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18 AAC 75.325(g) is amended to read:

(g) If using method two or method three for determining the applicable soil cleanup levels as described in 18 AAC 75.340 - 18 AAC 75.341, or if applying the groundwater cleanup levels at Table C in 18 AAC 75.345, a responsible person shall ensure that, after completing site cleanup, the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and **does not exceed** a cumulative noncarcinogenic risk standard at a hazard index of **one** [1.0] across all exposure pathways. Guidance on cumulative risk determinations is provided in the department's *Cumulative Risk Guidance*, dated **June 9, 2008** [NOVEMBER 7, 2002]. The department's *Cumulative Risk Guidance*, dated **June 9, 2008** [NOVEMBER 7, 2002], is adopted by reference.

The lead-in language of 18 AAC 75.325(h) is amended to read:

(h) If proposing an alternative cleanup level for soil or groundwater, based on a site-specific risk assessment under method four in 18 AAC 75.340(f) or under the provisions of **18 AAC 75.345(b)(2)** [18 AAC 75.345(b)(3)], a responsible person shall ensure that the risk from hazardous substances does not exceed the cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and **does not exceed** the cumulative noncarcinogenic risk standard at a hazard index of **one** [1.0] across all exposure pathways. Guidance on cumulative risk determinations is provided in the department's *Cumulative Risk Guidance*, adopted by reference in (g) of this section. Instead of the risk standards required by this subsection, the department may consider a risk standard consistent with the range acceptable under 40 C.F.R. 300.430, revised as of July 1, **2004** [2002], adopted by reference, based on

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(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am ___/___/___, Register ____)

Authority:	AS 46.03.020	AS 46.03.740	AS 46.04.020
	AS 46.03.050	AS 46.03.745	AS 46.04.070
	AS 46.03.710	AS 46.03.822	AS 46.09.020

18 AAC 75.340(e)(1) is amended to read:

(1) the migration to groundwater or inhalation levels in Table B1 of 18 AAC 75.341(c) or Table B2 of 18 AAC 75.341(d), based on the use of approved site-specific soil data and the equations set out in the department's *Cleanup Levels Guidance*, dated **June 9, 2008** [NOVEMBER 7, 2002], adopted by reference; the alternative cleanup level that then applies at the site for a hazardous substance is the most stringent of the Table B1 **direct contact** or Table B2 **ingestion** [INGESTION-BASED] level and the site-specific calculated levels for inhalation or migration to groundwater;

18 AAC 75.340(e)(2)(A) is amended to read:

(A) the **direct contact** [INGESTION-BASED] level in Table B1 or **the ingestion level in** Table B2;

The lead-in language of 18 AAC 75.340(e)(3) is amended to read:

(3) the **direct contact** [INGESTION] level or the inhalation level in Table B1 or **the**

ingestion level or the inhalation level in Table B2 based on use of commercial or industrial exposure parameters listed in Appendix B of the *Cleanup Levels Guidance*, adopted by reference in (1) of this subsection, if the department determines that the site serves a commercial or industrial land use, and if the alternative **direct contact** [INGESTION] level or inhalation level does not exceed the migration to groundwater cleanup level in Table B1, **the alternative ingestion level or inhalation level does not exceed the migration to groundwater cleanup level in** [OR] Table B2, or **the alternative level does not exceed** a site-specific migration to groundwater level calculated under (2) of this subsection; the department will base a land use determination under this paragraph upon

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18 AAC 75.340(g) is amended to read:

(g) The department will [REQUIRE A RESPONSIBLE PERSON TO] develop a site-specific cleanup level for a hazardous substance not listed under 18 AAC 75.341(c), using **the equations set out in the department's *Cleanup Levels Guidance*, adopted by reference in (e)(1)** [METHODS PROVIDED UNDER (e) OR (f)] of this section, unless **the responsible** [THAT] person demonstrates that a site-specific cleanup level is not necessary to ensure protection of human health, safety, and welfare, and of the environment.

18 AAC 75.340(j)(2) is amended to read:

(2) human exposure from ingestion, **direct contact**, or inhalation of a volatile hazardous substance must be attained in the surface soil and the subsurface soil to a depth of at

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least 15 feet, unless an institutional control or site conditions prevent human exposure to the subsurface soil; and

18 AAC 75.340(k) is amended to read:

(k) For a cleanup conducted under methods two and three, a chemical that is detected at one-tenth or more of the Table B1 **direct contact** [INGESTION] and inhalation cleanup levels set out in 18 AAC 75.341(c) must be included when calculating cumulative risk under 18 AAC 75.325(g). (Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am __/__/____, Register ____)

Authority:	AS 46.03.020	AS 46.03.740	AS 46.04.070
	AS 46.03.050	AS 46.03.745	AS 46.09.020
	AS 46.03.710	AS 46.04.020	

18 AAC 75.341(c) is repealed and readopted to read:

(c) If a responsible person uses method two for chemicals other than petroleum hydrocarbons under 18 AAC 75.340, the soil cleanup levels must be based on Table B1 in this subsection.

TABLE B1. METHOD TWO – SOIL CLEANUP LEVELS TABLE (See notes for additional requirements)

CAS Number ⁴	Hazardous Substance	Carcinogenic (c/nc) ¹⁸	Arctic Zone ¹		Under 40 inch Zone ²		Over 40 inch Zone ³		Migration to Groundwater ⁷ (mg/kg)
			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
ORGANICS									
355-72-782	2-Amino-4,6-dinitrotoluene	nc	26		20		16		0.029
194-06-510	4-Amino-2,6-dinitrotoluene	nc	26		19		16		0.029
83-32-9	Acenaphthene ¹⁴	nc	3800		2800		2300		180
208-96-8	Acenaphthylene ¹⁴	nc	3800		2800		2300		180
67-64-1	Acetone	nc	123000	102000	91300	68600	74700	51100	88
309-00-2	Aldrin	c	0.40		0.30		0.24		0.070
120-12-7	Anthracene ¹⁴	nc	27800		20600		16800		3000
71-43-2	Benzene ¹⁴	c	200	17	150	11	120	8.5	0.025
56-55-3	Benzo(a)anthracene ¹⁴	c	6.6		4.9		4.0		3.6
205-99-2	Benzo(b)fluoranthene ¹⁴	c	6.6		4.9		4.0		12
207-08-9	Benzo(k)fluoranthene ¹⁴	c	66		49		40		120
65-85-0	Benzoic acid	nc	428000		317000		259000		410
191-24-2	Benzo(g,h,i)perylene ¹⁴	nc	1900		1400		1100		38700
50-32-8	Benzo(a)pyrene ¹⁴	c	0.66		0.49		0.40		2.1
111-44-4	Bis(2-chloroethyl)ether	c	10	4.9	7.5	3.3	6.2	2.5	0.0022
117-81-7	Bis(2-ethylhexyl)phthalate	c	300		220		180		13
75-27-4	Bromodichloromethane	c	180	15	130	10	110	7.3	0.044
75-25-2	Bromoform	c	1400	430 ¹²	1100	420	860	320	0.34
71-36-3	Butanol	nc	8800		6500		5300		9.8
104-51-8	n-Butylbenzene	nc	1400	42 ¹²	1000	42 ¹²	830	42 ¹²	15
135-98-8	sec-Butylbenzene	nc	1400	41 ¹²	1000	41 ¹²	830	41 ¹²	12

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
98-06-6	tert-Butylbenzene	nc	1400	70 ¹²	1000	70 ¹²	830	70 ¹²	12
85-68-7	Butyl benzyl phthalate	c	3900		2900		2400		920
86-74-8	Carbazole	c	390		290		230		6.5
75-15-0	Carbon disulfide	nc	6500	250 ¹²	4800	250 ¹²	3900	250 ¹²	12
56-23-5	Carbon tetrachloride	c	86	4.5	64	3.1	52	2.3	0.023
57-74-9	Chlordane	c	26		19		15		2.3
106-47-8	p-Chloroaniline	c	130		90		80		0.057
108-90-7	Chlorobenzene	nc	2700	200 ¹²	2000	200 ¹²	1700	200 ¹²	0.63
124-48-1	Chlorodibromomethane (Dibromochloromethane)	c	130	21	99	14	81	11	0.032
75-00-3	Chloroethane	c	3900	34	2900	23	2300	17	580
67-66-3	Chloroform	c	1400	4.7	1000	3.2	830	2.4	0.46
91-58-7	2-Chloronaphthalene	nc	6300		4700		3800		120
95-57-8	2-Chlorophenol	nc	680	3800	510	2500	410	1900	1.5
218-01-9	Chrysene ¹⁴	c	660		490		400		360
72-54-8	Dichlorodiphenyldichloroethane (DDD)	c	41		30		25		7.2
72-55-9	Dichlorodiphenyldichloroethylene (DDE)	c	29		21		18		5.1
50-29-3	Dichlorodiphenyltrichloroethane (DDT)	c	29		21		18		7.3
53-70-3	Dibenzo(a,h)anthracene ¹⁴	c	0.66		0.49		0.40		4.0
132-64-9	Dibenzofuran	nc	270		200		170		11
84-74-2	Di-n-butyl phthalate	nc	10700		7900		6500		80
117-84-0	Di-n-octyl phthalate	nc	4200		3100		2500		3800
94-75-7	2,4-Dichlororophenoxy acetic acid (2,4-D)	nc	1200		860		710		0.21

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
95-50-1	1,2-Dichlorobenzene	nc	12300	45 ¹²	9100	45 ¹²	7500	45 ¹²	5.1
541-73-1	1,3-Dichlorobenzene	nc	12300	69 ¹²	9100	69 ¹²	7500	69 ¹²	28
106-46-7	1,4-Dichlorobenzene	c	470	44	350	30	280	22	0.64
91-94-1	3,3-Dichlorobenzidine	c	15		11		9.2		0.19
75-71-8	Dichlorodifluoromethane	nc	27400	570	20300	380	16600	280	140
75-34-3	1,1-Dichloroethane	c	27400	900 ¹²	20300	900 ¹²	16600	900 ¹²	25
107-06-2	1,2-Dichloroethane	c	120	7.1	91	4.8	75	3.6	0.016
75-35-4	1,1-Dichloroethylene	c	19	1.3	14	0.85	11	0.63	0.030
156-59-2	<i>cis</i> -1,2-Dichloroethylene	nc	1400	190	1000	130	830	95	0.24
156-60-5	<i>trans</i> -1,2-Dichloroethylene	nc	2700	240	2000	160	1700	120	0.37
120-83-2	2,4-Dichlorophenol	nc	310		230		190		1.3
78-87-5	1,2-Dichloropropane	c	160	7.9	120	5.3	100	4.0	0.018
542-75-6	1,3-Dichloropropene	c	110	40	83	27	68	20	0.033
60-57-1	Dieldrin	c	0.43		0.32		0.26		0.0076
84-66-2	Diethyl phthalate	nc	84000		61900		50600		130
105-67-9	2,4-Dimethylphenol	nc	1800		1300		1100		8.8
131-11-3	Dimethyl phthalate	nc	>10 ⁶		773000		633000		1100
528-29-0	1,2-Dinitrobenzene	nc	11		7.8		6.4		0.020
99-65-0	1,3-Dinitrobenzene	nc	10		7.1		5.8		0.020
100-25-4	1,4-Dinitrobenzene	nc	8.8		6.5		5.3		0.020
51-28-5	2,4-Dinitrophenol	nc	210		160		130		0.54
121-14-2	2,4-Dinitrotoluene	nc	12		8.8		7.2		0.0093

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
606-20-2	2,6-Dinitrotoulene	c	12		8.9		7.3		0.0094
123-91-1	1,4-Dioxane	c	700		540		440		0.21
1746-01-6	2,3,7,8-TCDD (Dioxin) ⁸	c	0.000063		0.000047		0.000038		0.000058
122-39-4	Diphenylamine	nc	2200		1600		1300		25
115-29-7	Endosulfan	nc	820		610		500		64
72-20-8	Endrin	nc	2.7		2.0		1.7		0.29
100-41-4	Ethylbenzene ¹⁴	c	13700	110 ¹²	10100	110	8300	81	6.9
106-93-4	Ethylene dibromide (1,2-Dibromoethane)	c	5.6	0.89	4.2	0.60	3.4	0.44	0.00016
107-21-1	Ethylene glycol	nc	175000		130000		106000		190
206-44-0	Fluoranthene ¹⁴	nc	2500		1900		1500		1400
86-73-7	Fluorene ¹⁴	nc	3200		2300		1900		220
76-44-8	Heptachlor	c	1.7		1.3		1.0		0.28
1024-57-3	Heptachlor epoxide	c	0.86		0.63		0.52		0.014
118-74-1	Hexachlorobenzene	c	4.3	2.2	3.2	1.5	2.6	1.1	0.047
87-68-3	Hexachloro-1,3-butadiene	c	18	3.8 ¹²	13	3.8 ¹²	11	3.8 ¹²	0.12
319-84-6	alpha-Hexachlorocyclohexane	c	1.6		1.2		1.0		0.0064
319-85-7	beta-Hexachlorocyclohexane	c	5.5		4.0		3.3		0.022
58-89-9	gamma-Hexachlorocyclohexane (Lindane)	c	7.6		5.6		4.6		0.0095
77-47-4	Hexachlorocyclopentadiene	nc	530	3.0	390	2.0	320	1.5	1.3
67-72-1	Hexachloroethane	c	88	250	65	170	53	130	0.21
121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	c	97		72		59		0.040
302-01-2	Hydrazine	c	2.3	1.5	1.7	0.98	1.4	0.73	0.00080

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
193-39-5	Indeno(1,2,3-c,d)pyrene ¹⁴	c	6.6		4.9		4.0		41
78-59-1	Isophorone	c	7200		5300		4400		3.1
98-82-8	Isopropylbenzene (Cumene)	nc	13700	62 ¹²	10100	62 ¹²	8300	62 ¹²	51
72-43-5	Methoxychlor	nc	440		320		270		23
74-83-9	Methyl bromide (Bromomethane)	nc	190	21	140	14	120	11	0.16
74-87-3	Methyl chloride (Chloromethane)	c	860	37	640	25	520	19	0.21
78-93-3	Methyl ethyl ketone (MEK)	nc	82100	23300 ¹²	60800	23300 ¹²	49800	23300 ¹²	59
108-10-1	Methyl isobutyl ketone (MIBK)	nc	11000	2100 ¹²	8100	2100 ¹²	6600	2100 ¹²	8.1
74-95-3	Methylene bromide	nc	1400	560	1000	370	830	280	1.1
75-09-2	Methylene chloride	c	1500	240	1100	160	910	120	0.016
22967-92-6	Mercury (Methyl)	nc	10		7.7		6.3		0.012
90-12-0	1-Methylnaphthalene	nc	380	1100	280	760	230	560	6.2
91-57-6	2-Methylnaphthalene	nc	380	1100	280	750	230	560	6.1
95-48-7	2-Methylphenol (o-cresol)	c	4400		3200		2700		15
108-39-4	3-Methylphenol (m-cresol)	c	4400		3200		2700		15
106-44-5	4-Methylphenol (p-cresol)	c	480		350		290		1.5
1634-04-4	Methyl <i>tert</i> -butyl ether (MTBE)	c	6200	440	4600	290	3800	220	1.3
91-20-3	Naphthalene ¹⁴	nc	1900	42	1400	28	1100	21	20
98-95-3	Nitrobenzene	nc	68	180	51	120	41	90	0.094
55-63-0	Nitroglycerin	c	400		300		240		0.22
556-88-7	Nitroguanidine	nc	8800		6500		5300		11
62-75-9	n-Nitrosodimethylamine	c	0.22	0.28	0.16	0.19	0.13	0.14	0.000053

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
86-30-6	n-Nitrosodiphenylamine	c	1000		750		610		15
621-64-7	n-Nitroso-di-n-propylamine	c	0.71		0.52		0.43		0.0011
88-72-2	2-Nitrotoluene	c	35		26		21		0.025
99-08-1	3-Nitrotoluene	c	2000		1500		1200		4.9
99-99-0	4-Nitrotoluene	c	470		350		290		0.34
103-65-1	n-Propylbenzene	nc	1400	42 ¹²	1000	42 ¹²	830	42 ¹²	15
2691-41-0	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	nc	6200		4600		3700		49
87-86-5	Pentachlorophenol	c	52		39		32		0.047
85-01-8	Phenanthrene ¹⁴	nc	27800		20600		16800		3000
108-95-2	Phenol	nc	31300		23200		19000		68
133-63-63	Polychlorinated biphenyls (PCBs) ⁹	c	1		1		1		
129-00-0	Pyrene ¹⁴	nc	1900		1400		1100		1000
100-42-5	Styrene	nc	27400	200 ¹²	20300	200 ¹²	16600	200 ¹²	0.96
79-34-5	1,1,2,2-Tetrachloroethane	c	56	8.1	42	5.5	34	4.1	0.017
127-18-4	Tetrachloroethylene (PCE)	c	21	15	15	10	13	7.3	0.024
108-88-3	Toluene ¹⁴	nc	11000	220 ¹²	8100	220 ¹²	6600	220 ¹²	6.5
8001-35-2	Toxaphene	c	10		7.5		6.2		3.9
688-73-3	Tributyltin	nc	26		19		16		5500
120-82-1	1,2,4-Trichlorobenzene	nc	1400	41 ¹²	1000	41 ¹²	830	41 ¹²	0.85
71-55-6	1,1,1-Trichloroethane	nc	27400	360 ¹²	20300	360 ¹²	16600	360 ¹²	0.82
79-00-5	1,1,2-Trichloroethane	c	200	17	150	11	120	8.6	0.018
79-01-6	Trichloroethylene (TCE)	c	28	0.85	21	0.57	17	0.42	0.020

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			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
95-95-4	2,4,5-Trichlorophenol	nc	8800		6500		5300		67
88-06-2	2,4,6-Trichlorophenol	c	620	6100	460	4100	380	3000	1.4
93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid (2,4,5-TP)	nc	700		520		430		0.19
96-18-4	1,2,3-Trichloropropane	c	1.6	0.26	1.2	0.17	0.97	0.13	0.00053
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	nc	>10 ⁶	750 ¹²	>10 ⁶	750 ¹²	>10 ⁶	750 ¹²	750 ¹²
75-69-4	Trichlorofluoromethane (Freon-11)	nc	41100	990 ¹²	30400	990 ¹²	24900	820	86
95-63-6	1,2,4-Trimethylbenzene	nc	6800	49 ¹²	5100	49	4100	37	23
108-67-8	1,3,5-Trimethylbenzene	nc	6800	42 ¹²	5100	42 ¹²	4100	32	23
99-35-4	1,3,5-Trinitrobenzene	nc	3800		2800		2300		19
479-45-8	2,4,6-Trinitrophenylmethylnitramine (Tetryl)	nc	550		400		330		4.5
118-96-7	2,4,6-Trinitrotoluene (TNT)	c	60		44		36		0.49
108-05-4	Vinyl acetate	nc	137000	2200 ¹²	101000	1500	83000	1100	100
75-01-4	Vinyl chloride (Chloroethene)	c	7.5	6.4	5.5	4.3	4.5	3.2	0.0085
1330-20-7	Xylenes (total) ¹⁴	nc	27400	63 ¹²	20300	63 ¹²	16600	63 ¹²	63 ¹²
INORGANICS									
7440-36-0	Antimony	nc	55		41		33		3.6
7440-38-2	Arsenic ¹⁵	c	6.1		4.5		3.7		3.9
7440-39-3	Barium	nc	27400		20300		16600		1100
7440-41-7	Beryllium	c	270		200		170		42
7440-43-9	Cadmium	c	110		79		65		5.0
7440-47-3	Chromium (Total)	nc	410		300		250		25
16065-83-1	Chromium +3	nc	205000		152000		124000		>10 ⁶

TABLE B1. METHOD TWO – SOIL CLEANUP LEVELS TABLE (See notes for additional requirements)

CAS Number ⁴	Hazardous Substance	Carcinogenic (c/nc) ¹⁸	Arctic Zone ¹		Under 40 inch Zone ²		Over 40 inch Zone ³		Migration to Groundwater ⁷ (mg/kg)
			Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	Direct Contact (mg/kg) ⁵	Outdoor Inhalation ⁶ (mg/kg)	
18540-29-9	Chromium +6	nc	410		300		250		25
7440-50-8	Copper	nc	5500		4100		3300		460
57-12-5	Cyanide ¹⁰	nc	2700		2000		1700		27
7439-92-1	Lead ¹¹	c	400		400		400		
7439-97-6	Mercury	nc	41	26	30	18	25	13	1.4
7440-02-0	Nickel	nc	2700		2000		1700		86
7790-98-9	Perchlorate	nc	96		71		58		0.067
7782-49-2	Selenium	nc	680		510		410		3.4
7440-22-4	Silver	nc	680		510		410		11.2
7440-28-0	Thallium	nc	11		8.1		6.6		1.9
7440-62-2	Vanadium	nc	960		710		580		3400
7723-14-0	White phosphorus	nc	2.7		2.0		1.7		0.036
7440-66-6	Zinc	nc	41100		30400		24900		4100

NOTES TO TABLE B1 FOLLOW TABLE B2 IN (d) OF THIS SECTION

18 AAC 75.341(d) is repealed and readopted to read:

(d) If a responsible person uses method two for petroleum hydrocarbons under 18 AAC 75.340, the soil cleanup levels must be based on Table B2 in this subsection.

TABLE B2. METHOD TWO - PETROLEUM HYDROCARBON SOIL CLEANUP LEVELS

Petroleum Hydrocarbon Range	Arctic Zone ¹ mg/kg			Under 40 Inch Zone ²			Over 40 Inch Zone ³			Maximum Allowable Concentrations ¹³ mg/kg
	Ingestion (mg/kg) ¹⁶	Inhalation (mg/kg) ¹⁷	Migration to Groundwater (mg/kg) ⁷	Ingestion (mg/kg) ¹⁶	Inhalation (mg/kg) ¹⁷	Migration to groundwater (mg/kg) ⁷	Ingestion (mg/kg) ¹⁶	Inhalation (mg/kg) ¹⁷	Migration to Groundwater (mg/kg) ⁷	
For Laboratory Analysis using AK Methods 101, 102, and 103										
C ₆ -C ₁₀ GRO using AK 101	1400	1400	n/a	1400	1400	300	1400	1400	260	1400
C ₁₀ -C ₂₅ DRO using AK 102	12500	12500	n/a	10250	12500	250	8250	12500	230	12500
C ₂₅ -C ₃₆ RRO using AK 103	13700	22000	n/a	10000	22000	11000	8300	22000	9700	22000
For Laboratory Analysis using AK Aliphatic and Aromatic Fraction Methods 101AA, 102AA, and 103AA										
C ₆ -C ₁₀ Aliphatics	1000	1000	n/a	1000	1000	270	1000	1000	240	1000
C ₆ -C ₁₀ Aromatics	1000	1000	n/a	1000	1000	150	1000	1000	130	1000
C ₁₀ -C ₂₅ Aliphatics	10000	10000	n/a	10000	10000	7200	8300	10000	6400	10000
C ₁₀ -C ₂₅ Aromatics	5000	5000	n/a	4100	5000	100	3300	5000	90	5000
C ₂₅ -C ₃₆ Aliphatics	20000	20000	n/a	20000	20000	20000	20000	20000	20000	20000
C ₂₅ -C ₃₆ Aromatics	4100	10000	n/a	3000	10000	3300	2500	10000	2900	10000
See notes to table for further requirements. "n/a" means not applicable.										

Notes to Tables B1 and B2:

If applicable, site-specific cleanup levels must be protective of migration to surface water. Concentrations of hazardous substances in soil must be calculated and presented on a per dry weight basis. For volatile organic hazardous substances for which toxicity data is not currently available or calculated levels exceed the calculated saturation concentration, the cleanup level that applies at a site is the calculated saturation concentration determined using the equations set out in *Cleanup Levels Guidance*, adopted by reference in 18 AAC 75.340. The cleanup level from Table B1 or B2 that applies at a site is the most stringent of the applicable exposure pathway-specific cleanup levels based on direct contact, inhalation, or migration to groundwater.

In Table B1, a blank space means not available or not applicable.

1. "Arctic zone" is defined at 18 AAC 75.990.
2. "under 40 inch zone" means a site that receives mean annual precipitation of less than 40 inches each year.
3. "over 40 inch zone" means a site that receives mean annual precipitation of 40 or more inches each year.
4. "CAS Number" means the Chemical Abstract Service (CAS) registry number uniquely assigned to chemicals by the American Chemical Society and recorded in the CAS Registry System.
5. "direct contact" means exposure through both incidental ingestion of soil and through dermal absorption of the contaminant from soil.
6. "outdoor inhalation" means a potential pathway of exposure to volatile organic

hazardous substances in the soil through volatilization and migration to outdoor air.

7. "migration to groundwater" means the potential for hazardous substances to leach to groundwater where they may result in a completed human exposure pathway through direct ingestion of contaminants at or above levels listed in Table C at 18 AAC 75.345(b)(1); soil cleanup levels protective of migration to surface water must be determined on a site-specific basis.

8. The cleanup level in Table B1 for dioxin is for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) only; all cleanup levels for polychlorinated dibenzo-*p*-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF) congeners must be determined on a site-specific basis.

9. For unrestricted land use, polychlorinated biphenyls (PCBs) in soil shall be cleaned up to one mg/kg or less, unless the department determines that a different cleanup level is necessary as provided in 18 AAC 75.340(i); with the prior approval of the department, PCBs in soil may be cleaned up to

(A) between 1 and 10 mg/kg if the responsible person

(i) caps each area containing PCBs in soil at levels between 1 and 10 mg/kg; for purposes of this Note 9, "caps" means covering an area of PCB contaminated soil with an appropriate material to prevent exposure of humans and the environment to PCBs; to be approved, a cap must be designed and constructed of a material acceptable to the department and of sufficient strength and durability to withstand the use of the surface that is exposed to the environment; within 72 hours after discovery of a breach to the integrity of a cap, the responsible person or the landowner shall initiate repairs to that breach; and

(ii) provides the department within 60 days after completing the cleanup, documentation that the responsible person has recorded a deed notation in the appropriate land records, or on another instrument that is normally examined during a title search, documenting that PCBs remain in the soil, that the contaminated soil has been capped, and that subsequent interest holders may have legal obligations with respect to the cap and the contaminated soil; or

(B) an alternative PCB soil cleanup level developed through an approved site-specific risk assessment, conducted according to the *Risk Assessment Procedures Manual*, adopted by reference at 18 AAC 75.340.

10. Cyanide expressed as free, or physiologically available cyanide.

11. Lead cleanup levels are based on land use; for residential land use, the soil cleanup level is 400 mg/kg; for commercial or industrial land use, as applied in 18 AAC 75.340(e)(3), the soil cleanup level is 800 mg/kg; through an approved site-specific risk assessment, conducted according to the *Risk Assessment Procedures Manual*, adopted by reference at 18 AAC 75.340, approved exposure models may be used to evaluate exposure to a child resident or an adult worker; a responsible person may also propose an alternative cleanup level, through a site-specific risk assessment conducted according to the *Manual*, and based on a chemical speciation of the lead present at the site; for soils contaminated with lead more than 15 feet below ground surface, lead cleanup levels must be determined on a site-specific basis.

12. These levels are based on soil saturation level (C_{sat}) using the equations set out in the *Cleanup Levels Guidance*, adopted by reference in 18 AAC 75.340. Refer to the *Cumulative Risk Guidance*, adopted by reference in 18 AAC 75.325(g), for inhalation risk screening levels.

13. This level is the concentration of C₆ - C₁₀, C₁₀ - C₂₅, or C₂₅ - C₃₆ petroleum hydrocarbon range in surface and subsurface soil that, if exceeded, indicates an increased potential for hazardous substance migration or for risk to human health, safety, or welfare, or to the environment; the level of a petroleum hydrocarbon may not remain at a concentration above the maximum allowable concentration unless a responsible person demonstrates that the petroleum hydrocarbon will not migrate and will not pose a significant risk to human health, safety, or welfare, or to the environment; free product must be recovered as required by 18 AAC 75.325(f).

14. If using method two or method three, the applicable petroleum hydrocarbon cleanup levels must be met in addition to the applicable chemical-specific cleanup levels for benzene, ethylbenzene, toluene, and total xylenes; the chemical-specific cleanup levels for the polynuclear aromatic hydrocarbons acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene, and pyrene must also be met unless the department determines that those cleanup levels need not be met to protect human health, safety, and welfare, and the environment.

15. Due to naturally occurring variable concentrations throughout the state, arsenic must be evaluated as a contaminant of potential concern on a site-specific basis.

16. "ingestion" means a potential pathway of exposure to hazardous substances in soil through direct consumption of the soil.

17. "inhalation" means a potential pathway of exposure to volatile organic hazardous substances in the soil through volatilization.

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18. "c" means carcinogenic, and "nc" means noncarcinogenic.

(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am
____/____/____, Register _____)

Authority:	AS 46.03.020	AS 46.03.740	AS 46.04.070
	AS 46.03.050	AS 46.03.745	AS 46.09.020
	AS 46.03.710	AS 46.04.020	

18 AAC 75.345(b) is repealed and readopted to read:

(b) Contaminated groundwater must meet

(1) the cleanup levels in Table C if the current use or the reasonably expected potential future use of the groundwater, determined under 18 AAC 75.350, is a drinking water source; or

TABLE C. GROUNDWATER CLEANUP LEVELS			
CAS Number¹	Hazardous Substance	Carcinogenic (c/nc)²	Groundwater cleanup level (mg/L)
ORGANICS			
355-72-782	2-Amino-4,6-dinitrotoluene	nc	0.0073
194-06-510	4-Amino-2,6-dinitrotoluene	nc	0.0073
83-32-9	Acenaphthene	nc	2.2
208-96-8	Acenaphthylene	nc	2.2
67-64-1	Acetone	nc	33
309-00-2	Aldrin	c	0.00005
120-12-7	Anthracene	nc	11
71-43-2	Benzene	c	0.005
56-55-3	Benzo(a)anthracene	c	0.0012
205-99-2	Benzo(b)fluoranthene	c	0.0012
207-08-9	Benzo(k)fluoranthene	c	0.012
65-85-0	Benzoic acid	nc	150
191-24-2	Benzo(g,h,i)perylene	nc	1.1
50-32-8	Benzo(a)pyrene	c	0.0002
111-44-4	Bis(2-chloroethyl)ether	c	0.00077
117-81-7	Bis(2-ethylhexyl)phthalate	c	0.006
75-27-4	Bromodichloromethane	c	0.014
75-25-2	Bromoform	c	0.11
71-36-3	Butanol	nc	3.7
104-51-8	n-Butylbenzene	nc	0.37
135-98-8	sec-Butylbenzene	nc	0.37
98-06-6	tert-Butylbenzene	nc	0.37
85-68-7	Butyl benzyl phthalate	c	7.3
86-74-8	Carbazole	c	0.043
75-15-0	Carbon disulfide	nc	3.7
56-23-5	Carbon tetrachloride	c	0.005
57-74-9	Chlordane	c	0.002
106-47-8	p-Chloroaniline	c	0.016
108-90-7	Chlorobenzene	nc	0.1
124-48-1	Chlorodibromomethane (Dibromochloromethane)	c	0.010

TABLE C. GROUNDWATER CLEANUP LEVELS

CAS Number ¹	Hazardous Substance	Carcinogenic (c/nc) ²	Groundwater cleanup level (mg/L)
75-00-3	Chloroethane	c	0.29
67-66-3	Chloroform	c	0.14
91-58-7	2-Chloronaphthalene	nc	2.9
95-57-8	2-Chlorophenol	nc	0.18
218-01-9	Chrysene	c	0.12
72-54-8	Dichlorodipenyldichloroethane (DDD)	c	0.0035
72-55-9	Dichlorodipenyldichloroethylene (DDE)	c	0.0025
50-29-3	Dichlorodiphenyltrichloroethane (DDT)	c	0.0025
53-70-3	Dibenzo(a,h)anthracene	c	0.00012
132-64-9	Dibenzofuran	nc	0.073
84-74-2	Di-n-butyl phthalate	nc	3.7
117-84-0	Di-n-octyl phthalate	nc	1.5
94-75-7	2,4-Dichlororphenoxy acetic acid (2,4-D)	nc	0.07
95-50-1	1,2-Dichlorobenzene	nc	0.6
541-73-1	1,3-Dichlorobenzene	nc	3.3
106-46-7	1,4-Dichlorobenzene	c	0.075
91-94-1	3,3-Dichlorobenzidine	c	0.0019
75-71-8	Dichlorodifluoromethane	nc	7.3
75-34-3	1,1-Dichloroethane	c	7.3
107-06-2	1,2-Dichloroethane	c	0.005
75-35-4	1,1-Dichloroethylene	c	0.007
156-59-2	<i>cis</i> -1,2-Dichloroethylene	nc	0.07
156-60-5	<i>trans</i> -1,2-Dichloroethylene	nc	0.10
120-83-2	2,4-Dichlorophenol	nc	0.11
78-87-5	1,2-Dichloropropane	c	0.005
542-75-6	1,3-Dichloropropene	c	0.0085
60-57-1	Dieldrin	c	0.000053
84-66-2	Diethyl phthalate	nc	29
105-67-9	2,4-Dimethylphenol	nc	0.73
131-11-3	Dimethyl phthalate	nc	370
528-29-0	1,2-Dinitrobenzene	nc	0.0037
99-65-0	1,3-Dinitrobenzene	nc	0.0037
100-25-4	1,4-Dinitrobenzene	nc	0.0037

TABLE C. GROUNDWATER CLEANUP LEVELS

CAS Number ¹	Hazardous Substance	Carcinogenic (c/nc) ²	Groundwater cleanup level (mg/L)
51-28-5	2,4-Dinitrophenol	nc	0.073
121-14-2	2,4-Dinitrotoluene	nc	0.0013
606-20-2	2,6-Dinitrotoluene	c	0.0013
123-91-1	1,4-Dioxane	c	0.077
1746-01-6	2,3,7,8-TCDD (Dioxin)	c	0.000000030
122-39-4	Diphenylamine	nc	0.91
115-29-7	Endosulfan	nc	0.22
72-20-8	Endrin	nc	0.002
100-41-4	Ethylbenzene	c	0.7
106-93-4	Ethylene dibromide (1,2-Dibromoethane)	c	0.00005
107-21-1	Ethylene glycol	nc	73
206-44-0	Fluoranthene	nc	1.5
86-73-7	Fluorene	nc	1.5
76-44-8	Heptachlor	c	0.0004
1024-57-3	Heptachlor epoxide	c	0.0002
118-74-1	Hexachlorobenzene	c	0.001
87-68-3	Hexachloro-1,3-butadiene	c	0.0073
319-84-6	alpha-Hexachlorocyclohexane	c	0.00014
319-85-7	beta-Hexachlorocyclohexane	c	0.00047
58-89-9	gamma-Hexachlorocyclohexane (Lindane)	c	0.0002
77-47-4	Hexachlorocyclopentadiene	nc	0.05
67-72-1	Hexachloroethane	c	0.04
121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	c	0.0077
302-01-2	Hydrazine	c	0.00028
193-39-5	Indeno(1,2,3-c,d)pyrene	c	0.0012
78-59-1	Isophorone	c	0.90
98-82-8	Isopropylbenzene (Cumene)	nc	3.7
72-43-5	Methoxychlor	nc	0.04
74-83-9	Methyl bromide (Bromomethane)	nc	0.051
74-87-3	Methyl chloride (Chloromethane)	c	0.066
78-93-3	Methyl ethyl ketone (MEK)	nc	22
108-10-1	Methyl isobutyl ketone (MIBK)	nc	2.9
74-95-3	Methylene bromide	nc	0.37

TABLE C. GROUNDWATER CLEANUP LEVELS

CAS Number ¹	Hazardous Substance	Carcinogenic (c/nc) ²	Groundwater cleanup level (mg/L)
75-09-2	Methylene chloride	c	0.005
22967-92-6	Mercury (Methyl)	nc	0.0037
90-12-0	1-Methylnaphthalene	nc	0.15
91-57-6	2-Methylnaphthalene	nc	0.15
95-48-7	2-Methylphenol (o-cresol)	c	1.8
108-39-4	3-Methylphenol (m-cresol)	c	1.8
106-44-5	4-Methylphenol (p-cresol)	c	0.18
1634-04-4	Methyl <i>tert</i> -butyl ether (MTBE)	c	0.47
91-20-3	Naphthalene	nc	0.73
98-95-3	Nitrobenzene	nc	0.018
55-63-0	Nitroglycerin	c	0.050
556-88-7	Nitroguanidine	nc	3.7
62-75-9	n-Nitrosodimethylamine	c	0.000017
86-30-6	n-Nitrosodiphenylamine	c	0.17
621-64-7	n-Nitroso-di-n-propylamine	c	0.00012
88-72-2	2-Nitrotoluene	c	0.0037
99-08-1	3-Nitrotoluene	c	0.73
99-99-0	4-Nitrotoluene	c	0.050
103-65-1	n-Propylbenzene	nc	0.37
2691-41-0	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	nc	1.8
87-86-5	Pentachlorophenol	c	0.001
85-01-8	Phenanthrene	nc	11
108-95-2	Phenol	nc	11
133-63-63	Polychlorinated biphenyls (PCBs)	c	0.0005
129-00-0	Pyrene	nc	1.1
100-42-5	Styrene	nc	0.1
79-34-5	1,1,2,2-Tetrachloroethane	c	0.0043
127-18-4	Tetrachloroethylene (PCE)	c	0.005
108-88-3	Toluene	nc	1.0
8001-35-2	Toxaphene	c	0.003
688-73-3	Tributyltin	nc	0.011
120-82-1	1,2,4-Trichlorobenzene	nc	0.07
71-55-6	1,1,1-Trichloroethane	nc	0.2

TABLE C. GROUNDWATER CLEANUP LEVELS

CAS Number¹	Hazardous Substance	Carcinogenic (c/nc)²	Groundwater cleanup level (mg/L)
79-00-5	1,1,2-Trichloroethane	c	0.005
79-01-6	Trichloroethylene (TCE)	c	0.005
95-95-4	2,4,5-Trichlorophenol	nc	3.7
88-06-2	2,4,6-Trichlorophenol	c	0.077
93-72-1	2-(2,4,5-Trichlorophenoxy) Propionic Acid (2,4,5-TP)	nc	0.05
96-18-4	1,2,3-Trichloropropane	c	0.00012
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	nc	1100
75-69-4	Trichlorofluoromethane (Freon-11)	nc	11
95-63-6	1,2,4-Trimethylbenzene	nc	1.8
108-67-8	1,3,5-Trimethylbenzene	nc	1.8
99-35-4	1,3,5-Trinitrobenzene	nc	1.1
479-45-8	2,4,6-Trinitrophenylmethylnitramine (Tetryl)	nc	0.15
118-96-7	2,4,6-Trinitrotoluene (TNT)	c	0.018
108-05-4	Vinyl acetate	nc	37
75-01-4	Vinyl chloride (Chloroethene)	c	0.002
1330-20-7	Xylenes (total)	nc	10
INORGANICS			
7440-36-0	Antimony	nc	0.006
7440-38-2	Arsenic	c	0.010
7440-39-3	Barium	nc	2.0
7440-41-7	Beryllium	c	0.004
7440-43-9	Cadmium	c	0.005
7440-47-3	Chromium (Total)	nc	0.10
16065-83-1	Chromium +3	nc	55
18540-29-9	Chromium +6	nc	0.10
7440-50-8	Copper	nc	1.0
57-12-5	Cyanide	nc	0.20
7439-92-1	Lead	c	0.015
7439-97-6	Mercury	nc	0.002
7440-02-0	Nickel	nc	0.10
7790-98-9	Perchlorate	nc	0.026
7782-49-2	Selenium	nc	0.05
7440-22-4	Silver	nc	0.10

TABLE C. GROUNDWATER CLEANUP LEVELS			
CAS Number ¹	Hazardous Substance	Carcinogenic (c/nc) ²	Groundwater cleanup level (mg/L)
7440-28-0	Thallium	nc	0.002
7440-62-2	Vanadium	nc	0.26
7723-14-0	White phosphorus	nc	0.00073
7440-66-6	Zinc	nc	5.0
PETROLEUM HYDROCARBONS			
	C ₆ -C ₁₀ GRO	nc	2.2
	C ₁₀ -C ₂₅ DRO	nc	1.5
	C ₂₅ -C ₃₆ RRO	nc	1.1

Notes to Table C:

1. "CAS Number" means the Chemical Abstract Service (CAS) registry number uniquely assigned to chemicals by the American Chemical Society and recorded in the CAS Registry System.

2. "c" means carcinogenic, and "nc" means noncarcinogenic.

(2) an approved cleanup level based on an approved site-specific risk assessment conducted under the *Risk Assessment Procedures Manual*, adopted by reference in 18 AAC 75.340.

18 AAC 75.345(c)(3)(A) is amended to read:

(A) a **threshold odor number** [THRESHOLD ODOR NUMBER] (TON) of 1 for odor, as measured by Method 2150B, Standard Methods for the Examination of Water and Wastewater, **21st** [18TH] edition, American Public Health Association (**2005**)

[(1992)], adopted by reference; or

18 AAC 75.345(c)(3)(B) is amended to read:

(B) a **flavor threshold number** [FLAVOR THRESHOLD NUMBER] (FTN) of 1 for flavor, as measured by Method 2160B, Standard Methods for the Examination of Water and Wastewater, adopted by reference in (A) of this paragraph.

18 AAC 75.345(e) is amended to read:

(e) The point of compliance where groundwater cleanup levels must be attained is throughout the site from each point extending vertically from the uppermost level of the saturated zone to the lowest possible depth that could potentially be affected by the discharge or release of a hazardous substance, unless the department approves an alternative point of compliance as part of the cleanup action under 18 AAC 75.360. **For the department to approve an alternative point of compliance** [TO BE APPROVED] under this subsection, **the**

(1) [AN] alternative point of compliance [(1)] must be within the existing groundwater contamination plume; and

(2) the cleanup levels in Table C at (b)(1) of this section must be met at [MAY NOT EXCEED] the property boundary **in an area where the current use or reasonably expected potential future use of groundwater in the neighboring property is determined to be a source of drinking water**, unless a responsible person

(A) demonstrates that attainment of the applicable groundwater cleanup levels is not practicable; and

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(B) provides an alternative source of water for affected persons.

(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am ___/___/____, Register _____)

Authority:	AS 46.03.020	AS 46.03.745	AS 46.04.070
	AS 46.03.050	AS 46.03.755	AS 46.09.010
	AS 46.03.710	AS 46.04.020	AS 46.09.020
	AS 46.03.740		

18 AAC 75.360(11)(G)(vi) is amended to read:

(vi) a demonstration that the contaminated zone will be compacted to 95 percent or more of the maximum density as specified in American Society for Testing and Materials (ASTM) **D 1557-07** [D 1557-91], **Standard Test Methods** [METHOD] *for Laboratory Compaction Characteristics of Soil Using Modified Effort*, updated **November 2007** [JANUARY 1997] and adopted by reference, or ASTM **D 4253-00** [D 4253-93], *Standard Test Methods for Maximum Index Density and Unit Weight of Soils [OR SOLIDS] Using a Vibratory Table*, updated **March 2006** [FEBRUARY 1993] and adopted by reference;

(Eff. 1/22/99, Register 149; am ___/___/____, Register _____)

Authority:	AS 46.03.020	AS 46.03.740	AS 46.04.020
	AS 46.03.050	AS 46.03.745	AS 46.04.070
	AS 46.03.710	AS 46.03.822	AS 46.09.020

Editor's note: The ASTM methods adopted by reference in 18 AAC 75.360 may be reviewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices, and may be obtained from **ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; telephone (610) 832-9585; fax (610) 832-9555** [THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, 1916 RACE STREET, PHILADELPHIA, PENNSYLVANIA 19103].

18 AAC 75.370(a)(4) is repealed and readopted to read:

(4) place petroleum-contaminated soil on a liner that meets the minimum specifications for the testing methods set out in Table D of this section;

TABLE D. BOTTOM LINER SPECIFICATIONS

Method	Coated Fabric	Extruded Fabric
Short-term storage of petroleum-contaminated soil (less than 180 days)		
Cold crack (ASTM D 2136-02, updated July 2007)	-60° F	-60° F
Black carbon content (ASTM D 1603-06, updated March 2006)	2% or greater	2% or greater
Tensile strength (ASTM D 751-06, updated May 2006)	125 lbs (warp)	N/A
Mullen burst (ASTM D 751-06, updated May 2006)	250 psi	N/A
One inch tensile strength (ASTM D 882-02, updated June 2002)	N/A	25 lbs (warp)
One inch elongation MD (machine direction)	N/A	550%
Nominal thickness	10 mil	10 mil
Oil resistance (ASTM D 471-06, updated November 2006)	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.
Long-term storage of petroleum-contaminated soil (180 days to two years)		
Cold crack (ASTM D 2136-02, updated July 2007)	-60° F	-60° F
Black carbon content (ASTM D 1603-06, updated March 2006)	2% or greater	2% or greater
Tensile strength (ASTM D 751-06, updated May 2006)	300 lbs (warp)	N/A
Mullen burst (ASTM D 751-06, updated May 2006)	500 psi	N/A
One inch tensile strength (ASTM D 882-02, updated June 2002)	N/A	45 lbs (warp)
One inch elongation MD (machine direction)	N/A	625%
Nominal thickness	20 mil	20 mil
Oil resistance (ASTM D 471-06, updated November 2006)	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.
The American Society for Testing and Materials (ASTM) methods referred to in this table are adopted by reference. "N/A" means not applicable.		

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Authority: AS 46.03.020 AS 46.03.740 AS 46.04.070
AS 46.03.050 AS 46.03.745 AS 46.09.020
AS 46.03.710 AS 46.04.020

Editor's note: The ASTM methods adopted by reference in Table D of 18 AAC 75.370 may be reviewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices, and may be obtained from **ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; telephone (610) 832-9585; fax (610) 832-9555** [THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, 1916 RACE STREET, PHILADELPHIA, PENNSYLVANIA 19103].

18 AAC 75.375(f) is amended to read:

(f) If the concentrations of all residual hazardous substances remaining at the site are subsequently determined to be below the [APPLICABLE CLEANUP] levels **that allow for unrestricted use**, the department will approve [, AT THE OWNER'S REQUEST,] elimination of the institutional control. (Eff. 1/22/99, Register 149; am ___/___/____, Register ____)

Authority: AS 46.03.020 AS 46.03.745 AS 46.04.110
AS 46.03.050 AS 46.04.020 AS 46.09.060
AS 46.03.710 AS 46.04.070 AS 46.09.070
AS 46.03.740

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18 AAC 75.380(b)(9)(I) is amended to read:

(I) confirmation that any hazardous waste generated was stored, treated, or disposed of in compliance with 42 U.S.C. 6901 - 6992k (Solid Waste Disposal Act, as amended by Resource Conservation Recovery Act), as amended through **January 6, 2003** [OCTOBER 1, 1998] and adopted by reference; and

18 AAC 75.380(b) is amended by adding a new paragraph to read:

(11) cumulative risk calculations.

(Eff. 1/22/99, Register 149; am ___/___/____, Register ____)

Authority: AS 46.03.020 AS 46.03.745 AS 46.04.070
AS 46.03.050 AS 46.03.755 AS 46.09.010
AS 46.03.710 AS 46.04.020 AS 46.09.020
AS 46.03.740

18 AAC 75.495(a)(7) is amended to read:

(7) Western Alaska Region: that area north of the area described in (6) of this subsection, encompassed by the boundaries of the southernmost boundary of the Bering Straits Regional Corporation, and **Iditarod and Kuspuk** Regional Educational Attendance Areas [11 AND 5], including adjacent shorelines and state waters, and having as its seaward boundary a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured;

(Eff. 5/14/92, Register 122; am 11/27/2002, Register 164; am ___/___/____, Register ____)

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Authority: AS 46.03.020 AS 46.04.070 AS 46.04.210
AS 46.04.055

18 AAC 75.990(12)(B) is amended to read:

(B) for human health purposes, a substance that meets the criteria of **the descriptors "Carcinogenic to Humans" or "Likely to be Carcinogenic to Humans"** [A GROUP A OR GROUP B CARCINOGEN] according to EPA's *Guidelines for Carcinogen Risk Assessment*, **EPA/630/P-03/001F (March 2005)** [51 FED. REG. 33992, 33999 - 34000 (SEPT. 24, 1986)], adopted by reference;

18 AAC 75.990(109) is amended to read:

(109) "risk assessment" **means a determination of potential health effects, including effects of contaminant exposure through inhalation, ingestion, dermal absorption, and other means, and the assessment of risk to human health and the environment from contaminants remaining in the land, air, or water as a result of a release** [HAS THE MEANING GIVEN IN AS 46.03.450];

18 AAC 75.990 is amended by adding new paragraphs to read:

(183) "DRO" means diesel range organics within the meaning given in 18 AAC 78.995;

(184) "GRO" means gasoline range organics within the meaning given in 18 AAC 78.995;

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(185) "PCBs" means polychlorinated biphenyls;

(186) "RRO" means residual range organics within the meaning given in 18 AAC 78.995. (Eff. 5/14/92, Register 122; am 9/25/93, Register 127; am 4/4/97, Register 142; am 4/11/97, Register 142; am 1/22/99, Register 149; am 8/27/2000, Register 155; am 10/28/2000, Register 156; am 11/27/2002, Register 164; am 12/14/2002, Register 164; am 1/30/2003, Register 165; am 8/8/2003, Register 167; am 5/26/2004, Register 170; am 12/30/2006, Register 180; am ___/___/____, Register ____)

Authority:	AS 46.03.020	AS 46.03.755	AS 46.04.055
	AS 46.03.050	AS 46.03.822	AS 46.04.070
	AS 46.03.710	AS 46.04.020	AS 46.08.140
	AS 46.03.740	AS 46.04.030	AS 46.09.010
	AS 46.03.745	AS 46.04.035	AS 46.09.020