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**OFFICE OF THE LIEUTENANT GOVERNOR  
ALASKA**

**MEMORANDUM**

**TO:** Gary Mendivil, Department of Environmental Conservation  
**FROM:** Scott Meriwether, Office of the Lieutenant Governor - 465.4081   
**DATE:** October 7, 2016  
**RE:** Filed Permanent Regulations: Department of Environmental Conservation

Regulations re: contaminated site cleanup procedures and soil and groundwater cleanup levels (18 AAC 75.325(g),(h); 18 AAC 75.340 - 18 AAC 75.345; 18 AAC 75.370(a)(2); 18 AAC 75.990)

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Attorney General File: JU2015200567  
Regulation Filed: October 07, 2016  
Effective Date: November 06, 2016  
Print: 220, January 2017

cc with enclosures: Linda Miller, Department of Law  
Dianne Blumer, Administrative Regulation Review Committee  
Judy Herndon, LexisNexis

ORDER ADOPTING CHANGES TO  
REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

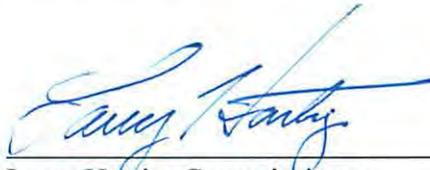
The attached 51 pages of regulations, dealing with cleanup levels for soil and groundwater and how they are calculated at contaminated sites under 18 AAC 75 (Oil and Other Hazardous Substances Pollution Control), are adopted and certified to be a correct copy of the regulation changes that the Department of Environmental Conservation adopts under the authority of AS 46.03 and AS 46.04 after compliance with the Administrative Procedure Act (AS 44.62), specifically including notice under AS 44.62.190 and 44.62.200 and opportunity for public comment under AS 44.62.210.

This action is not expected to require an increased appropriation.

In considering public comments, the Department of Environmental Conservation paid special attention to the cost to private persons of the regulatory action being taken. Public comments were received from 23 parties and responses were provided to those comments. Changes were made to address many of the comments. In addition, the Department of Environmental Conservation also gave special attention to alternate practical methods in this regulatory action, as required by AS 46.03.024.

The regulation changes adopted under this order take effect on the 30<sup>th</sup> day after they have been filed by the lieutenant governor, as provided in AS 44.62.180.

DATE: September 16, 2016



Larry Hartig, Commissioner  
Department of Environmental Conservation

FILING CERTIFICATION

I, Byron Mallott, Lieutenant Governor for the State of Alaska, certify that on October 7, 2016, at 11: A .m., I filed the attached regulations according to the provisions of AS 44.62.040 – 44.62.120.



Byron Mallott, Lieutenant Governor

Effective: November 6, 2016.

Register: 220, January 2017

Header and footer should be one inch from top and bottom, all pages

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 and 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, reported to one significant figure, across all exposure pathways. Instructions for determining [GUIDANCE ON]

cumulative risk are [DETERMINATIONS IS] provided in the department's Procedures for Calculating Cumulative Risk, dated September 13 and May 15, 2016 [CUMULATIVE RISK GUIDANCE, JUNE

9, 2008]. The department's Procedures for Calculating Cumulative Risk, dated May 15, 2016

[CUMULATIVE RISK GUIDANCE, JUNE 9, 2008] is adopted by reference.

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), 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, reported to one significant figure, across all exposure pathways. Instructions for

[GUIDANCE ON] cumulative risk are [DETERMINATIONS IS] provided in the department's Procedures for Calculating Cumulative Risk [CUMULATIVE RISK GUIDANCE], adopted by reference in (g) of this

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

am 10/9/2008, Register 188; am 11/6/2016, Register 220)

am 6/7/2015, Register 214; am 1/1/2016, Register 217;

<b>Authority:</b>	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 department's Procedures for Calculating Cumulative Risk

[CUMULATIVE RISK GUIDANCE], adopted by reference in 18 AAC 75.325 may be viewed at or obtained from the department's offices in Anchorage, Fairbanks, Juneau, and Soldotna or the department's Internet website at

[http://dec.alaska.gov/spar/csp/guidance\\_forms/csguidance.htm](http://dec.alaska.gov/spar/csp/guidance_forms/csguidance.htm).

... Publisher: ① In the printed Alaska Administrative Code, please delete the space that precedes "spar".  
② Retain the three paragraphs that follow the first paragraph of the editor's note.

18 AAC 75.340(d) is amended to read:

(d) The soil cleanup levels provided under method one and method two apply at a develops an alternative cleanup level or contaminated site unless the department approves an alternative cleanup level that the

responsible person has proposed under method three or method four. To obtain approval for an alternative cleanup level, a responsible person must demonstrate that an alternative cleanup level proposed under method three or method four is protective of human health, safety, and welfare, and of the environment, and must demonstrate compliance with the applicable institutional control requirements under 18 AAC 75.375. **The cleanup level that applies at a site is the most**

**stringent of either the alternative cleanup site-specific calculated level or, for a pathway where no alternative cleanup level site-specific**

**Value was calculated, the listed value for a hazardous substance in Table B1 of 18 AAC 75.341(c) or Table B2 of 18 AAC 75.341(d).**



18 AAC 75.340(e) is amended to read:

(e) Under method three, a responsible person may propose for the department's approval or the department may set <sup>an</sup> a site-specific <sup>(C, J)</sup> alternative cleanup level for a hazardous substance listed in Table B1 of 18 AAC 75.341(c) or Table B2 of 18 AAC 75.341(d) that modifies <sup>the levels for the</sup>

(1) <sup>(C, J)</sup> ~~the levels for the~~ migration to groundwater or human health pathways <sup>(C, J)</sup> [INHALATION LEVELS] in Table B1 [OF 18 AAC 75.341(c)] or ~~the levels for the migration to groundwater or inhalation pathways in~~ 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 Procedures for Calculating Cleanup Levels, dated <sup>September</sup> ~~May 15, 2016~~ <sup>(C, J) and</sup> [CLEANUP LEVELS GUIDANCE, JUNE 9, 2008] 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 LEVEL AND THE SITE-SPECIFIC CALCULATED LEVELS FOR INHALATION OR MIGRATION TO GROUNDWATER]; ]

(2) <sup>(C, J)</sup> ~~the levels for the~~ migration to groundwater pathway [LEVELS] in Table B1 or Table B2 <sup>(C, J)</sup> based on approved site-specific soil and groundwater data <sup>(C, J)</sup> and an approved fate and transport model that demonstrates that alternative soil cleanup levels are protective of the applicable groundwater cleanup levels under 18 AAC 75.345 [IF THE ALTERNATIVE MIGRATION TO GROUNDWATER CLEANUP LEVEL DOES NOT EXCEED

(A) THE DIRECT CONTACT LEVEL IN TABLE B1 OR THE INGESTION LEVEL IN TABLE B2;

(B) THE INHALATION LEVEL IN TABLE B1 OR TABLE B2; OR

(C) A SITE-SPECIFIC INHALATION LEVEL CALCULATED UNDER (1) OF THIS SUBSECTION; THE LEVEL THAT APPLIES AT THE SITE IS THE MOST STRINGENT LEVEL]; <sup># ((delete one (excess) space))</sup> or

(3) ~~the level for the~~ human health pathway <sup>THE</sup> [DIRECT CONTACT OR THE INHALATION LEVEL] in Table B1 or ~~the levels for~~ <sup>[THE]</sup> ingestion [LEVEL] or [THE] inhalation pathways [LEVEL] in Table B2 based on use of commercial or industrial exposure parameters listed in Appendix B of the Procedures for Calculating Cleanup Levels [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 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 TABLE B2] <sup>#</sup> 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

- (A) consultation with the public, including the local zoning authority, if any;
- (B) a determination that the site does not serve a residential land use;
- (C) a determination that the site will not serve a future residential land use based on consideration of the factors in EPA's *Land Use in the CERCLA Remedy Selection Process*, OSWER Dir. No. 9355.7-04, dated May 25, 1995, adopted by reference; land in an undeveloped area for which it would be difficult to determine a

future use pattern is capable of being a residential area, unless demonstrated otherwise;  
and

(D) consent of each landowner who is affected by the contamination at the site that a cleanup level less stringent than a cleanup level appropriate to residential land use is appropriate for the site.



*Publisher: The agency has not made an amendment to 18 AAC 75.340(F)(2). Existing 18 AAC 75.340(f)(2) is unchanged.*

~~18 AAC 75.340(f)(2) is amended to read:~~

~~(2) obtains the consent of each landowner who is affected by the contamination at the site that a cleanup level less stringent than a cleanup level appropriate to residential land use is appropriate for the site.~~

18 AAC 75.340(g) is amended to read:

(g) The department will develop a site-specific cleanup level for a hazardous substance not listed under 18 AAC 75.341(c) using the **procedures** [EQUATIONS] set out in the department's **Risk Assessment Procedures Manual** [CLEANUP LEVELS GUIDANCE], adopted by reference in ~~18 AAC 75.340(f)(1)~~ <sup>(f)(1) [(e)(1)]</sup> [18 AAC 75.340(e)(1)] of this section, unless the responsible 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(i)(2) is repealed and readopted to read:

(2) a site-specific analysis is necessary due to

- (A) exposure pathways such as the potential for the accumulation of vapors in buildings or other structures at levels that threaten human health;
- (B) sediment contamination;
- (C) impacts to ecological receptors;
- (D) other site uses such as recreational, agricultural, or subsistence use; or
- (E) the presence of sensitive subpopulations who respond biologically to lower levels of exposure to a hazardous substance.

...

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

of or [DIRECT] contact with soil, or from

(2) human exposure from ingestion dermal [DIRECT CONTACT] or inhalation of particulates or a volatile hazardous substance <sup>2</sup> must be attained in the surface soil and the subsurface soil to a depth of [AT LEAST] 15 feet, unless an institutional control or site conditions prevent human exposure to the subsurface soil; and

(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am am. 1/1/2016, Register 217; 10/9/2008, Register 188; am 11/6/2016, Register 220)

<b>Authority:</b>	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 documents adopted by reference in 18 AAC 75.340 may be reviewed at, or requested from, the department's offices in Anchorage, Fairbanks, Juneau, and Soldotna.~~

~~The documents adopted by reference may also be viewed through the department's Internet website at <http://dec.alaska.gov/spar/csp/guidance-forms/esguidance.htm>.~~

*Publisher: The existing editor's note that follows 18 AAC 75.340 is unchanged; what it displayed as "new" was already added effective January 1, 2016 (Register 217), as part of Dep't of Law file JU2015200191.))*



The introductory language of 18 AAC 75.341(a) is amended to read:

(a) If a responsible person uses method one **for petroleum hydrocarbons** for a non-Arctic zone under 18 AAC 75.340, the soil cleanup levels must be based on Table A1 in this subsection.

• • •

The introductory language of 18 AAC 75.341(b) is amended to read:

(b) If a responsible person uses method one **for petroleum hydrocarbons** for an Arctic zone under 18 AAC 75.340, the soil cleanup levels must be based on Table A2 in this subsection.

• • •

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)

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup>  (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Acenaphthene <sup>7</sup>	83-32-9	nc	6300	4600	3800	37
Acenaphthylene <sup>7,8</sup>	208-96-8	nc	3100	2300	1900	18
Acetone	67-64-1	nc	1.0 x 10 <sup>5,9</sup> #	81000	65000	38
Aldrin	309-00-2	ca	0.67	0.49	0.40	0.0099
Ammonium Perchlorate	7790-98-9	nc	96	71	58	0.037
Anthracene <sup>7</sup>	120-12-7	nc	31000	23000	19000	390
Antimony (metallic)	7440-36-0	nc	55	41	33	4.6
Arsenic, Inorganic <sup>11</sup>	7440-38-2	ca	12	8.8	7.2	0.20
Barium	7440-39-3	nc	25000	20000	17000	2100
Benz[a]anthracene <sup>7</sup>	56-55-3	m	2.7	2.0	1.7	0.28
Benzaldehyde	100-52-7	nc	770 <sup>10</sup>	770 <sup>10</sup>	770 <sup>10</sup>	0.52

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(e); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Benzene <sup>7</sup>	71-43-2	ca	16	11	8.1	0.022
Benzo[a]pyrene <sup>7</sup>	50-32-8	m	0.28	0.20	0.17	0.27
Benzo[b]fluoranthene <sup>7</sup>	205-99-2	m	2.8	2.0	1.7	2.7
Benzo[g,h,i]perylene <sup>7,8</sup>	191-24-2	nc	3100	2300	1900	15000
Benzo[k]fluoranthene <sup>7</sup>	207-08-9	m	28	20	17	27
Benzoic Acid	65-85-0	nc	1.0 x 10 <sup>5,9</sup>	1.0 x 10 <sup>5,9</sup>	1.0 x 10 <sup>5,9</sup>	200
Benzyl Alcohol	100-51-6	nc	11000	8200	6700	5.7
Beryllium and compounds	7440-41-7	nc	270	200	170	260
Bis(2-chloroethyl)ether	111-44-4	ca	4.0	2.8	2.1	0.00042
Bis(2-ethylhexyl)phthalate	117-81-7	ca	680	500	410	88
Bromobenzene	108-86-1	nc	160 <sup>10</sup>	160 <sup>10</sup>	160 <sup>10</sup>	0.36

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Bromodichloromethane	75-27-4	ca	5.3	3.6	2.6	0.0043
Bromoform	75-25-2	ca	340	240	170	0.10
Bromomethane	74-83-9	nc	15	10	7.4	0.024
Butadiene, 1,3-	106-99-0	ca	1.2	0.86	0.64	0.0012
Butanol, N-	71-36-3	nc	6500 <sup>10</sup>	6500 <sup>10</sup>	6500 <sup>10</sup>	5.3
Butyl Benzyl Phthalate	85-68-7	ca	5000	3700	3000	16
Butylbenzene, n-	104-51-8	nc	20 <sup>10</sup>	20 <sup>10</sup>	20 <sup>10</sup>	23
Butylbenzene, sec-	135-98-8	nc	28 <sup>10</sup>	28 <sup>10</sup>	28 <sup>10</sup>	42
Butylbenzene, tert-	98-06-6	nc	35 <sup>10</sup>	35 <sup>10</sup>	35 <sup>10</sup>	11
Cadmium (Diet)	7440-43-9	nc	120	92	76	9.1
Carbon Disulfide	75-15-0	nc	500 <sup>10</sup>	500 <sup>10</sup>	500 <sup>10</sup>	2.9

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup>  (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Carbon Tetrachloride	56-23-5	ca	13	9.1	6.6	0.021
Chlordane	12789-03-6	ca	29	22	17	0.18
Chlordecone (Kepone)	143-50-0	ca	0.95	0.70	0.58	0.0083
Chloroaniline, p-	106-47-8	ca	47	35	29	0.015
Chlorobenzene	108-90-7	nc	180 <sup>10</sup>	180 <sup>10</sup>	180 <sup>10</sup>	0.46
Chloroform	67-66-3	ca	5.8	4.0	2.9	0.0071
Chloromethane	74-87-3	nc	250	170	120	0.61
Chloronaphthalene, Beta-	91-58-7	nc	8400	6200	5100	26
Chlorophenol, 2-	95-57-8	nc	680	510	410	0.71
Chromium(III), Insoluble Salts <sup>12</sup>	16065-83-1	nc	1.0 x 10 <sup>5,9</sup> #			
Chromium(VI) <sup>12</sup>	18540-29-9	m	4.9	3.9	3.2	0.089

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) ↑ #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup>  (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Chrysene <sup>7</sup>	218-01-9	m	280	200	170	82
Copper	7440-50-8	nc	5500	4100	3300	370
Cresol, m-	108-39-4	nc	5500	4100	3400	6.1
Cresol, o-	95-48-7	nc	5500	4100	3400	6.2
Cresol, p-	106-44-5	nc	11000	8200	6700	12
Cumene	98-82-8	nc	54 <sup>10</sup>	54 <sup>10</sup>	54 <sup>10</sup>	5.6
Cyanide (CN-) <sup>13</sup>	57-12-5	nc	48	34	26	0.20
Cyclohexane	110-82-7	nc	77 <sup>10</sup>	77 <sup>10</sup>	77 <sup>10</sup>	150
DDD	72-54-8	ca	40	29	24	0.49
DDE, p,p'-	72-55-9	ca	34	25	20	0.72
DDT	50-29-3	ca	33	24	20	5.1

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Dibenz[a,h]anthracene <sup>7</sup>	53-70-3	m	0.28	0.20	0.17	0.87
Dibenzofuran	132-64-9	nc	130	95	77	0.97
Dibromochloromethane	124-48-1	ca	140	110	88	0.0027
Dibromoethane, 1,2- (Ethylene Dibromide)	106-93-4	ca	0.62	0.42	0.31	0.00024
Dibromomethane (Methylene Bromide)	74-95-3	nc	45	31	22	0.025
Dibutyl Phthalate	84-74-2	nc	11000	8200	6700	16
Dichlorobenzene, 1,2-	95-50-1	nc	78 <sup>10</sup>	78 <sup>10</sup>	78 <sup>10</sup>	2.4
Dichlorobenzene, 1,3- <sup>8</sup>	541-73-1	nc	62 <sup>10</sup>	62 <sup>10</sup>	62 <sup>10</sup>	2.3
Dichlorobenzene, 1,4-	106-46-7	ca	31	21	15	0.037
Dichlorobenzidine, 3,3'-	91-94-1	ca	21	16	13	0.056
Dichlorodifluoromethane	75-71-8	nc	220	150	110	3.9

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: carcinogen(c); noncarcinogen(nc); mutagen(m)	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup>  (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Dichloroethane, 1,1-	75-34-3	ca	67	46	33	0.092
Dichloroethane, 1,2-	107-06-2	ca	7.9	5.5	3.9	0.0055
Dichloroethylene, 1,1-	75-35-4	nc	480	330	240	1.2
Dichloroethylene, 1,2-cis-	156-59-2	nc	270	200	170	0.12
Dichloroethylene, 1,2-trans-	156-60-5	nc	960 <sup>10</sup>	960 <sup>10</sup>	960 <sup>10</sup>	1.3
Dichlorophenol, 2,4-	120-83-2	nc	330	250	200	0.21
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	nc	1200	910	740	0.53
Dichloropropane, 1,2-	78-87-5	ca	16	11	8.0	0.016
Dichloropropene, 1,3-	542-75-6	ca	29	21	15	0.018
Dieldrin	60-57-1	ca	0.59	0.44	0.36	0.0047
Diethyl Phthalate	84-66-2	nc	88000	66000	54000	60

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); # mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Dimethylphenol, 2,4-	105-67-9	nc	2200	1600	1300	3.2
Dimethylphthalate <sup>8</sup>	131-11-3	nc	88000	66000	54000	48
Dinitrobenzene, 1,2-	528-29-0	nc	11	8.2	6.7	0.014
Dinitrobenzene, 1,3-	99-65-0	nc	11	8.2	6.7	0.014
Dinitrobenzene, 1,4-	100-25-4	nc	11	8.2	6.7	0.014
Dinitrophenol, 2,4-	51-28-5	nc	220	160	130	0.34
Dinitrotoluene, 2,4-	121-14-2	ca	30	23	18	0.024
Dinitrotoluene, 2,6-	606-20-2	ca	6.3	4.7	3.8	0.0050
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	nc	270	200	160	0.25
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	nc	270	200	160	0.25
Dioxane, 1,4-	123-91-1	ca	100	73	58	0.012

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Diphenylamine	122-39-4	nc	2800	2000	1700	4.3
Endosulfan	115-29-7	nc	820	610	500	9.3
Endrin	72-20-8	nc	33	25	20	0.61
Ethyl Chloride	75-00-3	nc	1400 <sup>10</sup>	1400 <sup>10</sup>	1400 <sup>10</sup>	72
Ethylbenzene <sup>7</sup>	100-41-4	ca	72	49	35	0.13
Ethylene Glycol	107-21-1	nc	1.0 x 10 <sup>5,9</sup> <sub>#</sub>	1.0 x 10 <sup>5,9</sup> <sub>#</sub>	1.0 x 10 <sup>5,9</sup> <sub>#</sub>	110
Fluoranthene <sup>7</sup>	206-44-0	nc	4200	3100	2500	590
Fluorene <sup>7</sup>	86-73-7	nc	4200	3100	2500	36
Formaldehyde	50-00-0	ca	430	290	210	0.011
Heptachlor	76-44-8	ca	2.2	1.6	1.3	0.0076
Heptachlor Epoxide	1024-57-3	ca	1.2	0.86	0.69	0.0019

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); # mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Hexachlorobenzene	118-74-1	ca	2.8	2.0	1.5	0.0082
Hexachlorobutadiene	87-68-3	nc	3.3 <sup>10</sup>	3.3 <sup>10</sup>	3.3 <sup>10</sup>	0.020
Hexachlorocyclohexane, Alpha-	319-84-6	ca	1.5	1.1	0.91	0.0029
Hexachlorocyclohexane, Beta-	319-85-7	ca	5.3	3.9	3.2	0.010
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	ca	9.9	7.4	6.0	0.016
Hexachlorocyclopentadiene	77-47-4	nc	2.0	1.4	1.0	0.0093
Hexachloroethane	67-72-1	ca	24	17	12	0.018
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	ca	110	79	64	0.027
Hexane, N-	110-54-3	nc	130 <sup>10</sup>	130 <sup>10</sup>	130 <sup>10</sup>	130 <sup>10</sup>
Hexanone, 2-	591-78-6	nc	380	270	210	0.11
Hydrazine	302-01-2	ca	0.79	0.55	0.40	2.9 x 10 <sup>-5</sup>

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); noncarcinogen(nc); # mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Indeno[1,2,3-cd]pyrene <sup>7</sup>	193-39-5	m	2.8	2.0	1.7	8.8
Isophorone	78-59-1	ca	10000	7400	6100	2.7
Isopropanol	67-63-0	nc	14000	9500	6800	1.1
Lead and Compounds <sup>14</sup>	7439-92-1	nc	400	400	400	n/a .5
Mercuric Chloride <sup>8</sup>	7487-94-7	nc	41	30	25	3.9
Mercury (elemental)	7439-97-6	nc	3.1 <sup>10</sup>	3.1 <sup>10</sup>	3.1 <sup>10</sup>	0.36
Methanol	67-56-1	nc	1.0 x 10 <sup>5,9</sup>	1.0 x 10 <sup>5,9</sup>	1.0 x 10 <sup>5,9</sup>	54
Methoxychlor	72-43-5	nc	550	410	340	13
Methyl Ethyl Ketone (2-Butanone)	78-93-3	nc	23000 <sup>10</sup>	23000 <sup>10</sup>	23000 <sup>10</sup>	15
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	nc	2200 <sup>10</sup>	2200 <sup>10</sup>	2200 <sup>10</sup>	18
Methyl Mercury	22967-92-6	nc	14	10	8.3	180

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ca	970	670	480	0.40
Methylene Chloride	75-09-2	nc	630	460	360	0.33
Methylnaphthalene, 1-	90-12-0	ca	68 <sup>10</sup>	68 <sup>10</sup>	68 <sup>10</sup>	0.41
Methylnaphthalene, 2-	91-57-6	nc	420	310	250	1.3
Naphthalene <sup>7</sup>	91-20-3	ca	42	29	20	0.038
Nickel Soluble Salts	7440-02-0	nc	2600	2000	1700	340
Nitrobenzene	98-95-3	ca	63	43	31	0.0079
Nitroglycerin	55-63-0	nc	11	8.2	6.7	0.0082
Nitroguanidine	556-88-7	nc	11000	8200	6700	5.8
Nitrosodimethylamine, N-	62-75-9	m	0.036	0.026	0.020	3.3 x 10 <sup>-6</sup>
Nitroso-di-N-propylamine, N-	621-64-7	ca	1.4	1.00	0.82	0.00068

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(e); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Nitrosodiphenylamine, N-	86-30-6	ca	1900	1400	1200	4.6
Nitrotoluene, m-	99-08-1	nc	11	8.2	6.7	0.013
Nitrotoluene, o-	88-72-2	ca	55	41	34	0.024
Nitrotoluene, p-	99-99-0	nc	440	330	270	0.32
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	nc	6700	5000	4100	9.7
Octyl Phthalate, di-N-	117-84-0	nc	1100	820	670	370
Pentachlorophenol	87-86-5	ca	18	13	11	0.0043
Pentaerythritol tetranitrate (PETN)	78-11-5	nc	220	160	130	0.43
Perfluorooctane Sulphonic Acid (PFOS) <sup>20</sup> <del>Sulphonate</del> Sulfonate	1763-23-1	nc	2.2	1.6	1.3	0.0030
Perfluorooctanoic Acid (PFOA) <sup>20</sup>	335-67-1	nc	2.2	1.6	1.3	0.0017
Phenanthrene <sup>7,8</sup>	85-01-8	nc	3100	2300	1900	39

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Phenol	108-95-2	nc	33000	25000	20000	29
Phosphorus, White	7723-14-0	nc	2.7	2.0	1.7	0.020
Polychlorinated Biphenyls (total) <sup>15</sup>	1336-36-3	ca	1.0	1.0	1.0	n/a <sup>6</sup>
Propyl benzene	103-65-1	nc	52 <sup>10</sup>	52 <sup>10</sup>	52 <sup>10</sup>	9.1
Pyrene <sup>7</sup>	129-00-0	nc	3100	2300	1900	87
Selenium	7782-49-2	nc	680	510	410	6.9
Silver	7440-22-4	nc	680	510	410	11
Styrene	100-42-5	nc	180 <sup>10</sup>	180 <sup>10</sup>	180 <sup>10</sup>	10
TCDD, 2,3,7,8- <sup>16</sup>	1746-01-6	ca	8.2 x 10 <sup>-5</sup>	6.0 x 10 <sup>-5</sup>	4.9 x 10 <sup>-5</sup>	3.9 x 10 <sup>-6</sup>
Tetrachloroethane, 1,1,1,2-	630-20-6	ca	30	21	15	0.022
Tetrachloroethane, 1,1,2,2-	79-34-5	ca	8.8	6.1	4.4	0.0030

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Tetrachloroethylene	127-18-4	nc	68 <sup>10</sup>	68 <sup>10</sup>	68 <sup>10</sup>	0.19
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	nc	270	200	170	2.5
Thallium (Soluble Salts)	7440-28-0	nc	1.4	1.00	0.83	0.19
Toluene <sup>7</sup>	108-88-3	nc	200 <sup>10</sup>	200 <sup>10</sup>	200 <sup>10</sup>	6.7
Toxaphene	8001-35-2	ca	8.6	6.4	5.2	0.72
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	nc	740 <sup>10</sup>	740 <sup>10</sup>	740 <sup>10</sup>	1700
Trichlorobenzene, 1,2,3-	87-61-6	nc	110	81	66	0.15
Trichlorobenzene, 1,2,4-	120-82-1	nc	65	45	32	0.082
Trichloroethane, 1,1,1-	71-55-6	nc	360 <sup>10</sup>	360 <sup>10</sup>	360 <sup>10</sup>	32
Trichloroethane, 1,1,2-	79-00-5	nc	2.3	1.6	1.1	0.0014
Trichloroethylene	79-01-6	nc	7.1	4.9	3.5	0.011

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(c); noncarcinogen(nc); mutagen(m) # #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Trichlorofluoromethane	75-69-4	nc	980 <sup>10</sup>	980 <sup>10</sup>	980 <sup>10</sup>	41
Trichlorophenol, 2,4,5-	95-95-4	nc	11000	8200	6700	28
Trichlorophenol, 2,4,6-	88-06-2	nc	110	82	67	0.092
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	nc	1100	820	670	0.66
Trichlorophenoxypropionic acid, -2,4,5	93-72-1	nc	880	660	540	0.55
Trichloropropane, 1,2,3-	96-18-4	m	0.089	0.066	0.054	3.1 x 10 <sup>-5</sup>
Trimethylbenzene, 1,2,4-	95-63-6	nc	43 <sup>10</sup>	43 <sup>10</sup>	33	0.16
Trimethylbenzene, 1,3,5-	108-67-8	nc	37 <sup>10</sup>	37 <sup>10</sup>	37 <sup>10</sup>	1.3
Tri-n-butyltin	688-73-3	nc	41	30	25	0.68
Trinitrobenzene, 1,3,5-	99-35-4	nc	3900	2900	2400	15
Trinitrotoluene, 2,4,6-	118-96-7	nc	64	47	39	0.39

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

Hazardous Substance	CAS Number <sup>1</sup>	health effect that drives risk: #(ca); carcinogen(e); noncarcinogen(nc); mutagen(m) #	Arctic Zone <sup>2</sup>	Under 40 Inch Zone <sup>3</sup>	Over 40 Inch Zone <sup>4</sup>	Migration to Groundwater <sup>6</sup> (mg/kg)
			Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	Human Health <sup>5</sup> (mg/kg)	
Vanadium and Compounds	7440-62-2	nc	680	510	420	1100
Vinyl Acetate	108-05-4	nc	2100	1400	1000	1.1
Vinyl Chloride	75-01-4	ca	0.69	0.65	0.61	0.00080
Xylenes <sup>7</sup>	1330-20-7	nc	57 <sup>10</sup>	57 <sup>10</sup>	57 <sup>10</sup>	1.5
Zinc and Compounds	7440-66-6	nc	41000	30000	25000	4900

See notes to table for further requirements. "n/a" means not applicable.

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

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.

↑ (((Publisher:)))  
This bold text is in the printed Alaska Administrative Code, right before 18 AAC 75.341(d) starts.  
Please retain the bold text. )))

**TABLE B2. METHOD TWO - PETROLEUM HYDROCARBON SOIL CLEANUP LEVELS**

Petroleum Hydrocarbon Range	Arctic Zone <sup>2</sup> mg/kg			Under 40 Inch Zone <sup>3</sup>			Over 40 Inch Zone <sup>4</sup>			Maximum Allowable Concentrations <sup>17</sup> mg/kg
	Ingestion (mg/kg) <sup>18</sup>	Inhalation (mg/kg) <sup>19</sup>	Migration to Groundwater (mg/kg) <sup>6</sup>	Ingestion (mg/kg) <sup>16</sup>	Inhalation (mg/kg) <sup>17</sup>	Migration to groundwater (mg/kg) <sup>6</sup>	Ingestion (mg/kg) <sup>16</sup>	Inhalation (mg/kg) <sup>17</sup>	Migration to Groundwater (mg/kg) <sup>6</sup>	
<b>For Laboratory Analysis using AK Methods 101, 102, and 103</b>										
C <sub>6</sub> -C <sub>10</sub> GRO using AK 101	1400	1400	n/a	1400	1400	300	1400	1400	260	1400
C <sub>10</sub> -C <sub>25</sub> DRO using AK 102	12500	12500	n/a	10250	12500	250	8250	12500	230	12500

C <sub>25</sub> -C <sub>36</sub> RRO using AK 103	13700	22000	n/a	10000	22000	11000	8300	22000	9700	22000
<b>For Laboratory Analysis using AK Aliphatic and Aromatic Fraction Methods 101AA, 102AA, and 103AA</b>										
C <sub>6</sub> -C <sub>10</sub> Aliphatics	1000	1000	n/a	1000	1000	270	1000	1000	240	1000
C <sub>6</sub> -C <sub>10</sub> Aromatics	1000	1000	n/a	1000	1000	150	1000	1000	130	1000
C <sub>10</sub> -C <sub>25</sub> Aliphatics	10000	10000	n/a	10000	10000	7200	8300	10000	6400	10000
C <sub>10</sub> -C <sub>25</sub> Aromatics	5000	5000	n/a	4100	5000	100	3300	5000	90	5000

C <sub>25</sub> -C <sub>36</sub> Aliphatics	20000	20000	n/a	20000	20000	20000	20000	20000	20000	20000
C <sub>25</sub> -C <sub>36</sub> 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, alternative 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 are 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 the *Procedures for Calculating Cleanup Levels*, 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 human health, ingestion,

Where the superscript figure "9" follows the exponent "10<sup>5</sup>", separated by a semicolon, the figure "9" refers to Note 9.

inhalation, or migration to groundwater.

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. "Arctic zone" is defined at 18 AAC 75.990.

3. "Under 40 inch zone" means a site that receives mean annual precipitation of less than 40 inches each year.

4. "Over 40 inch zone" means a site that receives mean annual precipitation of 40 or more inches each year.

exposure pathway is

5. The "Human Health" means the cumulative exposure pathway through dermal contact, ingestion, and inhalation of volatile and particulate compounds from hazardous substances in the soil but excludes the vapor intrusion pathway of indoor air inhalation.

6. The "Migration to groundwater" is (cap) means the potential for hazardous substances to leach to groundwater where they may result in a completed human health exposure pathway through dermal

contact, ingestion, or inhalation 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.

7. 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, benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[g,h,i]pyrene, chrysene, dibenz[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.

8. Where one or more toxicological values were unavailable, toxicity values from surrogate compounds or other sources were used as follows:

(A) pyrene is a toxicity surrogate for acenaphthylene, benzo(g,h,i) perylene, and phenanthrene;

(B) 1,2-dichlorobenzene is a toxicity surrogate for 1,3-dichlorobenzene;

(C) diethylphthalate is a toxicity surrogate for dimethylphthalate;

(D) elemental mercury is a toxicity surrogate for mercuric chloride<sup>?</sup>

~~(E) EPA's May 2016 Drinking Water Health Advisories for Perfluorooctanoic~~

~~Acid (PFOA) and Perfluorooctane Sulfonate (PFOS).~~

9. The ceiling limit of 100,000 mg/kg is equivalent to a chemical representing 10%<sup>percent</sup> by weight of the soil sample. At this contaminant concentration <sup>?</sup>and higher<sup>?</sup>, the assumptions for soil contact may be violated (for example, soil adherence and wind-borne dispersion assumptions) due to the

presence of the foreign substance itself.

10. These levels are based on soil saturation level (Csat) using the equations set out in *Procedures for Calculating Cleanup Levels*, adopted by reference in 18 AAC 75.340. Refer to the *Procedures for Calculating Cumulative Risk*, adopted by reference in 18 AAC 75.325(g), for inhalation risk screening levels.

11. Due to the prevalence of naturally occurring arsenic throughout the state, arsenic at a site will be considered background arsenic unless anthropogenic contribution from a source, activity, or mobilization by means of ~~via~~ another introduced contaminant is known or suspected.

12. Due to the prevalence of naturally occurring chromium III throughout the state, ~~Alaska,~~ sample results reported for total chromium detected at a site will be considered background chromium III unless anthropogenic contribution of chromium III or VI from a source, activity, or mobilization by means of ~~via~~ another introduced contaminant is known or suspected. The calculated chromium III migration to groundwater cleanup level exceeds 1,000,000 ~~1 million~~ parts per million.

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

14. 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 in ~~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 *Risk Assessment Procedures 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 will be determined on a site-specific

basis.

15. For unrestricted land use, polychlorinated biphenyls (PCBs) in soil shall be cleaned up to the listed value, unless the department determines that a different cleanup level is necessary as provided in 18 AAC 75.340(i); <sup>with the prior approval of the department, PCBs in soil may be cleaned up to</sup> ~~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 <sup>15</sup> §, “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.

16. This cleanup level 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.

17. This level is the concentration of C<sub>6</sub> - C<sub>10</sub>, C<sub>10</sub> - C<sub>25</sub>, or C<sub>25</sub> - C<sub>36</sub> 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).

18. "Ingestion" means a potential pathway of exposure to hazardous substances through direct consumption of the soil.

*"(Italics the document titles)"*

19. "Inhalation" means a potential pathway to volatile organic hazardous substances in the soil through volatilization.

20. Toxicity values for PFOS and PFOA were sourced from EPA's Health Effects Support Document for Perfluorooctane Sulfonate (PFOS) (EPA 822-R-16-002), dated May 2016, and Health Effects Support Document for Perfluorooctanoic Acid (PFOA) (EPA 822-R-16-003), dated May 2016.

*am 1/30/2003, Register 165;*  
*am 8/27/2000, Register 155;*  
*am 10/9/2008, Register 188; am*  
*11/6/2016, Register 220)*

11/6/2016, Register 220)

<b>Authority:</b>	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	

*"(Publisher: Existing editor's note after 18 AAC 75.341 is unchanged.)"*  
~~Editor's note: The applicable EPA rule governing disposal and cleanup of PCB~~

contaminated facilities under 40 C.F.R. Part 761.61 (PCB remediation waste) may apply to PCB cleanup at a contaminated site. The PCB cleanup levels listed in Table B1 are based on cleanup levels referred to in 40 C.F.R. 761.61 for high occupancy areas with no cap.

18 AAC 75.345 is repealed and readopted to read:

**18 AAC 75.345. Groundwater and surface water cleanup levels.** (a) Except as otherwise provided in this section, cleanup of a discharge or release of a hazardous substance to groundwater or surface water must meet the requirements of this section.

(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;

TABLE C. GROUNDWATER CLEANUP LEVELS			
Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); ↑ noncarcinogen(nc); ↑ mutagen(m) ↑	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ <del>2</del> (ug/L) liter)
Acenaphthene	83-32-9	nc	530
Acenaphthylene <sup>3</sup>	208-96-8	nc	260
Acetone	67-64-1	nc	14000
Aldrin	309-00-2	ca	0.0092
Ammonium Perchlorate	7790-98-9	nc	14
Anthracene	120-12-7	nc	43 <sup>4</sup>
Antimony (metallic)	7440-36-0	nc	7.8
Arsenic, Inorganic <sup>5</sup>	7440-38-2	ca	0.52
Barium	7440-39-3	nc	3800
Benz[a]anthracene	56-55-3	m	0.12
Benzaldehyde	100-52-7	nc	1900

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ (ug/L) liter)
Benzene	71-43-2	ca	4.6
Benzo[a]pyrene	50-32-8	m	0.034
Benzo[b]fluoranthene	205-99-2	m	0.34
Benzo[g,h,i]perylene <sup>3</sup>	191-24-2	nc	0.26 <sup>4</sup>
Benzo[k]fluoranthene	207-08-9	m	0.80 <sup>4</sup>
Benzoic Acid	65-85-0	nc	75000
Benzyl Alcohol	100-51-6	nc	2000
Beryllium and compounds	7440-41-7	nc	25
Bis(2-chloroethyl)ether	111-44-4	ca	0.14
Bis(2-ethylhexyl)phthalate	117-81-7	ca	56
Bromobenzene	108-86-1	nc	62
Bromodichloromethane	75-27-4	ca	1.3
Bromoform	75-25-2	ca	33
Bromomethane	74-83-9	nc	7.5
Butadiene, 1,3-	106-99-0	ca	0.18
Butanol, N-	71-36-3	nc	2000
Butyl Benzyl Phthalate	85-68-7	ca	160
Butylbenzene, n-	104-51-8	nc	1000
Butylbenzene, sec-	135-98-8	nc	2000
Butylbenzene, tert-	98-06-6	nc	690
Cadmium (Diet)	7440-43-9	nc	9.2

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ ( <del>ug/L</del> ) liter)
Carbon Disulfide	75-15-0	nc	810
Carbon Tetrachloride	56-23-5	ca	4.6
Chlordane	12789-03-6	ca	0.20
Chlordecone (Kepone)	143-50-0	ca	0.035
Chloroaniline, p-	106-47-8	ca	3.7
Chlorobenzene	108-90-7	nc	78
Chloroform	67-66-3	ca	2.2
Chloromethane	74-87-3	nc	190
Chloronaphthalene, Beta-	91-58-7	nc	750
Chlorophenol, 2-	95-57-8	nc	91
Chromium(III), Insoluble Salts <sup>6</sup>	16065-83-1	nc	22000
Chromium(VI) <sup>6</sup>	18540-29-9	m	0.35
Chrysene	218-01-9	m	2.0 <sup>4</sup>
Copper	7440-50-8	nc	800
Cresol, m-	108-39-4	nc	930
Cresol, o-	95-48-7	nc	930
Cresol, p-	106-44-5	nc	1900
Cumene	98-82-8	nc	450
Cyanide (CN-)	57-12-5	nc	1.5
Cyclohexane	110-82-7	nc	13000
DDD	72-54-8	ca	0.32

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/liter)
DDE, p,p'-	72-55-9	ca	0.46
DDT	50-29-3	ca	2.3
Dibenz[a,h]anthracene	53-70-3	m	0.034
Dibenzofuran	132-64-9	nc	7.9
Dibromochloromethane	124-48-1	ca	8.7
Dibromoethane, 1,2- (Ethylene Dibromide)	106-93-4	ca	0.075
Dibromomethane (Methylene Bromide)	74-95-3	nc	8.3
Dibutyl Phthalate	84-74-2	nc	900
Dichlorobenzene, 1,2-	95-50-1	nc	300
Dichlorobenzene, 1,3- <sup>3</sup>	541-73-1	nc	300
Dichlorobenzene, 1,4-	106-46-7	ca	4.8
Dichlorobenzidine, 3,3'-	91-94-1	ca	1.3
Dichlorodifluoromethane	75-71-8	nc	200
Dichloroethane, 1,1-	75-34-3	ca	28
Dichloroethane, 1,2-	107-06-2	ca	1.7
Dichloroethylene, 1,1-	75-35-4	nc	280
Dichloroethylene, 1,2-cis-	156-59-2	nc	36
Dichloroethylene, 1,2-trans-	156-60-5	nc	360
Dichlorophenol, 2,4-	120-83-2	nc	46
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	nc	170
Dichloropropane, 1,2-	78-87-5	ca	4.4

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ (ug/L) liter)
Dichloropropene, 1,3-	542-75-6	ca	4.7
Dieldrin	60-57-1	ca	0.018
Diethyl Phthalate	84-66-2	nc	15000
Dimethylphenol, 2,4-	105-67-9	nc	360
Dimethylphthalate <sup>3</sup>	131-11-3	nc	16000
Dinitrobenzene, 1,2-	528-29-0	nc	1.9
Dinitrobenzene, 1,3-	99-65-0	nc	2.0
Dinitrobenzene, 1,4-	100-25-4	nc	2.0
Dinitrophenol, 2,4-	51-28-5	nc	39
Dinitrotoluene, 2,4-	121-14-2	ca	2.4
Dinitrotoluene, 2,6-	606-20-2	ca	0.49
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	nc	39
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	nc	39
Dioxane, 1,4-	123-91-1	ca	4.6
Diphenylamine	122-39-4	nc	310
Endosulfan	115-29-7	nc	100
Endrin	72-20-8	nc	2.3
Ethyl Chloride	75-00-3	nc	21000
Ethylbenzene	100-41-4	ca	15
Ethylene Glycol	107-21-1	nc	40000
Fluoranthene	206-44-0	nc	260 <sup>4</sup>

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ liter)
Fluorene	86-73-7	nc	290
Formaldehyde	50-00-0	ca	4.3
Heptachlor	76-44-8	ca	0.014
Heptachlor Epoxide	1024-57-3	ca	0.014
Hexachlorobenzene	118-74-1	ca	0.098
Hexachlorobutadiene	87-68-3	nc	1.4
Hexachlorocyclohexane, Alpha-	319-84-6	ca	0.072
Hexachlorocyclohexane, Beta-	319-85-7	ca	0.25
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	ca	0.42
Hexachlorocyclopentadiene	77-47-4	nc	0.41
Hexachloroethane	67-72-1	ca	3.3
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	ca	7.0
Hexane, N-	110-54-3	nc	1500
Hexanone, 2-	591-78-6	nc	38
Hydrazine	302-01-2	ca	0.011
Indeno[1,2,3-cd]pyrene	193-39-5	m	0.19 <sup>4</sup>
Isophorone	78-59-1	ca	780
Isopropanol	67-63-0	nc	410
Lead and Compounds <sup>7</sup>	7439-92-1	nc	15
Mercuric Chloride <sup>3</sup>	7487-94-7	nc	5.7
Mercury (elemental)	7439-97-6	nc	0.52

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/liter)
Methanol	67-56-1	nc	20000
Methoxychlor	72-43-5	nc	37
Methyl Ethyl Ketone (2-Butanone)	78-93-3	nc	5600
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	nc	6300
Methyl Mercury	22967-92-6	nc	2.0
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ca	140
Methylene Chloride	75-09-2	nc	110
Methylnaphthalene, 1-	90-12-0	ca	11
Methylnaphthalene, 2-	91-57-6	nc	36
Naphthalene	91-20-3	ca	1.7
Nickel Soluble Salts	7440-02-0	nc	390
Nitrobenzene	98-95-3	ca	1.4
Nitroglycerin	55-63-0	nc	2.0
Nitroguanidine	556-88-7	nc	2000
Nitrosodimethylamine, N-	62-75-9	m	0.0011
Nitroso-di-N-propylamine, N-	621-64-7	ca	0.11
Nitrosodiphenylamine, N-	86-30-6	ca	120
Nitrotoluene, m-	99-08-1	nc	1.7
Nitrotoluene, o-	88-72-2	ca	3.1
Nitrotoluene, p-	99-99-0	nc	43
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	nc	1000

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/ ( $\mu\text{g/L}$ ) liter)
Octyl Phthalate, di-N-	117-84-0	nc	22 <sup>4</sup>
Pentachlorophenol	87-86-5	ca	0.41
Pentaerythritol tetranitrate (PETN)	78-11-5	nc	39
Perfluorooctane Sulphonic Acid (PFOS) <sup>3-9</sup> Sulfonate	1763-23-1	nc	0.40
Perfluorooctanoic Acid (PFOA) <sup>2-9</sup>	335-67-1	nc	0.40
Phenanthrene <sup>3</sup>	85-01-8	nc	170
Phenol	108-95-2	nc	5800
Phosphorus, White	7723-14-0	nc	0.40
Polychlorinated Biphenyls (PCBs)	1336-36-3	ca	0.50
Propyl benzene	103-65-1	nc	660
Pyrene	129-00-0	nc	120
Selenium	7782-49-2	nc	100
Silver	7440-22-4	nc	94
Styrene	100-42-5	nc	1200
TCDD, 2,3,7,8- <sup>8</sup>	1746-01-6	ca	1.2 x 10 <sup>-6</sup>
Tetrachloroethane, 1,1,1,2-	630-20-6	ca	5.7
Tetrachloroethane, 1,1,2,2-	79-34-5	ca	0.76
Tetrachloroethylene	127-18-4	nc	41
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	nc	39
Thallium (Soluble Salts)	7440-28-0	nc	0.20
Toluene	108-88-3	nc	1100

TABLE C. GROUNDWATER CLEANUP LEVELS

Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms / liter)
Toxaphene	8001-35-2	ca	0.71
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	nc	55000
Trichlorobenzene, 1,2,3-	87-61-6	nc	7.0
Trichlorobenzene, 1,2,4-	120-82-1	nc	4.0
Trichloroethane, 1,1,1-	71-55-6	nc	8000
Trichloroethane, 1,1,2-	79-00-5	nc	0.41
Trichloroethylene	79-01-6	nc	2.8
Trichlorofluoromethane	75-69-4	nc	5200
Trichlorophenol, 2,4,5-	95-95-4	nc	1200
Trichlorophenol, 2,4,6-	88-06-2	nc	12
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	nc	160
Trichlorophenoxypropionic acid, -2,4,5	93-72-1	nc	110
Trichloropropane, 1,2,3-	96-18-4	m	0.0075
Trimethylbenzene, 1,2,4-	95-63-6	nc	15
Trimethylbenzene, 1,3,5-	108-67-8	nc	120
Tri-n-butyltin	688-73-3	nc	3.7
Trinitrobenzene, 1,3,5-	99-35-4	nc	590
Trinitrotoluene, 2,4,6-	118-96-7	nc	9.8
Vanadium and Compounds	7440-62-2	nc	86
Vinyl Acetate	108-05-4	nc	410
Vinyl Chloride	75-01-4	ca	0.19

TABLE C. GROUNDWATER CLEANUP LEVELS			
Hazardous Substance	CAS Number <sup>1</sup>	Health effect that drives risk: carcinogen(ca); noncarcinogen(nc); mutagen(m)	Groundwater Human Health Cleanup Level <sup>2</sup> (micrograms/liter) (µg/L)
Xylenes	1330-20-7	nc	190
Zinc and Compounds	7440-66-6	nc	6000
PETROLEUM HYDROCARBONS			
C <sub>6</sub> -C <sub>10</sub> GRO		nc	2200
C <sub>10</sub> -C <sub>25</sub> DRO		nc	1500
C <sub>25</sub> -C <sub>36</sub> RRO		nc	1100

**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. "Human Health" means cumulative exposure pathway through dermal contact, ingestion, and inhalation of volatile compounds from hazardous substances in the water.

3. Where one or more toxicological values were unavailable, toxicity values from surrogate compounds or other sources were used as follows:

(A) pyrene is a toxicity surrogate for acenaphthylene, benzo(g,h,i) perylene, and phenanthrene;

(B) 1,2-dichlorobenzene is a toxicity surrogate for 1,3-dichlorobenzene;

(C) diethylphthalate is a toxicity surrogate for dimethylphthalate;

(D) elemental mercury is a toxicity surrogate for mercuric chloride.

~~(E) EPA's May 2016 *Drinking Water Health Advisories for Perfluorooctanoic*~~

~~*Acid (PFOA) and Perfluorooctane Sulfonate (PFOS):*~~

4. These levels are based on water solubility using the data set out in *Procedures for Calculating Cleanup Levels*, adopted by reference in 18 AAC 75.340.

5. Due to the prevalence of naturally occurring arsenic throughout the state, arsenic at a site will be considered background arsenic unless anthropogenic contribution from a source, activity, or mobilization ~~via~~ <sup>by means of</sup> another introduced contaminant is known or suspected.

6. Due to the prevalence of naturally occurring chromium III throughout <sup>the state,</sup> Alaska, sample results reported for total chromium detected at a site will be considered background chromium III unless anthropogenic contribution of chromium III or VI from a source, activity, or mobilization ~~via~~ <sup>by means of</sup>

another introduced contaminant is known or suspected.

9. Toxicity values for PFOS and PFOA were sourced from EPA's Health Effects Support Document for Perfluorooctane Sulfonate (PFOS) (EPA 822-R-16-002), dated May 2016, and Health Effects Support Document for Perfluorooctanoic Acid (PFOA) (EPA 822-R-16-003), dated May 2016.

The

7. Lead cleanup level is taken from EPA's action level for lead in water.

8. This cleanup level 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.

(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;

(3) <sup>an alternative</sup> ~~site-specific~~ cleanup level for a hazardous substance not listed under

~~18 AAC 75.345(b)(1)~~ <sup>(1) of this subsection</sup> proposed by the responsible party and approved by the department, using

the procedures set out in the department's *Risk Assessment Procedures Manual*, adopted by

reference in 18 AAC 75.340, unless the responsible person demonstrates that ~~a site-specific~~ <sup>an alternative</sup> cleanup level is not necessary to ensure protection of human health, safety, and welfare, and of the environment; or

(4) ~~a site-specific~~ <sup>an alternative</sup> cleanup level for a hazardous substance not listed under <sup>(1) of this subsection</sup> ~~18 AAC 75.345(b)(1)~~ set by the department using the procedures set out in the department's *Risk Assessment Procedures Manual*, adopted by reference in 18 AAC 75.340.

(c) The department <sup>will</sup> ~~may~~ set a more stringent cleanup level than the applicable level under (b) of this section, if the department determines that a more stringent cleanup level is necessary to ensure protection of human health, safety, or welfare, or of the environment, and based on actual onsite and actual or likely offsite uses of the groundwater that are likely to be affected by the hazardous substance. In making a determination under this subsection, the department may consider:

(1) the risks to current or potential future users of the groundwater as a drinking water source, as determined under 18 AAC 75.350;

(2) the presence of sensitive subpopulations who respond biologically to lower levels of exposure to a hazardous substance;

(3) the groundwater use classifications other than for drinking water, as set out under 18 AAC 70.020(a)(1)(A) and 18 AAC 70.050(2);

(4) the primary or secondary maximum contaminant levels in 18 AAC 80.300 for actual or likely drinking water supplies;

(5) a health advisory value developed by <sup>EPA's</sup> ~~the Environmental Protection Agency's~~ Office of Water; and

(6) the cleanup levels in this section for groundwater contaminated with petroleum <sup>3</sup> the contamination may not exceed, for each petroleum hydrocarbon range applicable, including the gasoline range, the diesel range, and the residual range,

(A) a threshold odor number (TON) of 1 for odor, as measured by Method 2150B, *Standard Methods for the Examination of Water and Wastewater*, 7<sup>th</sup> (2012), 22nd edition, American Public Health Association (2005), adopted by reference; or

(B) a 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.

(d) Where the department determines that toxicity information is insufficient to establish a cleanup level for a hazardous substance or a pollutant ~~as defined under AS 46.03.900(20)~~ that ensures protection of human health, safety, and welfare, and of the environment, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established under (b)(2), (3), or (4) of this section. ~~18 AAC 75.345(b)(2), (b)(3) or (b)(4).~~

(e) Toxic substances in sediment may not cause, and may not be reasonably <sup>2</sup> be expected to cause, a toxic or other deleterious effect on aquatic life, except as authorized under 18 AAC 70. For purposes of this subsection, "toxic substances" has the meaning given in 18 AAC 70.990.

(f) 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 zone of saturation 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 under this subsection, the

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

(2) cleanup levels established in (b) and (c) of this section must be met at 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

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

(g) Groundwater that is closely connected hydrologically to nearby surface water may not cause a violation of the water quality standards in 18 AAC 70 for surface water or sediment. The department will, in consultation with local, state, and federal officials and the public, establish points of compliance with this subsection, taking into account ~~the following factors:~~

(1) groundwater travel time and distance from sources of hazardous substances to surface water;

(2) the contribution of the groundwater to the chemical and physical quantity and quality of the surface water;

(3) organisms living in or dependent upon the groundwater to surface water ecosystems;

(4) climatic, tidal, or seasonal variations;

(5) feasibility of attaining applicable water quality standards to support the designated uses of the surface water;

(6) presence of sediment contamination;

and

(7) if conducted for the site, the conclusions of a site-specific risk assessment conducted under the *Risk Assessment Procedures Manual*, adopted by reference in 18 AAC 75.340.

(h) If the groundwater point of compliance is established at or near a property boundary or if groundwater is closely connected hydrologically to a surface waterbody, the department will, if the department determines that sentinel monitoring is necessary to ensure protection of human health, safety, or welfare, or the environment, require a responsible person to develop sentinel monitoring wells that monitor for any hazardous substances likely to migrate to the applicable point of compliance at concentrations that exceed the cleanup levels.

(i) The department will require long-term monitoring if the department determines that monitoring is necessary to ensure protection of human health, safety, or welfare, or of the environment and if groundwater, surface water, soil, or sediment contains residual concentrations of a hazardous substance that exceed the applicable cleanup levels. If long-term monitoring is required under this subsection, a responsible person shall submit a plan and schedule for monitoring as part of the requirements for cleanup operations under 18 AAC 75.360. Unless otherwise approved by the department, a responsible person shall conduct monitoring quarterly for at least one year to establish the concentration trend. The department will evaluate the monitoring program yearly. If the monitoring indicates that the concentration trend

(1) is increasing, the department will require additional follow-up monitoring and assess the need for additional cleanup; or

(2) is stable or decreasing, and that hazardous substance migration is not occurring, the department will decrease or discontinue the monitoring frequency and locations, if the responsible person demonstrates that continued monitoring is not necessary to ensure protection of human health, safety, and welfare, and of the environment.

(j) The department will require groundwater, surface water, soil, or sediment monitoring to estimate contaminant flux rates and to address potential bioaccumulation of each hazardous substance at the site, if the department determines that monitoring is necessary to ensure protection of human health, safety, or welfare, or of the environment. If monitoring is required under this subsection, a responsible person shall submit a plan and schedule for monitoring as part of the cleanup operation requirements under 18 AAC 75.360.

(k) Groundwater monitoring wells must be installed, developed, and decommissioned in accordance with an approved method that is protective of human health, safety, and welfare, and of the environment.

(l) For a cleanup conducted under (b)(1) of this section, a chemical that is detected at one-tenth or more of the Table C value 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 10/9/2008, Register 188; am 6/17/2015, Register 214; am 11/6/2016, Register 220)

<b>Authority:</b>	AS 46.03.020	AS 46.03.745	AS 46.04.070
	AS 46.03.050	<u>AS 46.03.755</u>	AS 46.09.010
	AS 46.03.710	<del>AS 46.03.900</del>	AS 46.09.020
	AS 46.03.740	AS 46.04.020	

Editor's note: Standard Methods for the Examination of Water and Wastewater, (in 18 AAC 75.345), adopted by reference in this section, may be purchased from the American Water Works Association Bookstore, 6666 West Quincy Avenue, Denver, Colorado 80235, or may be viewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices.

at <http://www.awwa.org/store.aspx> or by contacting the organization at [service@awwa.org](mailto:service@awwa.org) or (800) 926-7337. The document also

18 AAC 75.370(a)(2) is amended to read:

(2) store contaminated soil

(A) 100 feet or more from surface water, a private water system, [A CLASS C PUBLIC WATER SYSTEM AS DEFINED IN 18 AAC 80.1990,] or a fresh water supply system that uses groundwater for a use designated in 18 AAC

70.020(a)(1)(A) and

18 AAC 70.050(2) [18 AAC 70.050(a)(2)]; and

(B) 200 feet or more from a water source serving a community water system, a non-transient non-community water system, or a transient non-community water system [CLASS A OR CLASS B PUBLIC WATER SYSTEM], as defined in 18 AAC 80.1990;

(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 10/9/2008, Register 188; am 6/17/2015, Register 214; am 11/6/2016, Register 220)

<b>Authority:</b>	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 75.990 is amended by adding new paragraphs to read:

(19<sup>6</sup>) “mutagen” means a hazardous substance capable of inducing change to genetic material

(19<sup>7</sup>) “mutagenic” means of or relating to a mutagen

(19<sup>8</sup>) “sensitive subpopulation” means a group of individuals that is at increased risk of some adverse health event or outcome after exposure to a contaminant.

(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 10/9/2008, Register 188; am 4/8/2012, Register 202; am 9/4/2014, Register 211; am 6/17/2015, am 4/16/2016, Register 218; Register 214; am 11/6/2016, Register 220)

<b>Authority:</b>	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

# MEMORANDUM

State of Alaska  
Department of Law

To: Hon. Byron Mallott  
Lieutenant Governor

Date: October 7, 2016

File No.: JU2015200567

Tel. No.: 465-3600

From: Steven C. Weaver   
Sr. Assistant Attorney General  
and Assistant Regulations Attorney  
Legislation and Regulations Section

Re: Regulations re: contaminated site  
cleanup procedures and soil and  
groundwater cleanup levels (18 AAC  
75.325(g), (h); 18 AAC 75.340 -  
18 AAC 75.345; 18 AAC  
75.370(a)(2); 18 AAC 75.990)

We have reviewed the attached regulations from the Department of Environmental Conservation against the statutory standards of the Administrative Procedure Act. I have reviewed this project under a specific delegation dated October 6, 2016 from the Regulations Attorney. The regulations update contaminated site cleanup procedures regarding soil and groundwater cleanup levels.

We find no legal problems. This memorandum constitutes the written statement of approval under AS 44.62.060(b) and (c) that authorizes your office to file the attached regulations.

One of the documents adopted by reference in these regulations, the American Public Health Association's *Standard Methods for the Examination of Water and Wastewater*, 22nd edition (2012), was previously filed with a recent Department of Environmental Conservation regulations project. The document was filed with the department's update to regulations in 18 AAC 80 regarding drinking water, adopted-by-reference material, and lead content of pipes and other products (Department of Law file number JU2013200738), the first part of which was filed November 13, 2014, took effect December 13, 2014, and appeared in print in Register 212 (January 2015).

The August 26, 2015 public notice, the October 4, 2015 supplemental public notice, the October 25, 2015 second supplemental public notice, the May 19, 2016 public notice, the June 21, 2016 supplemental public notice, and the September 16, 2016 adoption order all state that this action is not expected to require an increased appropriation. Therefore, a fiscal note under AS 44.62.195 is not required.

We have made some technical corrections to conform the regulations in accordance with AS 44.62.125. The corrections are shown on the attached copy of the regulations. Because a few

Hon. Byron Mallott, Lieutenant Governor  
Our file: JU2015200567

October 7, 2016  
Page 2

of those technical corrections were to a chemical name set out in the regulations, we made handwritten conforming changes in two of the documents that the department adopted by reference. The conforming changes are located in the following places:

In the department's *Procedures for Calculating Cleanup Levels*, dated September 15, 2016: Appendix B, pages 47 and 52.

In the department's *Procedures for Calculating Cumulative Risk*, dated September 15, 2016: Appendix B, pages 18, 24, 30, and 36.

SCW

cc w/enc: (via email)

Hon. Larry Hartig, Commissioner  
Department of Environmental Conservation

Gary Mendivil, Regulations Contact  
Department of Environmental Conservation

Kristin Ryan, Director  
Division of Spill Prevention and Response  
Department of Environmental Conservation

Sally Schlichting  
Division of Spill Prevention and Response  
Department of Environmental Conservation

Jennifer A. Currie  
Assistant Attorney General  
Environmental Section

Steven E. Mulder  
Chief Assistant Attorney General  
Environmental Section

Susan R. Pollard  
Chief Assistant Attorney General  
Legislation/Regulation Section

# MEMORANDUM

## State of Alaska Department of Law

TO: Hon. Byron Mallott  
Lieutenant Governor

DATE: October 6, 2016

FILE NO.: JU2015200567

TELEPHONE NO.: 465-3600

FROM: Susan R. Pollard *SRP*  
Chief Assistant Attorney General  
& Regulations Attorney  
Legislation/Regulations Section—Juneau

SUBJECT: Specific delegation of authority regarding regulations review on Department of Environmental Conservation regulations re: contaminated site cleanup procedures and soil and ground-water cleanup levels (18 AAC 75.325(g), (h); 18 AAC 75.340 - 18 AAC 75.345; 18 AAC 75.370(a)(2); 18 AAC 75.990)

By this memorandum, I am delegating my authority as Regulations Attorney under AS 44.62 to Assistant Attorney General Steven C. Weaver for the above-referenced regulations project. Under this delegation of authority, Steven Weaver has my full authority under AS 44.62 to conduct the legal review under AS 44.62 and take necessary actions on this regulations project.

If you have questions, please let me know.

SCW

cc w/enc:

Scott C. Meriwether, AAC Coordinator  
Office of the Lieutenant Governor

Steven C. Weaver  
Sr. Assistant Attorney General &  
Assistant Regulations Attorney  
Legislation/Regulations Section—Juneau

STATE OF ALASKA            )  
  ) ss.  
1st JUDICIAL DISTRICT    )

AFFIDAVIT OF NOTICE OF PROPOSED ADOPTION OF REGULATIONS  
AND FURNISHING OF ADDITIONAL INFORMATION

I, Sally Schlichting, Environmental Program Manager I, of Department of Environmental Conservation, being sworn, state the following:

As required by AS 44.62.190, notice of the proposed adoption of changes to 18 AAC 75 Oil and Other Hazardous Substances Pollution Control dealing with cleanup levels for soil and groundwater and how they are calculated at contaminated sites, has been given by being

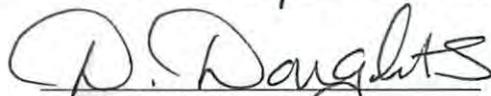
- (1) published in a newspaper or trade publication;
- (2) furnished to interested persons;
- (3) furnished to appropriate state officials;
- (4) furnished to the Department of Law, along with a copy of the proposed regulations;
- (5) electronically transmitted to incumbent State of Alaska legislators;
- (6) furnished to the Legislative Affairs Agency, Division of Legal and Research Services;
- (7) posted on the Alaska Online Public Notice System as required by AS 44.62.175(a)(1) and (b) and 44.62.190(a)(1);
- (8) furnished electronically, along with a copy of the proposed regulations, to the Legislative Affairs Agency, the chair of the Resources Committee of the Alaska Senate and House of Representatives, the Administrative Regulation Review Committee, and the legislative council.

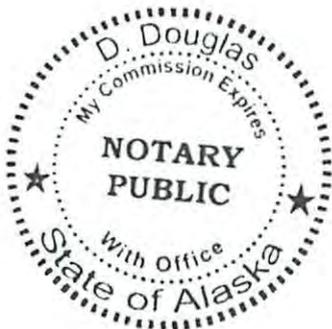
As required by AS 44.62.190, additional regulations notice information regarding the proposed adoption of the regulation changes described above has been furnished to interested persons and those in (5) and (6) of the list above. The additional regulations notice information also has been posted on the Alaska Online Public Notice System.

DATE: 9/15/16  
          Juneau

  
Sally Schlichting, Environmental Program Manager

SUBSCRIBED AND SWORN TO before me this 16 day of September, 2016

  
Notary Public in and for the  
State of Alaska  
My commission expires: with week.



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*[Handwritten signature and text, possibly "Notary Public" and "State of Alaska"]*



STATE OF ALASKA                    )  
  ) ss.  
FIRST JUDICIAL DISTRICT        )

AFFIDAVIT OF AGENCY RECORD OF PUBLIC COMMENT

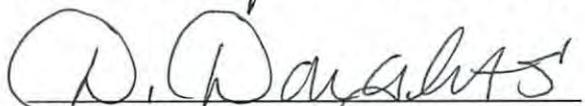
I, Sally Schlichting, Environmental Program Manager for the Department of Environmental Conservation being duly sworn, state the following:

In compliance with AS 44.62.215, the Department of Environmental Conservation has kept a record of its use or rejection of factual or other substantive information that was submitted in writing as public comment and that was relevant to the accuracy, coverage, or other aspect of the Department of Environmental Conservation regulations dealing with cleanup levels in soil and groundwater and how they are calculated at contaminated sites under 18 AAC 75.

Date: 9/16/16  
Juneau, Alaska

  
\_\_\_\_\_  
Sally Schlichting, Environmental Program Manager

SUBSCRIBED AND SWORN TO before me this 16 day of September, 2016

  
\_\_\_\_\_  
Notary Public in and for the  
State of Alaska  
My commission expires: with work.



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SUPPLEMENTAL NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's *Procedures for Calculating Cumulative Risk* and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology; update the department's *Procedures for Calculating Cleanup Levels* and adopt it by reference; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis; modify the requirement for how cleanup levels protecting human exposure are met at a site.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's *Risk Assessment Procedures Manual*; allow the department to set a more stringent cleanup level if necessary by considering other factors; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide protections, including such measures as an alternative source of drinking water or implement other institutional controls under 18 AAC 75.375; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method.
- (5) Amend 18 AAC 75.990 to provide definitions for "mutagen;" "mutagenic;" and "sensitive subpopulation."
- (6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>.

**In order to provide additional time for comments the public comment period has been extended. All comments must be received by 5:00 p.m. on July 8, 2016.** Comments received after this date will not be considered in final action on these rules.

You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than June 28, 2016 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/regulation\\_projects/index.htm](http://dec.alaska.gov/spar/regulation_projects/index.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. **You should comment during the time allowed if your interests could be affected.** Written comments received are public records and are subject to public inspection.

This is a SUPPLEMENTAL NOTICE adding to the NOTICE OF PROPOSED CHANGES that was issued on May 19, 2016, concerning the proposed regulation revisions contained in the Department of Law file number JU2015200567. This SUPPLEMENTAL NOTICE is being issued to extend the public comment period to provide additional time for comments.

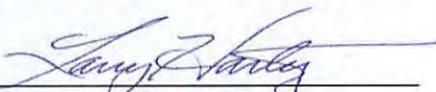
**Statutory Authority:** AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

**Statutes Being Implemented, Interpreted, or Made Specific:**

AS 46.03.020	AS 46.03.900	AS 46.04.070
AS 46.03.050	AS 46.03.822	AS 46.08.140
AS 46.03.710	AS 46.04.020	AS 46.09.010
AS 46.03.740	AS 46.04.030	AS 46.09.020
AS 46.03.745	AS 46.04.035	
AS 46.03.755	AS 46.04.055	

**Fiscal Information:** The proposed regulation changes are not expected to require an increased appropriation.

Dated: June 20, 2016  
Anchorage, Alaska

  
Larry Hartig, Commissioner

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# AFFIDAVIT OF PUBLICATION

STATE OF ALASKA  
THIRD JUDICIAL DISTRICT

Emma Dunlap  
being first duly sworn on oath deposes and says that he/she is a representative of the Alaska Dispatch News, a daily newspaper. That said newspaper has been approved by the Third Judicial Court, Anchorage, Alaska, and it now and has been published in the English language continually as a daily newspaper in Anchorage, Alaska, and it is now and during all said time was printed in an office maintained at the aforesaid place of publication of said newspaper. That the annexed is a copy of an advertisement as it was published in regular issues (and not in supplemental form) of said newspaper on

June 21, 2016

and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is not in excess of the rate charged private individuals.

Signed Emma Dunlap

Subscribed and sworn to before me  
this 21st day of June, 2016

Britney Thompson

Notary Public in and for  
The State of Alaska.  
Third Division  
Anchorage, Alaska  
MY COMMISSION EXPIRES

Britney Thompson  
Notary Public  
BRITNEY L. THOMPSON  
State of Alaska  
My Commission Expires Feb 23, 2019

## SUPPLEMENTAL NOTICE OF PROPOSED CHANGES IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's Procedures for Calculating Cumulative Risk and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology; update the department's Procedures for Calculating Cleanup Levels and adopt it by reference; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis; modify the requirement for how cleanup levels protecting human exposure are met at a site.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's Risk Assessment Procedures Manual; allow the department to set a more stringent cleanup level if necessary by considering other factors; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide protections, including such measures as an alternative source of drinking water or implement other institutional controls under 18 AAC 75.375; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method.
- (5) Amend 18 AAC 75.990 to provide definitions for "mutagen;" "mutagenic;" and "sensitive subpopulation."
- (6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>.

In order to provide additional time for comments the public comment period has been extended. All comments must be received by 5:00 p.m. on July 8, 2016. Comments received after this date will not be considered in final action on these rules.

You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than June 28, 2016 to ensure that any necessary accommodations can be provided.

VP, Cargo Logistics  
ALASKA  
Ravn

Ravn Alaska is currently recruiting for a VP, Cargo Logistics. This position will be based in Anchorage, Alaska. Travel is required.

<http://www.ravnlogistics.com>

DIRECTOR OF EXTERNAL COMMUNICATIONS  
Regional Citizens' Advisory Council  
PRINCE WILLIAM SOUND  
RCAC  
Regional Citizens' Advisory Council

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) seeks a Director of External Communications. This person will be based in Anchorage, Alaska.

[news-jobs@alaskadispatch.com](http://news-jobs@alaskadispatch.com)

Notary Public  
BRITNEY L. THOMPSON  
State of Alaska  
Commission Expires Feb 28, 2019

CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's *Procedures for Calculating Cumulative Risk* and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology; update the department's *Procedures for Calculating Cleanup Levels* and adopt it by reference; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis; modify the requirement for how cleanup levels protecting human exposure are met at a site.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
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- (5) Amend 18 AAC 75.990 to provide definitions for "mutagen;" "mutagenic;" and "sensitive subpopulation."
- (6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303,

P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>. **All comments must be received by 5:00 p.m. on June 23, 2016.** Comments received after this date will not be considered in final action on these rules.

This is the second public comment period for these proposed changes. The first public comment period occurred from August 26, 2015 through December 11, 2015. This public comment period provides the public with the opportunity to review the changes made to the proposed amendments based on comments received during the last public comment period.

A public workshop will be held at the following location and date:

**Anchorage: Wednesday, June 8, 2016 from 2:30 p.m. to 4:30 p.m. at the BP Energy Center, 900 E. Benson Boulevard.**

Any discussions at the public workshop will not be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than June 13, 2016 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/regulation\\_projects/index.htm](http://dec.alaska.gov/spar/regulation_projects/index.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. **YOU SHOULD COMMENT DURING THE TIME ALLOWED IF YOUR INTERESTS COULD BE AFFECTED.** Written comments received are public records and are subject to public inspection.

**Statutory Authority:** AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

**Statutes Being Implemented, Interpreted, or Made Specific:**

AS 46.03.020	AS 46.03.710	AS 46.03.745
AS 46.03.050	AS 46.03.740	AS 46.03.755

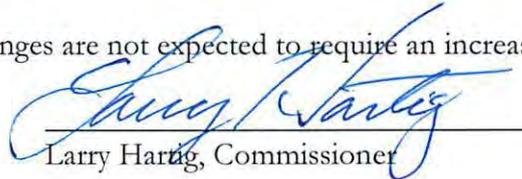
AS 46.03.900  
AS 46.03.822  
AS 46.04.020  
AS 46.04.030

AS 46.04.035  
AS 46.04.055  
AS 46.04.070  
AS 46.08.140

AS 46.09.010  
AS 46.09.020

**Fiscal Information:** The proposed regulation changes are not expected to require an increased appropriation.

Dated: May 18, 2016  
Juneau, Alaska

  
Larry Hartig, Commissioner

CLEANUP LEVEL AMENDMENTS  
ADDITIONAL REGULATIONS NOTICE INFORMATION  
(AS 44.62.190(d))

1. Adopting agency: Alaska Department of Environmental Conservation
2. General subject of regulation: Contaminated Site Cleanup Rules
3. Citation of regulation (may be grouped): 18 AAC 75
4. Department of Law file number, if any: JU2015200567
5. Reason for the proposed action:
  - ( ) Compliance with federal law or action (identify):
  - ( ) Compliance with new or changed state statute
  - ( ) Compliance with Federal or state court decision (identify)
  - (X) Development of program standards
  - ( ) Other (identify):
6. Appropriation/Allocation: The proposed regulation amendments are not expected to require an increased appropriation.
7. Estimated costs in the aggregate to comply with the proposed action to:

**a. Private Persons. This group encompasses the general public, homeowners, and private businesses.**

General Public: There are no increased costs to private persons or businesses who are not involved in contaminated sites. There may be reduced or avoided costs as a result of safer levels in soil and groundwater, especially for the most sensitive receptors – children – and reduced risk for cancer and non-cancer illnesses.

Homeowners are unlikely to incur additional costs, as the majority of residential cleanups relate to total petroleum contamination and the cleanup levels for petroleum hydrocarbons are not changing. However, some additional costs associated with lowered cleanup levels for petroleum constituents such as benzene may prolong some cleanups where these compounds have contaminated groundwater at the site.

Private Businesses with contaminated site issues: Private businesses with contaminated groundwater are more likely to face additional costs than sites only with contaminated soil, as a greater number of cleanup levels for groundwater are becoming more stringent. These costs may materialize as increased expenses to operate treatment systems for a longer period of time; conduct additional groundwater monitoring; and to achieve lower detection limits or practical quantitation limits (PQLs).

Environmental consulting firms will experience short-term incremental learning costs (cost of familiarizing with regulation/compliance planning) which they may pass on to clients. These learning costs include a modest amount of time to understand new cleanup criteria; learn new online calculator tools that replace outdated versions used to develop alternative cleanup levels and calculate cumulative risk; additional analysis to determine whether certain regulatory requirements may apply at certain sites; and becoming familiar with two updated guidance documents, mainly as they apply to calculating alternative cleanup levels under Method 3.

**b. Other State Agencies.** There will be no increase costs to the majority of state agencies and their operations. However there will be a slight increase in contracting costs for state agencies that manage state-owned sites and facilities with groundwater contamination where additional years of monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower practical quantitation limits (PQLs) may be required for certain analytes, particularly in groundwater.

**c. Municipalities.** There will be an incremental increase in direct costs for municipalities with contaminated sites and municipally owned landfills. These costs include staff oversight time and contracting costs associated with monitoring and

cleanup, especially where additional years of groundwater monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower PQLs may be required for certain analytes, particularly in groundwater.

8. Cost of implementation to the state agency and available funding (in thousands of dollars):

	Initial Year FY 2016	Subsequent Years
Operating Cost	\$ <u>0</u>	\$ <u>0</u>
Capital Cost	\$ <u>0</u>	\$ <u>0</u>
1002 Federal receipts	\$ <u>0</u>	\$ <u>0</u>
1003 General fund match	\$ <u>0</u>	\$ <u>0</u>
1004 General fund	\$ <u>0</u>	\$ <u>0</u>
1005 General fund/ program	\$ <u>0</u>	\$ <u>0</u>
1037 General fund/mental health	\$ <u>0</u>	\$ <u>0</u>
Other (Response Fund)	\$ <u>0</u>	\$ <u>0</u>

9. The name of the contact person for the regulations:

Name: Sally Schlichting  
 Title: Unit Manager for Technical Services, Policy and Regulations  
 Address: ADEC, Contaminated Sites Program  
410 Willoughby Ave. Suite 303, P.O. Box 111800, Juneau, AK 99811-1800

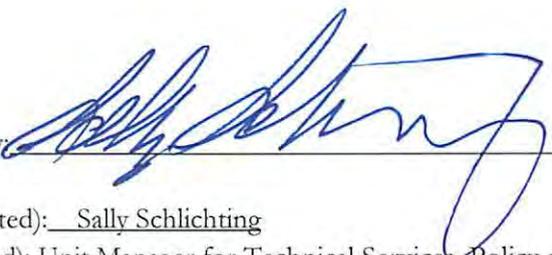
Telephone: (907) 465-5076

E-mail address sally.schlichting@alaska.gov

10. The origin of the proposed action:

- Staff of state agency
- Federal government
- General public
- Petition for regulation change
- Other (identify)

11. Date: May 18, 2016

Prepared by: 

Name (printed): Sally Schlichting  
 Title (printed): Unit Manager for Technical Services, Policy and Regulations  
 Telephone: (907) 465-5076

CLEANUP LEVEL AMENDMENTS  
ADDITIONAL REGULATIONS NOTICE INFORMATION  
(AS 44.62.190(d))

1. Adopting agency: Alaska Department of Environmental Conservation
2. General subject of regulation: Contaminated Site Cleanup Rules
3. Citation of regulation (may be grouped): 18 AAC 75
4. Department of Law file number, if any: JU2015200567
5. Reason for the proposed action:
  - ( ) Compliance with federal law or action (identify):
  - ( ) Compliance with new or changed state statute
  - ( ) Compliance with Federal or state court decision (identify)
  - (X) Development of program standards
  - ( ) Other (identify):
6. Appropriation/Allocation: The proposed regulation amendments are not expected to require an increased appropriation.
7. Estimated costs in the aggregate to comply with the proposed action to:

**a. Private Persons. This group encompasses the general public, homeowners, and private businesses.**

General Public: There are no increased costs to private persons or businesses who are not involved in contaminated sites. There may be reduced or avoided costs as a result of safer levels in soil and groundwater, especially for the most sensitive receptors – children – and reduced risk for cancer and non-cancer illnesses.

Homeowners are unlikely to incur additional costs, as the majority of residential cleanups relate to total petroleum contamination and the cleanup levels for petroleum hydrocarbons are not changing. However, some additional costs associated with lowered cleanup levels for petroleum constituents such as benzene may prolong some cleanups where these compounds have contaminated groundwater at the site.

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Environmental consulting firms will experience short-term incremental learning costs (cost of familiarizing with regulation/compliance planning) which they may pass on to clients. These learning costs include a modest amount of time to understand new cleanup criteria; learn new online calculator tools that replace outdated versions used to develop alternative cleanup levels and calculate cumulative risk; additional analysis to determine whether certain regulatory requirements may apply at certain sites; and becoming familiar with two updated guidance documents, mainly as they apply to calculating alternative cleanup levels under Method 3.

**b. Other State Agencies.** There will be no increase costs to the majority of state agencies and their operations. However there will be a slight increase in contracting costs for state agencies that manage state-owned sites and facilities with groundwater contamination where additional years of monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower practical quantitation limits (PQLs) may be required for certain analytes, particularly in groundwater.

**c. Municipalities.** There will be an incremental increase in direct costs for municipalities with contaminated sites and municipally owned landfills. These costs include staff oversight time and contracting costs associated with monitoring and cleanup, especially where additional years of groundwater monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower PQLs may be required for certain analytes, particularly in groundwater.

8. Cost of implementation to the state agency and available funding (in thousands of dollars):

	Initial Year FY 2017	Subsequent Years
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Capital Cost	\$ <u>0</u>	\$ <u>0</u>
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1003 General fund match	\$ <u>0</u>	\$ <u>0</u>
1004 General fund	\$ <u>0</u>	\$ <u>0</u>
1005 General fund/ program	\$ <u>0</u>	\$ <u>0</u>
1037 General fund/mental health	\$ <u>0</u>	\$ <u>0</u>
Other (Response Fund)	\$ <u>0</u>	\$ <u>0</u>

9. The name of the contact person for the regulations:

Name: Sally Schlichting

Title: Unit Manager for Technical Services, Policy and Regulations

Address: ADEC, Contaminated Sites Program

410 Willoughby Ave. Suite 303, P.O. Box 111800, Juneau, AK 99811-1800

Telephone: (907) 465-5076

E-mail address sally.schlichting@alaska.gov

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- Staff of state agency
- Federal government
- General public
- Petition for regulation change
- Other (identify)

11. Date: May 18, 2016

Prepared by: 

Name (printed): Sally Schlichting

Title (printed): Unit Manager for Technical Services, Policy and Regulations

Telephone: (907) 465-5076

270239  
#1386517  
\$752.00

# AFFIDAVIT OF PUBLICATION

STATE OF ALASKA  
THIRD JUDICIAL DISTRICT

Kayla Lavea  
being first duly sworn on oath  
deposes and says that he is  
a representative of the  
Alaska Dispatch News, a  
daily newspaper. That said  
newspaper has been approved  
by the Third Judicial Court,  
Anchorage, Alaska, and it now  
and has been published in the  
English language continually as a  
daily newspaper in Anchorage,  
Alaska, and it is now and during  
all said time was printed in an  
office maintained at the aforesaid  
place of publication of said  
newspaper. That the annexed is  
a copy of an advertisement as it  
was published in regular issues  
(and not in supplemental form)  
of said newspaper on

May 19, 2016

and that such newspaper was  
regularly distributed to its  
subscribers during all of said  
period. That the full amount of  
the fee charged for the foregoing  
publication is not in excess of  
the rate charged private individuals.

Signed *Kayla Lavea*

Subscribed and sworn to before

me this 15 day of June

2016  
*Bretney Thompson*

Notary Public in and for  
The State of Alaska  
Third Division  
Anchorage, Alaska  
MY COMMISSION EXPIRES

2/23/2019  
Bretney Thompson  
Notary Public  
State of Alaska  
My Commission Expires Feb 23, 2019

## CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's Procedures for Calculating Cumulative Risk and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology; update the department's Procedures for Calculating Cleanup Levels and adopt it by reference; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis; modify the requirement for how cleanup levels protecting human exposure are met at a site.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's Risk Assessment Procedures Manual; allow the department to set a more stringent cleanup level if necessary by considering other factors; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide protections, including such measures as an alternative source of drinking water or implement other institutional controls under 18 AAC 75.375; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method.
- (5) Amend 18 AAC 75.990 to provide definitions for "mutagen;" "mutagenic;" and "sensitive subpopulation."
- (6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>. All comments must be received by 5:00 p.m. on June 23, 2016. Comments received after this date will not be considered in final action on these rules.

This is the second public comment period for these proposed changes. The first public comment period occurred from August 26, 2015 through December 11, 2015. This public comment period provides the public with the opportunity to review the changes made to the proposed amendments based on comments received during the last public comment period.

A public workshop will be held at the following location and date:

**Anchorage: Wednesday, June 8, 2016 from 2:30 p.m. to 4:30 p.m. at the BP Energy Center, 900 E. Benson Boulevard.**

Any discussions at the public workshop will not be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov).

**Restaurant**  
1475

**Yogurtland**  
CINNABON

**Red Stevens Anchorage Intl Airport**  
If you're self motivated and enjoy working with people, we are looking for a Server/Cashier PT/FT with opportunities to advance within. No experience necessary. Apply in person or email resume to: [ak101@yogurtland.com](mailto:ak101@yogurtland.com)

**We Buy Some**  
Unwanted/Repairable Vehicles  
Car Killer Recycling  
(907)522-0288 or (907)522-1456

**Autos/Classic & Specialty**  
8300

**T-4 Well Drilling Inc**

**MATANUSKA-SI REQUEST FOR FURNISH & INSTALL**

The Matanuska-Susitna Borough is in the bid documents. Installation within the borough.

The North Slope Borough will not be bidder in response to this invitation reserves the right to reject any or a Tuesday May 24, 2016 at 4:00 PM. Oyak at [john.oyak@north-si](mailto:john.oyak@north-si) Bernadette Adams@north-si

Published: May 19, 2016

# STATEMENT OF PURCHASE

STATE OF ALASKA  
DEPARTMENT OF REVENUE  
1000 EAST BROADWAY  
ANCHORAGE, ALASKA 99501  
PHONE: 273-3000  
FAX: 273-3001

DATE: 01/23/2019  
TIME: 10:00 AM  
OFFICE: ANCHORAGE  
AGENT: JAMES W. HARRIS  
ADDRESS: 1000 EAST BROADWAY  
ANCHORAGE, ALASKA 99501  
PHONE: 273-3000  
FAX: 273-3001

Expires Feb 23, 2019  
JAMES W. HARRIS  
ANCHORAGE, ALASKA

**SUPPLEMENTAL PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**BRIEF DESCRIPTION**

The Alaska Department of Environmental Conservation is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's *Procedures for Calculating Cumulative Risk* and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology to conform with the updated soil cleanup level table and how these cleanup levels are calculated and presented; update the department's *Procedures for Calculating Cleanup Levels* and adopt it by reference; require agreement of landowners affected by contamination to create and maintain institutional controls where a cleanup level is less stringent than a level appropriate for unrestricted land use; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis where sensitive subpopulations are present; and housekeeping changes to address new terminology and update or correct cross-referencing and regulatory references.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Repeal and readopt 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by a responsible party or development of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's *Risk Assessment Procedures Manual*; allow the department to set a more stringent cleanup level if necessary by considering factors such as the presence of sensitive subpopulations and primary maximum contaminant levels; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established; require the responsible party to gain concurrence from an affected property owner for the creation and maintenance of institutional controls if proposing not to meet the cleanup levels established at the property boundary; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved

method rather than the department's Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, April 1992.

- (5) Amend 18 AAC 75.990 to provide definitions for "mutagen," "mutagenic," and "sensitive subpopulation."
- (6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

**This is a second SUPPLEMENTAL NOTICE adding to the NOTICE OF PROPOSED CHANGES that was issued on August 26, 2015 and the SUPPLEMENTAL NOTICE that was issued on October 2, 2015, concerning the proposed regulation revisions. This SUPPLEMENTAL NOTICE is being issued to correct technical errors in the proposed amendments and to extend the public comment period. The errors that are corrected are as follows:**

- 1) Amendments to 18 AAC 75.340(e)(1) concerning the adoption by reference of the document, *Procedures for Calculating Cleanup Levels*, are corrected to add the document revision date of July 15, 2015.
- 2) Amendments to 18 AAC 75.340(e)(2) are corrected to preserve existing intent of this paragraph.
- 3) Amendments to 18 AAC 75.345 are presented correctly to show that the entire section is repealed and readopted.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>. **In order to provide additional time for comments the public comment period has been extended. All comments must be received by 5:00 p.m. December 11, 2015.** Comments received after this date will not be considered in final action on these rules.

Public workshops will be held at the following locations and dates:

**Anchorage:** October 14, 2015, from 2:00 p.m. to 4:00 p.m. at the Legislative Information Office building, 1<sup>st</sup> Floor Auditorium, 716 West 4<sup>th</sup> Avenue.

**Fairbanks:** October 27, 2015, from 2:00 p.m. to 4:00 p.m. at the Department of Environmental Conservation, 610 University Avenue, 1<sup>st</sup> Floor Conference Rooms, B and C.

**Teleconference:** November 5, 2015, from 2:00 p.m. to 4:00 p.m. Dial 1-800-315-6338, Access code: 95076#.

Requests can be sent to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). DEC will announce the cancellation of a

public workshop by publishing a public notice, by 5pm nine days prior to the scheduled workshop on this website: [http://dec.alaska.gov/commish/public\\_notices.htm](http://dec.alaska.gov/commish/public_notices.htm).

Any discussions at the public workshops will NOT be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than December 1, 2015 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. **You should comment during the time allowed if your interests could be affected.** Written comments received are public records and are subject to public inspection.

**Statutory Authority:** AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

**Statutes Being Implemented, Interpreted, or Made Specific:**

AS 46.03.020	AS 46.03.822	AS 46.04.070
AS 46.03.050	AS 46.03.900	AS 46.08.140
AS 46.03.710	AS 46.04.020	AS 46.09.010
AS 46.03.740	AS 46.04.030	AS 46.09.020
AS 46.03.745	AS 46.04.035	
AS 46.03.755	AS 46.04.055	

**Fiscal Information:** The proposed regulation changes are not expected to require an increased appropriation.

Dated: October 22, 2015  
Juneau, Alaska

  
Larry Hartig, Commissioner

270239  
0001374415  
\$946.22

# AFFIDAVIT OF P

STATE OF ALASKA  
THIRD JUDICIAL DISTRICT

Emma Dunlap  
being first duly sworn on oath deposes and  
says that he/she is a representative of the  
Alaska Dispatch News, a daily newspaper.  
That said newspaper has been approved  
by the Third Judicial Court, Anchorage,  
Alaska, and it now and has been published  
in the English language continually as a  
daily newspaper in Anchorage, Alaska, and  
it is now and during all said time was  
printed in an office maintained at the  
aforesaid place of publication of said  
newspaper. That the annexed is a copy of  
an advertisement as it was published in  
regular issues (and not in supplemental  
form) of said newspaper on

October 25, 2015

and that such newspaper was regularly  
distributed to its subscribers during all of  
said period. That the full amount of the fee  
charged for the foregoing publication is not  
in excess of the rate charged private  
individuals.

Signed Emma Dunlap

Subscribed and sworn to before me  
this 26th day of October, 2015

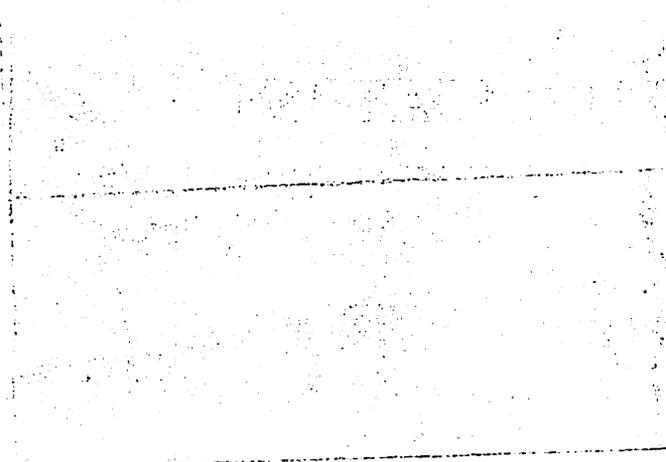
Britney Thompson

Notary Public in and for  
The State of Alaska.  
Third Division  
Anchorage, Alaska  
MY COMMISSION EXPIRES

2/23/2019

Notary Public  
BRITNEY L. THOMPSON  
State of Alaska  
My Commission Expires Feb 23, 2019





STATE OF ALABAMA  
DEPARTMENT OF REVENUE  
MONTGOMERY, ALABAMA  
SEP 23 2019

RECEIVED

NOV 02 2015

# Affidavit of Publication

DEC  
Division of Water Quality  
Wastewater Discharge Program

United States of America

State of Alaska

First Division

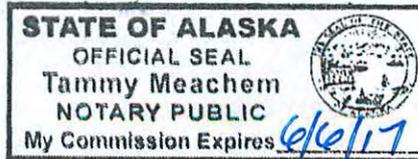
Alaska Dept. of Environmental Conservation

Ad#: 31900

I, Stephanie West, first duly sworn, oath, depose, and say that I am the Principle Clerk of the Juneau Empire, a newspaper of general circulation, published in the city of Juneau, State of Alaska; that the publication was published in said newspaper and on juneauempire.com, the online edition, on the 25th day of October 2015 and thereafter for 0 additional day(s), the last date of publication being October 25, 2015.

*Stephanie West*  
.....  
Subscribed and sworn to before me this day of October 27, 2015.

*[Signature]*  
.....  
Notary Public in and for the State of Alaska.



**SUPPLEMENTAL PUBLIC NOTICE**  
**CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES**  
**IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

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2) Amendments to 18 AAC 75.340(e)(2) are corrected to preserve existing intent of this paragraph.

3) Amendments to 18 AAC 75.345 are presented correctly to show that the entire section is repealed and readopted.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska

AFFP  
Contaminate Sites

## Affidavit of Publication

UNITED STATES OF AMERICA  
STATE OF ALASKA  
FOURTH DISTRICT } SS.

31704

SUPPLEMENTAL PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF  
PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

Before me, the undersigned, a notary public, this day personally appeared Magdalena Ibarra, who, being first duly sworn, according to law, says that he/she is an Advertising Clerk of the Fairbanks Daily News-Miner, a newspaper (i) published in newspaper format, (ii) distributed daily more than 50 weeks per year, (iii) with a total circulation of more than 500 and more than 10% of the population of the Fourth Judicial District, (iv) holding a second class mailing permit from the United States Postal Service, (v) not published primarily to distribute advertising, and (vi) not intended for a particular professional or occupational group. The advertisement which is attached is a true copy of the advertisement published in said paper on the following day(s):

### BRIEF DESCRIPTION

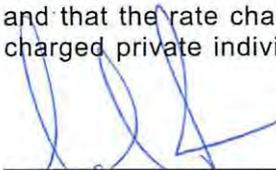
The Alaska Department of Environmental Conservation is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

October 25, 2015

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

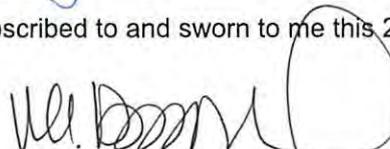
and that the rate charged thereon is not excess of the rate charged private individuals, with the usual discounts.

(1) Amend 18 AAC 75.325 to update the department's Procedures for Calculating Cumulative Risk and adopt it by reference.

  
\_\_\_\_\_  
Advertising Clerk

(2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology to conform with the updated soil cleanup level table and how these cleanup levels are calculated and presented; update the department's Procedures for Calculating Cleanup Levels and adopt it by reference; require agreement of landowners affected by contamination to create and maintain institutional controls where a cleanup level is less stringent than a level appropriate for unrestricted land use; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis where sensitive subpopulations are present; and housekeeping changes to address new terminology and update or correct cross-referencing and regulatory references.

Subscribed to and sworn to me this 25th day of October 2015.

  
\_\_\_\_\_  
Marena Burnell, Notary Public in and for the State Alaska.

My commission expires: December 07, 2017

00002863 00031704

ST OF AKDEC-CONTANIMATED SITES PROG  
555 CORDOVA ST 5TH FLR  
ANCHORAGE, AK 99501

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_

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NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20

(3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.

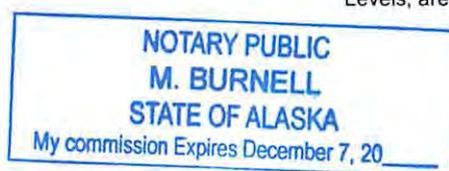
(4) Repeal and readopt 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by a responsible party or development of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's Risk Assessment Procedures Manual; allow the department to set a more stringent cleanup level if necessary by considering factors such as the presence of sensitive subpopulations and primary maximum contaminant levels; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established; require the responsible party to gain concurrence from an affected property owner for the creation and maintenance of institutional controls if proposing not to meet the cleanup levels established at the property boundary; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method rather than the department's Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, April 1992.

(5) Amend 18 AAC 75.990 to provide definitions for "mutagen," "mutagenic," and "sensitive subpopulation."

(6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

This is a second SUPPLEMENTAL NOTICE adding to the NOTICE OF PROPOSED CHANGES that was issued on August 26, 2015 and the SUPPLEMENTAL NOTICE that was issued on October 2, 2015, concerning the proposed regulation revisions. This SUPPLEMENTAL NOTICE is being issued to correct technical errors in the proposed amendments and to extend the public comment period. The errors that are corrected are as follows:

1) Amendments to 18 AAC 75.340(e)(1) concerning the adoption by reference of the document, Procedures for Calculating Cleanup Levels, are corrected to add the document revision



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NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My Commission Expires December 7, 20\_\_\_\_

date of July 15, 2015.

2) Amendments to 18 AAC 75.340(e)(2) are corrected to preserve existing intent of this paragraph.

3) Amendments to 18 AAC 75.345 are presented correctly to show that the entire section is repealed and readopted.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>.

In order to provide additional time for comments the public comment period has been extended. All comments must be received by 5:00 p.m. December 11, 2015. Comments received after this date will not be considered in final action on these rules.

Public workshops will be held at the following locations and dates:

Anchorage: October 14, 2015, from 2:00 p.m. to 4:00 p.m. at the Legislative Information Office building, 1st Floor Auditorium, 716 West 4th Avenue.

Fairbanks: October 27, 2015, from 2:00 p.m. to 4:00 p.m. at the Department of Environmental Conservation, 610 University Avenue, 1st Floor Conference Rooms, B and C.

Teleconference: November 5, 2015, from 2:00 p.m. to 4:00 p.m. Dial 1-800-315-6338, Access code: 95076#.

Requests can be sent to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). DEC will announce the cancellation of a public workshop by publishing a public notice, by 5pm nine days prior to the scheduled workshop on this website: [http://dec.alaska.gov/commish/public\\_notices.htm](http://dec.alaska.gov/commish/public_notices.htm).

Any discussions at the public workshops will NOT be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303,

questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than December 1, 2015 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. You should comment during the time allowed if your interests could be affected. Written comments received are public records and are subject to public inspection.

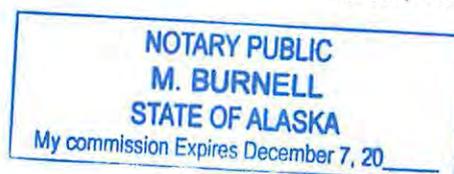
Statutory Authority: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

Statutes Being Implemented, Interpreted, or Made Specific:

AS 46.03.020 AS 46.03.050  
AS 46.03.710 AS 46.03.740  
AS 46.03.745 AS 46.03.755  
AS 46.03.822 AS 46.03.900  
AS 46.04.020 AS 46.04.030  
AS 46.04.035 AS 46.04.055  
AS 46.04.070 AS 46.08.140  
AS 46.09.010 AS 46.09.020

Fiscal Information: The proposed regulation changes are not expected to require an increased appropriation.

Dated: October 23, 2015 /s/  
Juneau, Alaska Larry Hartig, Commissioner



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NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My Commission Expires December 7, 20

Publish: Oct 25, 2015

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 3, 20\_\_\_\_

SUPPLEMENTAL PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

- (1) Amend 18 AAC 75.325 to update the department's *Procedures for Calculating Cumulative Risk* and adopt it by reference.
- (2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology to conform with the updated soil cleanup level table and how these cleanup levels are calculated and presented; update the department's *Procedures for Calculating Cleanup Levels* and adopt it by reference; require agreement of landowners affected by contamination to create and maintain institutional controls where a cleanup level is less stringent than a level appropriate for unrestricted land use; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis where sensitive subpopulations are present; and housekeeping changes to address new terminology and update or correct cross-referencing and regulatory references.
- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by a responsible party or development of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's *Risk Assessment Procedures Manual*; allow the department to set a more stringent cleanup level if necessary by considering factors such as the presence of sensitive subpopulations and primary maximum contaminant levels; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established; require the responsible party to gain concurrence from an affected property owner for the creation and maintenance of institutional controls if proposing not to meet the cleanup levels established at the property boundary; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method rather than the department's Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, April 1992.

(5) Amend 18 AAC 75.990 to provide definitions for “mutagen;” “mutagenic;” and “sensitive subpopulation.”

(6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

This is a SUPPLEMENTAL NOTICE adding to the NOTICE OF PROPOSED CHANGES that was issued on August 26, 2015, concerning the proposed regulation revisions. This SUPPLEMENTAL NOTICE is being issued because the Department of Environmental Conservation has changed the location for the Anchorage public workshop on the proposed regulations on October 14, 2015 from 2:00 p.m. to 4:00 pm. The workshop will be held at the Legislative Information Office building, 1<sup>st</sup> Floor Auditorium, 716 West 4<sup>th</sup> Avenue.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska’s online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>. **All comments must be received by 5:00 p.m. on November 25, 2015.** Comments received after this date will not be considered in final action on these rules.

Public workshops will be held at the following locations and dates:

**Anchorage:** October 14, 2015, from 2:00 p.m. to 4:00 p.m. at the Legislative Information Office building, 1<sup>st</sup> Floor Auditorium, 716 West 4<sup>th</sup> Avenue.

**Fairbanks:** October 27, 2015, from 2:00 p.m. to 4:00 p.m. at the Department of Environmental Conservation, 610 University Avenue, 1<sup>st</sup> Floor Conference Rooms, B and C.

**Teleconference:** November 5, 2015, from 2:00 p.m. to 4:00 p.m. Dial 1-800-315-6338, Access code: 95076#.

Requests can be sent to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). DEC will announce the cancellation of a public workshop by publishing a public notice, by 5pm nine days prior to the scheduled workshop on this website: [http://dec.alaska.gov/commish/public\\_notices.htm](http://dec.alaska.gov/commish/public_notices.htm).

Any discussions at the public workshops will NOT be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than November 25, 2015 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. **You should comment during the time allowed if your interests could be affected.** Written comments received are public records and are subject to public inspection.

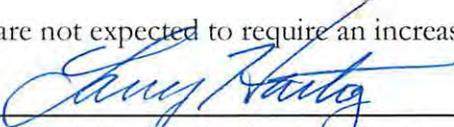
**Statutory Authority:** AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

**Statutes Being Implemented, Interpreted, or Made Specific:**

AS 46.03.020	AS 46.03.900	AS 46.04.070
AS 46.03.050	AS 46.03.822	AS 46.08.140
AS 46.03.710	AS 46.04.020	AS 46.09.010
AS 46.03.740	AS 46.04.030	AS 46.09.020
AS 46.03.745	AS 46.04.035	
AS 46.03.755	AS 46.04.055	

**Fiscal Information:** The proposed regulation changes are not expected to require an increased appropriation.

Dated: October 2, 2015  
Juneau, Alaska

  
Larry Hartig, Commissioner

270239  
0001373243  
\$946.22

# AFFIDAVIT O

STATE OF ALASKA  
THIRD JUDICIAL DISTRICT

EMMA DUNLAP

being first duly sworn on oath deposes and says that he/she is a representative of the Alaska Dispatch News, a daily newspaper. That said newspaper has been approved by the Third Judicial Court, Anchorage, Alaska, and it now and has been published in the English language continually as a daily newspaper in Anchorage, Alaska, and it is now and during all said time was printed in an office maintained at the aforesaid place of publication of said newspaper. That the annexed is a copy of an advertisement as it was published in regular issues (and not in supplemental form) of said newspaper on

October 04, 2015

and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is not in excess of the rate charged private individuals.

Signed *Emma Dunlap*

Subscribed and sworn to before me  
this 5th day of October, 2015

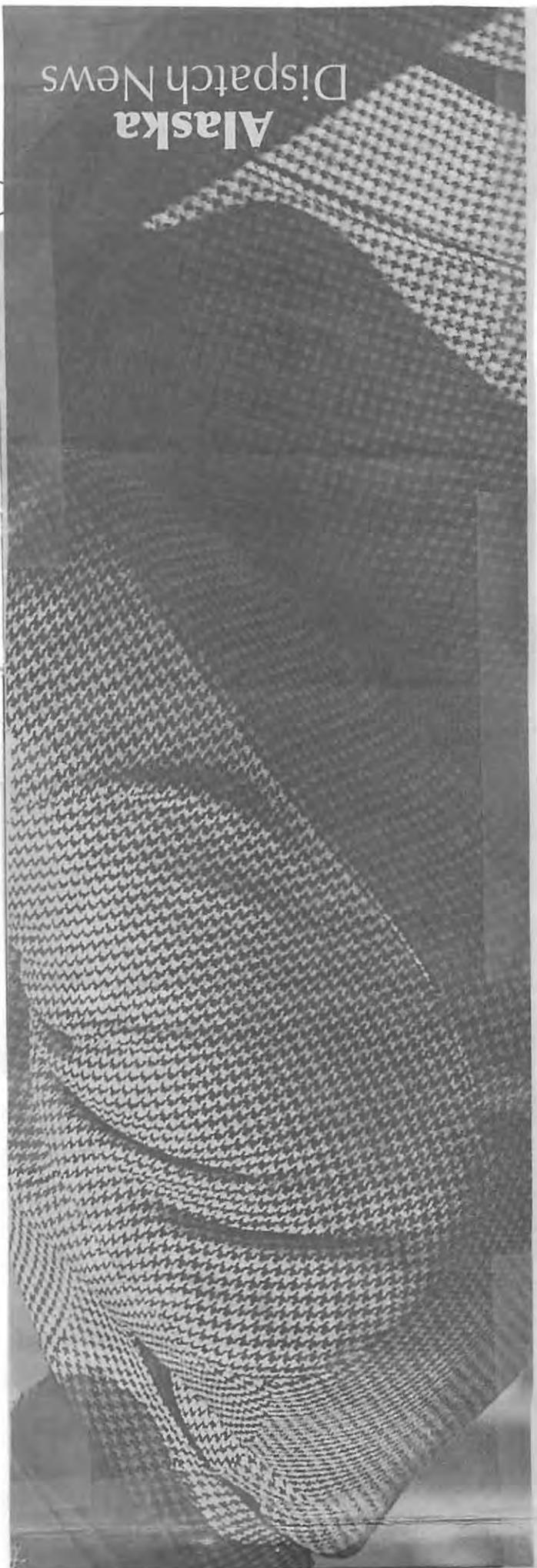
*Britney Thompson*

Notary Public in and for  
The State of Alaska.  
Third Division  
Anchorage, Alaska

MY COMMISSION EXPIRES

*2/23/2019*

Notary Public  
BRITNEY L. THOMPSON  
State of Alaska  
My Commission Expires Feb 23, 2019



My Commission Expires Feb 23, 2016  
THOMAS L. THOMPSON  
State of Alaska  
NOT RECORDED

PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

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- (3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.
- (4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by a responsible party or development of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's *Risk Assessment Procedures Manual*; allow the department to set a more stringent cleanup level if necessary by considering factors such as the presence of sensitive subpopulations and primary maximum contaminant levels; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established; require the responsible party to gain concurrence from an affected property owner for the creation and maintenance of institutional controls if proposing not to meet the cleanup levels established at the property boundary; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method rather than the department's Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, April 1992.

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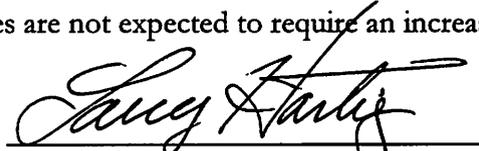
**Statutory Authority:** AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

**Statutes Being Implemented, Interpreted, or Made Specific:**

AS 46.03.020	AS 46.03.900	AS 46.04.070
AS 46.03.050	AS 46.03.822	AS 46.08.140
AS 46.03.710	AS 46.04.020	AS 46.09.010
AS 46.03.740	AS 46.04.030	AS 46.09.020
AS 46.03.745	AS 46.04.035	
AS 46.03.755	AS 46.04.055	

**Fiscal Information:** The proposed regulation changes are not expected to require an increased appropriation.

Dated: August 25, 2015  
Juneau, Alaska

  
Larry Hartig, Commissioner

CLEANUP LEVEL AMENDMENTS  
ADDITIONAL REGULATIONS NOTICE INFORMATION  
(AS 44.62.190(d))

1. Adopting agency: Alaska Department of Environmental Conservation
2. General subject of regulation: Contaminated Site Cleanup Rules
3. Citation of regulation (may be grouped): 18 AAC 75
4. Department of Law file number, if any: JU2015200567
5. Reason for the proposed action:
  - ( ) Compliance with federal law or action (identify):
  - ( ) Compliance with new or changed state statute
  - ( ) Compliance with Federal or state court decision (identify)
  - (X) Development of program standards
  - ( ) Other (identify):
6. Appropriation/Allocation: The proposed regulation amendments are not expected to require an increased appropriation.
7. Estimated costs in the aggregate to comply with the proposed action to:

**a. Private Persons. This group encompasses the general public, homeowners, and private businesses.**

General Public: There are no increased costs to private persons or businesses who are not involved in contaminated sites. There may be reduced or avoided costs as a result of safer levels in soil and groundwater, especially for the most sensitive receptors – children – and reduced risk for cancer and non-cancer illnesses.

Homeowners are unlikely to incur additional costs, as the majority of residential cleanups relate to petroleum contamination and the cleanup levels for petroleum hydrocarbons are not changing.

Private Businesses with contaminated site issues: Private businesses with contaminated groundwater are more likely to face additional costs than sites only with contaminated soil, as a greater number of cleanup levels for groundwater are becoming more stringent. These costs may materialize as increased expenses to operate treatment systems for a longer period of time; conduct additional groundwater monitoring; and to achieve lower detection limits (PQLs).

Environmental consulting firms will experience short-term incremental learning costs (cost of familiarizing with regulation/compliance planning) which they may pass on to clients. These learning costs include a modest amount of time to understand new cleanup criteria; learn new online calculator tools that replace outdated versions used to develop alternative cleanup levels and calculate cumulative risk; additional analysis to determine whether certain regulatory requirements may apply at certain sites, such as how expanded language requiring agreement from impacted property owners to maintain institutional controls may apply on a site specific basis; and becoming familiar with two updated guidance documents, mainly as they apply to calculating alternative cleanup levels under Method 3.

**b. Other State Agencies.** There will be no increase costs to the majority of state agencies and their operations. However there will be a slight increase in contracting costs for state agencies that manage state-owned sites and facilities with groundwater contamination where additional years of monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower PQLs may be required for certain analytes, particularly in groundwater.

**c. Municipalities.** There will be an incremental increase in direct costs for municipalities with contaminated sites and municipally owned landfills. These costs include staff oversight time and contracting costs associated with monitoring and cleanup, especially where additional years of groundwater monitoring may be required due to more stringent cleanup levels. In addition, increased costs to achieve lower PQLs may be required for certain analytes, particularly in groundwater.

8. Cost of implementation to the state agency and available funding (in thousands of dollars):

	Initial Year	Subsequent
	FY 2016	Years
Operating Cost	\$ 0	\$ 0
Capital Cost	\$ 0	\$ 0
1002 Federal receipts	\$ 0	\$ 0
1003 General fund match	\$ 0	\$ 0
1004 General fund	\$ 0	\$ 0
1005 General fund/ program	\$ 0	\$ 0
1037 General fund/mental health	\$ 0	\$ 0
Other (Response Fund)	\$ 0	\$ 0

9. The name of the contact person for the regulations:

Name: Sally Schlichting

Title: Unit Manager for Technical Services, Policy and Regulations

Address: ADEC, Contaminated Sites Program

410 Willoughby Ave. Suite 303, P.O. Box 111800, Juneau, AK 99811-1800

Telephone: (907) 465-5076

E-mail address sally.schlichting@alaska.gov

10. The origin of the proposed action:

Staff of state agency

Federal government

General public

Petition for regulation change

Other (identify)

11. Date: August 26, 2015

Prepared by: 

Name (printed): Sally Schlichting

Title (printed): Unit Manager for Technical Services, Policy and Regulations

Telephone: (907) 465-5076

MNT	5	In Search (TVG)	Truth in Love (TVG)	M. ina Fest	Empower You	Soldot Chrch
PBS	7	Sesame Street	Dinosaur Train (TVY)	WordGirl (TVY7)	Peg Plus Cat (TVY)	Cat in
CBS	11	Face the Nation (N)	Frontiers	World's Strongest Man 2015 (N) (cc)		GA Tr
ABC	13	Jerry Prevo		The Wildlife Docs	Outback Adv	World
LIFE	23	J. Osteen	Sub-D	Terra	Terra	Terra
USA	28	Playing House	I Now Pronounce You Chuck and Larry (8:31) ('07) Kevin James. Comedy.			
TBS	30	Friends	Friends	MLB Baseball: Boston Red Sox at		
TNT	31	The Lord of the Rings: The Two Towers ('02) *** Elijah Wood. F				
FX	32	How I Met	How I Met	Battle: Los Angeles ('11) ** Aaron		
ESPN	34	SportsCenter (N) (cc)	Webgems	Rookie	Heins	
ESP2	35	NHRA Drag Racing	Tennis	Sport		
SPIKE	38	Off Road	Engine	Truck	Muscle	Bar R
AMC	43	Tombstone (7:00) ('93) *** Kurt Russell, Val Kilmer. Western. (cc)				
TCM	44	One Sunday Afternoon ('33) ** Gary Co	Meet John Doe ('41) wyck. Drama. (cc)			
ANI	47	To Be Announced				
DISN	49	Mulan ('98) *** Musical. (cc)	K.C.			Austi
NGC	54	Wicked Tuna	Wicked Tuna			Port
DISC	56	I Escaped Jaws 2 (cc)	Sharkageddon (TVPG)			Air Je
TRAV	57	Mysteries-Museum	Mysteries-Museum			My.-
HIST	58	Titanic's Tragic Sister (TVPG)	Titanic's Achilles Heel: Possibility (cc)			
ABE	59	Dog the Bounty Hunter	Dog the Bounty Hunter			Beyo
HGTV	60	Love It or List It, Too	Love It or List It, Too			Love
FOOD	61	Pioneer	Trisha's	Barbecue	Valerie's	In Ita
MSN	66	Weekends With Alex Witt (N)				Meet
FNC	67	News HQ	Housecall	America's News HQ		Fox h
CNN	68	State of the Union	Fareed Zakaria GPS			CNN
SYFY	82	Vikings (7:30) ('13) Dominic Purcell.				Sin C

August 30, 2015 | SUNDAY PRIMETIME

		4 PM	4:30	5 PM	5:30	6
NBC	2	NFL Preseason Football: Arizona Cardinals at Oakland Raiders. in Oakland, Calif. (N) (Live) (cc)				
FOX	4	TMZ (N) (TVPG) (cc)		Paid Program	Paid Program	Bob's
MNT	5	Everybody Raymond	Everybody Raymond	Family Feud (cc)	Name Game	How I Mothe
PBS	7	Lucky Chow (cc)	Test Kitchen	NewsHour Wk	Alaska Weather	To the trary
CBS	11	Game Chang-ers	Modern Family	KTVA 5 pm	CBS Evening News (N)	60 Mir
ABC	13	American Athlete	Native Voices	Paid Program	World News	Americ Videos
LIFE	23	The Good Mistress (TV14, '14) Annie Heise.				
USA	28	Law & Order: Special Victims Unit (TV14)		Law & Order: Special Victims Unit: Gray.		Law & Unit: P
TBS	30	Married	Meet the Browns (4:45) ('08) ** Tyler Perry. (DV)			
TNT	31	Lord Rings	The Hobbit: An Unexpected Journey ('12) ** Ian M			
FX	32	White House Down (3:00) ('13) ** Action.				Battle
ESPN	34	MLB Baseball: Chicago Cubs at Los Angeles Dodgers. (N) (Live)				

PUBLIC NOTICE  
 CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
 IN THE REGULATIONS OF ALASKA DEPARTMENT OF  
 ENVIRONMENTAL CONSERVATION

AFFIDAVIT OF PUBLICATION

270239  
 0001370867  
 \$781.88

Notary Public  
 BRITNEY L. THOMPSON  
 State of Alaska  
 My Commission Expires Feb 23, 2019

Subscribed and sworn to before me  
 this 31st day of August, 2015  
 Britney Thompson

Signed  
 Emma Dunlap

and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is not in excess of the rate charged private individuals.

August 30, 2015  
 form) of said newspaper on regular issues (and not in supplemental an advertisement as it was published in newspaper. That the annexed is a copy of aforesaid place of publication of said printed in an office maintained at the it is now and during all said time was daily newspaper in Anchorage, Alaska, and in the English language continually as a by the Third Judicial Court, Anchorage. That said newspaper has been approved. Alaska Dispatch News, a daily newspaper. says that he/she is a representative of the being first duly sworn on oath deposes and Emma Dunlap

STATE OF ALASKA  
 THIRD JUDICIAL DISTRICT

Faint, illegible text, possibly bleed-through from the reverse side of the page.

Notary Public  
BRETT L. THOMPSON  
State of Alaska  
My Commission Expires Feb 28, 2019

# Affidavit of Publication

United States of America  
Dept. of Environmental Conservation

Ad #: 7000025227  
AO#: 52202116

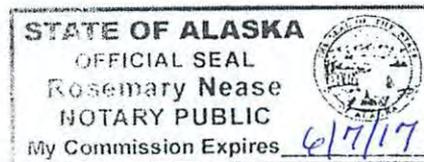
I, Stephanie West, first duly sworn, oath, depose, and say that I am the Principle Clerk of the JUNEAU EMPIRE, a newspaper of general circulation, published in the city of Juneau, State of Alaska; that the publication was published in said newspaper and on [www.juneauempire.com](http://www.juneauempire.com), the online edition, on the 30th day of August 2015 and thereafter for 0 additional day(s), the last date of publication being August 30th, 2015.

*Stephanie West*  
.....

Subscribed and sworn to before me this 16th day of November 2015.

*Rosemary Nease*  
.....

Notary Public in and for the State of Alaska.



PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (DEC) is proposing to update cleanup levels for soil and groundwater and how they are calculated for contaminated sites.

The Alaska Department of Environmental Conservation proposes to adopt regulation changes in Title 18, Chapter 75 of the Alaska Administrative Code, updating cleanup levels for soil and groundwater, as well as amending accompanying language for how such levels are calculated on a site-specific basis and in cases where a compound is not listed in the tables. The proposed changes include the following:

(1) Amend 18 AAC 75.325 to update the department's Procedures for Calculating Cumulative Risk and adopt it by reference.

(2) Amend 18 AAC 75.340 to clarify how reasonable maximum exposure is estimated for developing cleanup levels; provide instruction concerning site-specific cleanup levels; allow the department to set site-specific alternative cleanup levels for compounds listed in Tables B1 or B2; update exposure pathway terminology to conform with the updated soil cleanup level table and how these cleanup levels are calculated and presented; update the department's Procedures for Calculating Cleanup Levels and adopt it by reference; require agreement of landowners affected by contamination to create and maintain institutional controls where a cleanup level is less stringent than a level appropriate for unrestricted land use; allow the department to develop site-specific cleanup levels for hazardous substances not listed in the tables; remove the requirement for site-specific analysis where fugitive dust is present and add a requirement for site-specific analysis where sensitive subpopulations are present; and housekeeping changes to address new terminology and update or correct cross-referencing and regulatory references.

(3) Amend 18 AAC 75.341 to specify that method one applies to petroleum hydrocarbons and update cleanup levels and notes for method two in Table B1.

(4) Amend 18 AAC 75.345 to update cleanup levels and notes for groundwater in Table C; allow proposal of a site-specific cleanup level by a responsible party or development of a site-specific cleanup level by the department for a compound not listed in regulation, using the procedures in the department's Risk Assessment Procedures Manual; allow the department to set a more stringent cleanup level if necessary by considering factors such as the presence of sensitive subpopulations and primary maximum contaminant levels; specify that where the department determines that toxicity data is insufficient to establish a cleanup level for a hazardous substance or a pollutant, the department may require a responsible person to provide an alternative source of drinking water for the affected parties or implement other institutional controls under 18 AAC 75.375 until a cleanup level is established; require the responsible party to gain concurrence from an affected property owner for the creation and maintenance of institutional controls if proposing not to meet the cleanup levels established at the property boundary; and allow groundwater monitoring wells to be installed, developed, and decommissioned in accordance with an approved method rather than the department's Recommended Practices for Monitoring Well Design, Installation, and Decommissioning, April 1992.

(5) Amend 18 AAC 75.990 to provide definitions for "mutagen," "mutagenic," and "sensitive subpopulation."

(6) Housekeeping edits throughout the chapters to reflect the above changes, revise and clarify wording, correct typographical errors, clarify information in tables, and correct and update referenced regulations and updated documents.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, P.O. Box 111800, Juneau, AK 99811-1800, by facsimile at: (907) 465-5218, or by e-mail to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). Alternatively, you may submit your comments through the State of Alaska's online public notice website at: <http://aws.state.ak.us/OnlinePublicNotices/Default.aspx>.

All comments must be received by 5:00 p.m. on November 25, 2015. Comments received after this date will not be considered in final action on these rules.

AFFP

AO-52-2019-16

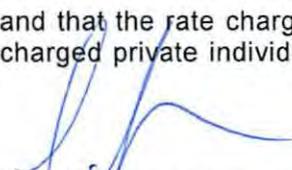
# Affidavit of Publication

UNITED STATES OF AMERICA }  
STATE OF ALASKA } SS.  
FOURTH DISTRICT }

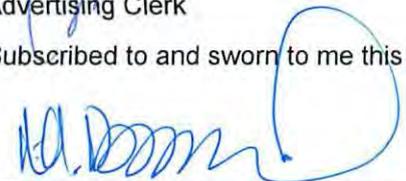
Before me, the undersigned, a notary public, this day personally appeared Magdalena Ibarra, who, being first duly sworn, according to law, says that he/she is an Advertising Clerk of the Fairbanks Daily News-Miner, a newspaper (i) published in newspaper format, (ii) distributed daily more than 50 weeks per year, (iii) with a total circulation of more than 500 and more than 10% of the population of the Fourth Judicial District, (iv) holding a second class mailing permit from the United States Postal Service, (v) not published primarily to distribute advertising, and (vi) not intended for a particular professional or occupational group. The advertisement which is attached is a true copy of the advertisement published in said paper on the following day(s):

August 30, 2015

and that the rate charged thereon is not excess of the rate charged private individuals, with the usual discounts.

  
\_\_\_\_\_  
Advertising Clerk

Subscribed to and sworn to me this 30th day of August 2015.

  
\_\_\_\_\_  
Marena Burnell, Notary Public in and for the State Alaska.

My commission expires: December 07, 2017

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LG ADV ACCT  
ST OF AK DEC/DIV ENV HEALTH  
555 CORDOVA STREET  
5TH FLOOR

30391

PUBLIC NOTICE  
CONTAMINATED SITES: NOTICE OF  
PROPOSED CHANGES  
IN THE REGULATIONS OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION

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NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_

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All comments must be received by 5:00 p.m. on November 25, 2015. Comments received after this date will not be considered in final action on these

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_

Public workshops will be held at the following locations and dates:

Anchorage: October 14, 2015, from 2:00 p.m. to 4:00 p.m. at the Department of Environmental Conservation, 555 Cordova Street, 1st Floor Conference Room.

Fairbanks: October 27, 2015, from 2:00 p.m. to 4:00 p.m. at the Department of Environmental Conservation, 610 University Avenue, 1st Floor Conference Rooms, B and C.

Teleconference: November 5, 2015, from 2:00 p.m. to 4:00 p.m. Dial 1-800-315-6338, Access code: 95076#.

Requests can be sent to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov). DEC will announce the cancellation of a public workshop by publishing a public notice, by 5pm nine days prior to the scheduled workshop on this website: [http://dec.alaska.gov/commish/public\\_notices.htm](http://dec.alaska.gov/commish/public_notices.htm).

Any discussions at the public workshops will NOT be considered as public comments for purposes of changing the proposed regulations. You may submit written questions relevant to the proposed action to Sally Schlichting by email to [sally.schlichting@alaska.gov](mailto:sally.schlichting@alaska.gov) or by mail to Sally Schlichting, Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 303, P.O. Box 111800, Juneau, AK 99811-1800. The questions must be received at least 10 days before the end of the public comment period. The Department of Environmental Conservation will aggregate its response to substantially similar questions and make the questions and responses available on [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm). The Department of Environmental Conservation may, but is not required to, answer written questions received after the 10-day cut-off date and before the end of the comment period.

If you are a person with a disability who needs a special accommodation in order to participate in this process, please contact Natalie Wolfe at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 no later than November 25, 2015 to ensure that any necessary accommodations can be provided.

A copy of the proposed regulation changes and material proposed for adoption by reference is available on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/> or at [http://dec.alaska.gov/spar/csp/reg\\_rev.htm](http://dec.alaska.gov/spar/csp/reg_rev.htm) and by contacting Sally Schlichting at the address or email above or by phone at (907) 465-5076.

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_

After the public comment period ends, the Department of Environmental Conservation will either adopt the proposed regulation changes or other provisions dealing with the same subject, without further notice, or decide to take no action. The language of the final regulations may be different from that of the proposed regulations. You should comment during the time allowed if your interests could be affected. Written comments received are public records and are subject to public inspection.

Statutory Authority: AS 46.03.010, AS 46.03.020, AS 46.03.050, AS 46.03.070, AS 46.03.710

Statutes Being Implemented, Interpreted, or Made Specific:

AS 46.03.020	AS 46.04.020
AS 46.03.050	AS 46.04.030
AS 46.03.710	AS 46.04.035
AS 46.03.740	AS 46.04.055
AS 46.03.745	AS 46.04.070
AS 46.03.755	AS 46.08.140
AS 46.03.900	AS 46.09.010
AS 46.03.822	AS 46.09.020

Fiscal Information: The proposed regulation changes are not expected to require an increased appropriation.

Dated: August 26, 2015 Larry Hartig,  
Commissioner  
Juneau, Alaska

Publish: August 30, 2015 AO-52-2019-16

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA  
My commission Expires December 7, 20\_\_\_\_