

DEPARTMENT OF ENVIRONMENTAL CONSERVATION



18 AAC 75

Oil and Other Hazardous Substances Pollution Control

Public Comment Draft

September 25, 2014

**Comment Period Ends
November 26, 5:00 p.m.**

**Sean Parnell
Governor**

**Larry Hartig
Commissioner**

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

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

...

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

(h) If proposing an alternative cleanup level for soil or groundwater, based on a site-specific risk assessment under method four in 18 AAC 75.340(f) or under the provisions of 18 AAC 75.345(b)(2), 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. Guidance on cumulative risk determinations is provided in the department's *Cumulative Risk Guidance*, adopted by reference in (g) of this section. Instead of the risk standards required by this subsection, the department may consider a risk standard consistent with the range acceptable under 40 C.F.R. 300.430, revised as of July 1, 2004, adopted by reference, based on

(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 __/__/____, Register ____)

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

The Editor's note for 18 AAC 75.325 is amended to read:

Editor's note: The document adopted by reference in 18 AAC 75.325 may be viewed at or obtained from [REVIEWED AT, OR REQUESTED FROM,] the department's offices in Anchorage, Fairbanks, Juneau, and Soldotna or the department's Internet website at <http://dec.alaska.gov/spar/guidance.htm>.

...

18 AAC 75.335(b)(1) is amended to read:

(1) prepared by a qualified environmental professional [QUALIFIED PERSON];

...

18 AAC 75.335(c)(1) is amended to read:

(1) is prepared by a qualified environmental professional [QUALIFIED PERSON]; (Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am __/__/____, Register ____)

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

AS 46.03.740

...

The lead-in language of 18 AAC 75.355(a) is amended to read:

18 AAC 75.355. Sampling and analysis. (a) Unless the department determines that final confirmation sampling is not needed to meet the requirements of the site cleanup rules, a responsible person shall submit a sampling and analysis plan for approval under 18 AAC 75.360, and after implementing the plan, shall submit the analytical sampling results collected to the department. **If approved in the sampling and analysis plan, sample collection for soil or water may be performed by a qualified sampler as defined under 18 AAC 75.990(191), when a qualified environmental professional is not available.** Based on the results of the analyses, a responsible person shall demonstrate compliance with the site cleanup rules.

...

The lead-in language of 18 AAC 75.355(b) is amended to read:

(b) A responsible person and the owner or operator of an offsite or portable treatment facility under 18 AAC 75.365 shall ensure that the collection, interpretation, and reporting of data, and the required sampling and analysis is conducted or supervised by a qualified, impartial third party. The department will, **on a site-specific basis,** waive the requirement for use of an impartial third party if a responsible person demonstrates that work performed will be conducted or supervised by a qualified and objective person, and if the department determines that a waiver is protective of human health, safety, and welfare, and of the environment, and that strict compliance with the impartial third party requirement is not practicable. To request a waiver under this subsection, in addition to meeting the requirements of 18 AAC 75.390, a responsible person shall submit

...

18 AAC 75.355(c)(1)(B) is amended to read:

(B) the practical quantitation limit is no greater than the practical quantitation limit established in EPA's *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846), Third Edition, including Final Update IV (2009), [EPA'S TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS (SW-846), THIRD EDITION, INCLUDING FINAL UPDATE III (1997),] adopted by reference;

...

18 AAC 75.355(d) is amended to read:

(d) Among the analytical methods set out in EPA's *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846), as adopted by reference in (c) of this section, if there is more than one analytical method for a hazardous substance, a responsible person may select any of those methods with a practical quantitation limit less than the applicable cleanup level. If only one analytical method has a practical quantitation limit less than the applicable cleanup level, that method must be used. Analysis for petroleum contamination must follow the applicable Alaska methods for petroleum hydrocarbons referred to in Table 1 of Chapter 2 of the *Underground Storage Tanks Procedures Manual*, dated August 18, 2014 [NOVEMBER 7, 2002]. Table 1 of Chapter 2 and Appendices C and D [D AND E] of the *Underground Storage Tanks Procedures Manual*, dated August 18, 2014 [NOVEMBER 7, 2002] are adopted by reference.

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

Authority: AS 44.46.025 AS 46.03.710 AS 46.04.020
AS 46.03.020 AS 46.03.740 AS 46.04.070
AS 46.03.050 AS 46.03.745 AS 46.09.020

The Editor's note for 18 AAC 75.355 is amended to read:

Editor's note: The documents adopted by reference in 18 AAC 75.355 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/guidance.htm>. EPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), may also be viewed at <http://www.epa.gov/wastes/hazard/testmethods/sw846/online/index.htm>.

[EPA'S TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS (SW-846), ADOPTED BY REFERENCE IN THIS SECTION, MAY BE PURCHASED FROM THE U.S. DEPARTMENT OF COMMERCE, NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161, (800) 553-6847, FAX: (703) 321-8547. THE UNDERGROUND STORAGE TANK PROCEDURES MANUAL, ADOPTED BY REFERENCE IN 18 AAC 75.355, MAY BE REQUESTED FROM THE DEPARTMENT AT ANY OF THE OFFICES LISTED BELOW. BOTH DOCUMENTS MAY BE VIEWED AT THE DEPARTMENT'S ANCHORAGE, FAIRBANKS, JUNEAU, OR SOLDOTNA OFFICE.]

...

The lead-in language of 18 AAC 75.360 is amended to read:

18 AAC 75.360. Cleanup operation requirements. A responsible person shall ensure that site cleanup is conducted or supervised by a **qualified environmental professional**

[QUALIFIED PERSON]. (Eff. 1/22/99, Register 149; am 10/9/2008, Register 188; __/__/____, Register __)

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

...

18 AAC 75.365(a)(1)(C) is amended to read:

(C) a post-treatment sampling and analysis plan prepared by a **qualified environmental professional** [QUALIFIED PERSON] in accordance with 18 AAC 75.355(b) to verify that the applicable cleanup levels have been met;

...

18 AAC 75.365(a)(1)(E) is amended to read:

(E) for an offsite treatment facility classified as a Category C or Category D facility, as described in the department's **Operation Requirements for Soil Treatment Facilities, dated March 15, 2013** [SOIL TREATMENT FACILITY GUIDANCE DATED NOVEMBER 7, 2002], engineering plans and engineering record drawings for contaminated soil and water containment structures; the **Operation Requirements for Soil Treatment Facilities, dated March 15, 2013** [SOIL TREATMENT FACILITY GUIDANCE DATED NOVEMBER 7, 2002], is adopted by reference; and

...

18 AAC 75.365(a)(2) is amended to read:

(2) If the facility is a Category C or Category D facility, as described in the *Operation Requirements for Soil Treatment Facilities* [SOIL TREATMENT FACILITY GUIDANCE], submit the following to the department before the owner or operator accepts or treats contaminated soil:

...

18 AAC 75.365(c)(4) is amended to read:

(4) “offsite or portable treatment facility “ has the meaning given in the *Operation Requirements for Soil Treatment Facilities* [SOIL TREATMENT FACILITY GUIDANCE], adopted by reference in (a)(1) of this section; (Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; __/__/____, Register __)

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

The Editor’s note of 18 AAC 75.365 is amended to read:

Editor’s note: The document adopted by reference in 18 AAC 75.365 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/guidance.htm> [THE DEPARTMENT’S *SOIL TREATMENT FACILITY GUIDANCE*, ADOPTED BY REFERENCE IN 18 AAC 75.365(A)(1), MAY BE VIEWED AT OR REQUESTED FROM THE DEPARTMENT’S OFFICES IN ANCHORAGE, FAIRBANKS, JUNEAU, AND SOLDOTNA].

...

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

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

TABLE D. BOTTOM LINER SPECIFICATIONS

Method	Coated Fabric	Extruded Fabric
Short-term storage of petroleum-contaminated soil (less than 180 days)		
Cold crack (ASTM D 2136-02(2012), updated 2012)	-60° F	-60° F
Black carbon content (ASTM D 1603-14, updated 2014)	2% or greater	2% or greater
Tensile strength (ASTM D 751-06(2011), updated 2011)	125 lbs (warp)	N/A
Mullen burst (ASTM D 751-06(2011), updated 2011)	250 psi	N/A
One inch tensile strength (ASTM D 882-12, updated August 2012)	N/A	25 lbs (warp)
One inch elongation MD (machine direction)	N/A	550%
Nominal thickness	10 mil	10 mil
Oil resistance (ASTM D 471-12a, updated December 2012)	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.
Long-term storage of petroleum-contaminated soil (180 days to two years)		
Cold crack (ASTM D 2136-02(2012), updated	-60° F	-60° F

Method	Coated Fabric	Extruded Fabric
2012)		
Black carbon content (ASTM D 1603-12, updated May 2012)	2% or greater	2% or greater
Tensile strength (ASTM D 751-06(2011), updated 2011)	300 lbs (warp)	N/A
Mullen burst (ASTM D 751-06(2011), updated May 2011)	500 psi	N/A
One inch tensile strength (ASTM D 882-12, updated August 2012)	N/A	45 lbs (warp)
One inch elongation MD (machine direction)	N/A	625%
Nominal thickness	20 mil	20 mil
Oil resistance (ASTM D 471-12a, updated December 2012)	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.	No signs of deterioration and more than 80% retention of tensile and seam strength after immersion for 30 days at 73° F.
The American Society for Testing and Materials (ASTM) methods referred to in this table are adopted by reference. "N/A" means not applicable.		

(Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 10/9/2008, Register 188; am

___/___/____, Register __)

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

The Editor's note of 18 AAC 75.370 is amended to read:

Editor's note: The ASTM methods adopted by reference in Table D of 18 AAC 75.370

may be reviewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices, or may be obtained from the ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; telephone (610) 832-9585; fax (610) 832-9555, or at www.astm.org.

...

The lead-in language of 18 AAC 75.380(a) is amended to read:

(a) A responsible person shall submit a written final cleanup report to the department for each site undergoing cleanup under the site cleanup rules. The report must be prepared by a qualified environmental professional [QUALIFIED PERSON].

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18 AAC 75.380(c)(1) is amended to read:

(1) applicable soil cleanup levels, based on sampling results from onsite contaminated soil and from contaminated soil moved offsite for treatment or disposal, calculated and presented on a per dry weight basis, and based on the maximum concentrations detected, unless the department approves an appropriate statistical method, in which case compliance will be based on the mean soil concentration at the 95th percent upper confidence limit; approval of a statistical method will be based on

(Eff. 1/22/99, Register 149; am 10/9/2008, Register 188; __/__/____, Register__)

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

...

The lead-in language of 18 AAC 75.390 is amended to read:

18 AAC 75.390. Waiver or modification. If the department determines that a waiver or [OF] modification will be protective of human health, safety, and welfare, and of the environment, the department will waive or modify the site cleanup rules based on a review of the quantity or concentration of the discharge or release, soil and groundwater conditions, surface water and topography, geology, water and land use, construction methods and materials, and any other human health or environmental factor important to the evaluation. A responsible person seeking a waiver or modification of a provision of the site cleanup rules under this section shall submit a written report to justify the request and to demonstrate that the waiver or modification is protective of human health, safety, and welfare, and of the environment. A qualified environmental professional [QUALIFIED PERSON] shall prepare and sign the report submitted under this section. (Eff. 1/22/99, Register 149; __/__/____, Register__)

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

...

18 AAC 75.990(46) (A) is amended to read:

(A) water in the zone of saturation; in this subparagraph, “zone of saturation” is the zone below the water table, where all interstices are filled with water [WATER IN THE SATURATED ZONE FOR PURPOSES OF EVALUATING WHETHER GROUNDWATER IS A DRINKING WATER SOURCE UNDER 18 AAC 75.350]; or

...

18 AAC 75.990(100) is repealed:

(100) repealed __/__/__;

...

18 AAC 75.990(155)(B) is amended to read:

(B) does not mean a **“qualified environmental professional” or a “qualified sampler”** [“QUALIFIED PERSON”] as defined in this section;

...

18 AAC 75.990 is amended by adding a new paragraph to read:

(190) "qualified environmental professional," means a person who is an impartial third party and who is qualified to perform site characterization and cleanup activities including fate and transport analysis, remediation design and other activities associated with contaminated sites; actively practices in the field of environmental science or another related scientific field including engineering, geology, physical science, hydrology, biology or chemistry or a related field; has not been found to have falsified environmental data or committed other acts of fraud directly related to environmental work; and meets one or more of the following minimum educational qualifications and experience requirements:

(A) has an undergraduate or graduate degree from a nationally or internationally accredited postsecondary institution in environmental science or engineering, geology, hydrology, physical science, biology, chemistry, or a related field and at least one year of professional experience in contaminated site characterization and cleanup activities under

the direct supervision of a qualified environmental professional completed after the degree described in this paragraph was obtained;

(B) has a four year degree in any field or a two year associates degree in environmental science, geology, hydrology, physical science, biology, chemistry, or a related field from a nationally or internationally accredited postsecondary institution, and at least three years of professional experience in contaminated site characterization and cleanup activities under the direct supervision of a qualified environmental professional; or

(C) is certified as an environmental technician under an apprenticeship program that conforms to the requirements of the U.S. Department of Labor, Employment and Training Administration, 29 CFR Part 29, Labor Standards for the Registration of Apprenticeship Programs, Amendment of Regulations, Final Rule, October 29, 2008, and has at least three additional years of professional experience in contaminated site characterization and cleanup activities under the direct supervision of a qualified environmental professional.

...

18 AAC 75.990 is amended by adding a new paragraph to read:

(191) "qualified sampler" means a person who is an impartial third party and who collects samples of environmental media, including soil, groundwater, and surface water, but excluding air and soil gas, for laboratory analysis; has not been found to have falsified environmental data or committed other acts of fraud directly related to environmental work; and who has received the following minimum training:

(A) applied field work involving environmental sample collection of soil, groundwater or surface water associated with coursework for a completed degree in environmental science, engineering, geology, hydrology, physical science, or a related field, at a nationally or internationally accredited postsecondary institution; or

(B) an environmental sampling training program recognized by the department; and

(C) at least three months of experience in environmental sampling under the direct supervision of a qualified environmental professional. (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 __/__/____, Register ____)

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