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RECEIVED

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DR. R. T. GOTTESMAN

VISTA

Meredith N. Scheck
Assistant Director
The Vinyl Institute
Wayne Interchange Plaza II
155 Route 46 West
Wayne, NJ 07470

Dear Meredith:

Attached is a listing of proposed Organic Toxicity Characteristic constituents. Those with a "48" in the list column are the new additions. The regulatory concentrations shown here are subject to change. I don't know how EPA will determine the regulatory level for the additions.

Sincerely,



Joseph C. Ledvina
Director, Environmental Activities

ajo

Attachment

VVV 000005588

TABLE 1-1. PROPOSED TCLP CONSTITUENTS AND THEIR REGULATORY CONCENTRATIONS

Compounds proposed for TCLP		Calculated concentrations Based on 1/29/87 list of new RfDs and/or RSDs	
		Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
Name (CASRN)	List ^a		
— Acetone (67-64-1)	48 F	14	14
Acrylonitrile (107-13-1)	52 PP	0.0013	0.0013
— Allyl alcohol (107-18-6)	48	0.71	0.71
Allyl chloride; 3-Chloropropylene (107-05-1)	48	b,c	b,c
Aniline (62-53-3)	48	0.18	2.2
Antimony (7440-36-0, etc.)	48 PP	0.00023	0.00023 - 78 ^d [0.2 - 0.5]
Arsenic (7440-38-2, etc.)	52 PP,EP	0.0002	0.0002 - 62 ^d [~ 2]
Barium (7440-39-3, etc.)	52 EP	40	40 - 10 ^{6d} [300 - 500]
Benz[a]anthracene (56-55-3)	48 PP	0.00018	0.45
Benzene (71-43-2)	52 PP	0.018	0.38
Benzidine (92-87-5)	48 PP	1.8×10^{-6}	1.8×10^{-6}
— Benzo[a]pyrene (50-32-8)	48 PP	5.3×10^{-5}	0.18
Beryllium (7440-41-7, etc.)	48 PP	4.0	4.0 - 10 ^{6d,e} [2 - 3.5]
Bis(2-chloroethyl) ether (111-44-4)	52 PP	0.00053	0.00082
— Bis(2-ethylhexyl) phthalate (117-81-7)	48 PP	2.5	56,000
— Bromodichloromethane (75-27-4)	48 PP	0.089	2.4
— Bromoform; Tribromomethane (75-25-2)	48 PP	b,c	b,c
Cadmium (7440-43-9, etc.)	52 PP,EP	2×10^{-5}	2×10^{-5} - 2.1 ^d [0.2]

(Continued)

TABLE 1-1. (Continued)

Compounds proposed for TCLP		Calculated concentrations Based on 1/29/87 list of new RfDs and/or RSDs	
		Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
Name (CASRN)	List ^b		
Carbon disulfide (75-15-0)	52 F	18	2,200
Carbon tetrachloride (56-23-5)	52 PP,F	0.0053	0.10
CFC-11; Trichlorofluoro- methane (75-69-4)	48 PP,F	b	b
CFC-12; Dichlorodifluoro- methane (75-71-8)	48 PP,F	31	64,000
Chlordane (54-74-9?; 12789-03-6?; <u>trans</u> : 5103-71-9; <u>cis</u> : 5103-74-2)	52 PP	0.036 ^{b,e}	3,200 ^{b,e}
Chlorobenzene (108-90-7)	52 PP,F	1.8	700
Chlorodibromomethane (124-48-1)	48 PP	0.14 ^{b,e}	5.3 ^{b,e}
Chloroform (67-66-3)	52 PP	0.0071	0.042
Chromium (7440-47-3, etc.)	52 EP	5 ^{b,i}	5 - 10 ^{6b,i} [x x 10 ² or 10 ³]
<u>o</u> -Cresol (95-48-7)	52 F	14 ^{b,f}	1,500 ^{b,f}
<u>m</u> -Cresol (108-39-4)	52 F	14 ^{b,f}	1,500 ^{b,f}
<u>p</u> -Cresol (106-44-5)	52 F	14 ^{b,f}	1,500 ^{b,f}
Cyanide (ion: 57-12-5)	48 PP	2.5	110
2,4-D acid (94-75-7), salts, and esters	52 EP	1.4	360
Dibenz[a,h]anthracene (53-70-3)	48 PP	1.2 x 10 ⁻⁵	0.034
1,2-Dibromo-3-chloropropane (96-12-8)	48	b	b
Dibutyl phthalate (84-74-2)	48 PP	14	110,000
<u>o</u> -Dichlorobenzene (95-50-1)	52 PP,F	5.3	8,300

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TABLE 1-1. (Continued)

Compounds proposed for TCLP		Calculated concentrations	
		Based on 1/29/87 list of new RfDs and/or RSDs	
		Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
Name (CASRN)	List ^b		
p-Dichlorobenzene (106-46-7)	52 PP	13 ^g	37,000 ^g
3,3'-Dichlorobenzidine (91-94-1)	48 PP	0.00036	0.034
— 2,4-Dichlorophenol (120-83-2)	48 PP	0.36	19
— Diethyl phthalate (84-66-2)	48 PP	23,000 ^h	1 x 10 ^{6h}
Dimethylnitrosamine; N-Nitrosodimethylamine (62-75-9)	48 PP	b	b
2,4-Dinitrophenol (51-28-5)	48 PP	0.25	9.9
2,4-Dinitrotoluene (121-14-2)	52 PP	0.018	0.038
Dinoseb; DNBP; 2,4-Dinitro-sec-butylphenol (88-85-7)	48	b	b
— 1,4-Dioxane (123-91-1)	48	0.12	1 x 10 ⁶
Diphenylamine (122-39-4)	48	3.6	2,400
1,2-Diphenylhydrazine (122-66-7)	48 PP	b	b
Endrin (72-20-8)	48 PP	0.0036 ^{b,i}	4.6 ^{b,i}
— Ethylbenzene (100-41-4)	48 PP,F	7.1	10,000
Ethylene dibromide (106-93-4)	48	b	b
Ethylene dichloride; 1,2-Dichloroethane (107-06-2)	52 PP	0.0071	0.041
Ethylene oxide (75-21-8)	48	0.002	0.002
Heptachlor (76-44-8) and its hydroxide?	52 PP	0.0036	5.6
Hexachlorobenzene (118-74-1)	52 PP	0.00036	1.2

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TABLE 1-1. (Continued)

Compounds proposed for TCLP		Calculated concentrations Based on 1/29/87 list of new RfDs and/or RSDs	
		Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
Name (CASRN)	List ^b		
Hexachlorobutadiene (87-68-3)	52 PP	0.0089	20
Hexachlorocyclopentadiene (77-47-4)	48 PP	0.71	3,900
Hexachloroethane (67-72-1)	52 PP	5.3 ^{b,j}	12,000 ^{b,j}
Indeno[1,2,3cd]pyrene (193-39-5)	48 PP	b	b
Isobutyl alcohol (78-83-1)	52 F	49	2,000
Isophorone (78-59-1)	48 PP	50	16,000
Lead (7439-92-1, etc.)	52 PP, EP	5 ^{b,i}	5 - 10 ⁶
Lindane; gamma-Hexachloro- cyclohexane (58-89-9)	52 PP, EP	0.071	58 ^{b,i}
Mercury (7439-97-6, etc.)	52 PP, EP	0.14	0.14 - 97,000 ^d [~ 0.1]
Methoxychlor (72-43-5)	52 EP	1.8 ^{b,h,i}	74,000 ^{b,h,i}
Methyl bromide (74-83-9)	48 PP	1.0 ^h	210 ^h
3-Methylcholanthrene (56-49-5)	48	7.1 x 10 ⁻⁵	14
Methylene chloride (75-09-2)	52 PP, F	0.053	0.51
Methyl ethyl ketone (78-93-3)	52 F	8.9	230
Methyl isobutyl ketone (108-10-1)	48 F	7.1	710
MOCA; 4,4-Methylenebis(2- chlorobenzenamine) (101-14-4)	48	0.036	0.42
Nickel (7440-02-0, etc.)	48 PP	0.71	0.71 - 10 ⁶ [80 - 200]
Nitrobenzene (98-95-3)	52 PP, F	0.089	3.8

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TABLE 1-1. (Continued)

Compounds proposed for TCLP		Calculated concentrations	
		Based on 1/29/87 list of new	
		RfDs and/or RSDs	
Name (CASRN)	List ^b	Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
N-Nitrosodiphenylamine (86-30-6)	48 PP	b	b
N-Nitrosopyrrolidine (930-55-2)	48	0.00036	0.00036
Pentachlorobenzene (608-93-5)	48	0.11	980
Pentachloronitrobenzene (82-68-8)	48	0.018	100
Pentachlorophenol (87-86-5)	52 PP	4.5	1,900
Phenol (108-95-2)	52 PP	28	2,300
Pronamide (23950-58-5)	48	0.36	430
Pyridine (110-86-1)	52 F	0.5	0.5
Selenium (7782-49-2, etc.)	52 PP,EP	1.0	1.0 - 10 ^e
Silver (7440-22-4; etc.)	52 PP, EP	2.0	2.0 - 10 ^{ed} [0.07]
Styrene (100-42-5)	48	24	44,000
1,2,4,5-Tetrachlorobenzene (95-94-3)	48	0.036	24.1
1,1,1,2-Tetrachloroethane (630-20-6)	52	12 ^{b,j}	4,500 ^{b,j}
1,1,2,2-Tetrachloroethane (79-34-5)	52 PP	0.036	0.80
Tetrachloroethylene (127-18-4)	52 PP,F	0.12	22
2,3,4,6-Tetrachlorophenol (58-90-2)	52	1.8	460
Toluene (108-88-3)	52 PP,F	18 ^{b,f}	19,000 ^{b,f}
Toxaphene (8001-35-2)	52 PP,EP	0.089	370

(Continued)

TABLE 1-1. (Continued)

Compounds proposed for TCLP		Calculated concentrations Based on 1/29/87 list of new RfDs and/or RSDs	
		Concentration in leachate, mg/L	Concentration in waste, mg/kg [crustal abundance]
Name (CASRN)	List ^b		
2,4,5-TP; Silvex (93-76-5)	52 EP	0.18	46
1,2,4-Trichlorobenzene (120-82-1)	48 PP	2.5	5,200
1,1,1-Trichloroethane; Methylchloroform (71-55-2)	52 PP,F	11	2,200
1,1,2-Trichloroethane (79-00-5)	52 PP	1.1	95
Trichloroethylene (79-01-6)	52 PP,F	0.053	2.5
2,4,5-Trichlorophenol (95-95-4)	52	14	9,000
2,4,6-Trichlorophenol (88-06-2)	52 PP	0.036	1.4
1,2,3-Trichloropropane; Glycerol trichlorohydrin (96-18-4)	48	25	10 ⁶
Vinyl chloride (75-01-4)	52 PP	0.036	0.84
Vinylidene chloride; 1,1-Dichloroethylene (75-35-4)	52 PP	1.3 ^{b,e}	500

^a 52 = Published in Fed. Regist. 6/13/86, proposed TCLP.

48 = Proposed additional compounds for TCLP.

PP = Priority pollutant.

EP = Extraction procedure toxicity characteristic list.

F = Among spent solvents or degreasing agents and still bottoms/sludges from their recovery specifically listed under RCRA as wastes F001 to F005.

^b No RfD or RSD on January 29 list.

^c Need D/A factor.

^d Range for infinite solubility to highly insoluble (10⁻⁶).

^e Based on new RfD, but would be better to have an RSD since substance is a carcinogen.

^f Based on RfD from Fed. Regist. 6/13/86.

^g Based on PMCL (proposed maximum contaminant level) from Fed. Regist. 6/13/86.

^h Assumed D/A value of 200 based upon hydrolysis constants.

ⁱ Based on DWS from Fed. Regist. 6/13/86.

^j Based on RSD Fed. Regist. 6/13/86.

Source of crustal abundance values for the elements: Brobst and Pratt (1973).