethylamine		0.40	28	2,3,4,6-Tetrachlorophenol		0.030	7.4
N-Nitrosodimethylamine		0.40	2.3[2]	Thiodicarb		0.019[2]	1.4[2]
N-Nitroso-di-n-butylamine		0.40	17	Thiophanate-methyl		0.056[2]	1.4[2]
N-Nitrosomethylethylamine		0.40	2.3	Toluene		0.080	10
N-Nitrosomorpholine		0.40	2.3	Toxaphene		0.0095	2.6
N-Nitrosopiperidine		0.013	35	Triallate		0.042[2]	1.4[2]
N-Nitrosopyrrolidine		0.013	35	2,4,6-Tribromophenol		.035	7.4
Oxamyl		0.056[2]	0.28[2]	1,2,4-Trichlorobenzene		0.055	19
Parathion		0.014	4.6	1,1,1-Trichloroethane		0.054	6.0
PCBs (Total) all isomers or Aroclors		0.10	10	1,1,2-Trichloroethane		0.054	6.0
Pebulate		0.042[2]	1.4[2]	Trichloroethylene		0.054	6.0
Pentachlorobenzene		0.055	10	Trichloromonofluoromethane		0.020	30
Pentachloroethane		0.055[2]	6.0[2]	2,4,5-Trichlorophenol		0.18	7.4
Pentachlorodibenzo-furans		0.000035	0.001	2,4,6-Trichlorophenol		0.035	7.4
Pentachlorodibenzo-p-dioxins		0.000063	0.001	1,2,3-Trichloropropane		0.85	30
Pentachloronitrobenzene		0.055	4.8	1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30
Pentachlorophenol		0.089	7.4	Triethylamine		0.081[2]	1.5[2]
Phenacetin		0.081	16	Tris(2,3-dibromopropyl) phosphate		0.11	0.10[2]
Phenathrene		0.059	5.6	Vernolate		0.042[2]	1.4[2]
Phenol		0.039	6.2	Vinyl chloride		0.27	6.0
Phorate		0.021	4.6	Xylenes (sum of o-, m-, and p- isomers)		0.32	30
Phthalic acid		0.055[2]	28[2]	Cyanides (Total)		1.2	590
Phthalic anhydride		0.055	28[2]	Cyanides (Amenable)		0.86	30[2]
Physostigmine		0.056[2]	1.4[2]	Antimony		1.9	2.1[1]
Physostigmine salicylate		0.056[2]	1.4[2]	Antimony		1.9	1.15[5]

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Arsenic			1.4	5.0 [1]					
Barium			1.2	7.6 [1]					
Barium		A	1.2	21 [1,5]					
Beryllium			0.82	0.014 [1,2]					
Beryllium			0.82	1.22 [1,5]					
Cadmium			0.69	0.19 [1]					
Cadmium		A	0.69	0.11 [1,5]					
Chromium (Total)			2.77	0.86 [1]					
Chromium (Total)			2.77	0.60 [1,5]					
Fluoride [3]			35	NA					
Lead			0.69	0.37 [1]					
Lead			0.69	0.75 [1,5]					
Mercury (Not from retorting)			0.15	0.025 [1]					
Nickel			3.98	5.0 [1]					
Nickel			3.98	11 [1,5]					
Mercury (From retorting)			N/A	0.20 [1]					
Selenium			0.82	0.16 [1]					
Selenium			0.82	5.7 [6]					
Silver			0.43	0.30 [1]					
Silver			0.43	0.14 [1,5]					
Sulfide [3]			14	NA					
Thallium			1.4	0.078 [1,2]					
Thallium			1.4	0.20 [1,5]					
Vanadium [3]			4.3	1.6 [1]					
Zinc [3]			2.61	4.3 [1]					
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxi			0.000035	0.0025					
1,2,3,4,6,7,8-heptachlorodibenzofuran			0.000035	0.0025					
1,2,3,4,7,8,9-heptachlorodibenzofuran			0.000035	0.0025					
1,2,3,4,6,7,8,9-octachlorodibenzo-p-diox			0.000063	0.005					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran			0.000063	0.005					

1 These concentrations are expressed in mg/l and are measured through an analysis of TCLP extract; all others measured through a total waste analysis.
2 These constituents are only applicable as Underlying Hazardous Constituents. They are not constituents requiring treatment in F039 wastes.
3 Not an underlying hazardous constituent requiring treatment in D001-D043 wastes, per 268.2(i).
4 These compounds are regulated by the sum of their concentration instead of as individual constituents.
5 These concentrations are effective in unauthorized states or states with no LDR program on August 24,1998. These concentrations are effective in all other states upon adoption by the state.
6 Effective August 24, 1998 in unauthorized states or states with no LDR program, Selenium at 5.7 Mg/L is not considered an underlying hazardous constituent in D001-D043 waste as it is above the characteristic level. This becomes effective in authorized states once that state adopts.
7 If a contaminated soil, and the alternative soil treatment standards are being utilized, the treatment standards for underlying hazardous constituents must be a 90% reduction of the constituent(s) or be less than 10 X the standards listed. Note that if the constituent concentration is less than 10 X UTS at the time of generation, that constituent is not considered an underlying hazardous constituent.