DEPARTMENT OF

ENVIRONMENTAL CONSERVATION

18 AAC 78

Underground Storage Tanks

Amended as of September 29, 2019

Michael J. Dunleavy
Governor

Jason W. Brune
Commissioner

IMPORTANT NOTE TO READER

THE REGULATIONS REPRODUCED HERE HAVE BEEN PROVIDED BY THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AS A PUBLIC COURTESY. WHILE EVERY EFFORT HAS BEEN MADE TO ASSURE THE ACCURACY OF THE REPRODUCED VERSION, THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CANNOT GUARANTEE ITS ABSOLUTE ACCURACY. PAPER COPIES OF THE REGULATIONS AS ORIGINALLY FILED BY THE LIEUTENANT GOVERNOR ARE AVAILABLE FROM THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

THE REGULATIONS HAVE AN EFFECTIVE DATE OF SEPTEMBER 29, 2019, ARE IN REGISTER 231, AND WILL APPEAR IN OFFICIAL PUBLISHED FORM IN THE OCTOBER 2019 SUPPLEMENT TO THE ALASKA ADMINISTRATIVE CODE.

Table of Contents

CHAPTER 78. UNDERGROUND STORAGE TANKS.

Article

Article 1. Underground Storage Tanks.

Section

18 AAC 78.005. Applicability. (a) **General requirements.** The requirements of this chapter apply to each owner and operator of an underground storage tank or underground storage tank system (UST), except as otherwise provided in (c) - (e) of this section.

(b) **Previously deferred USTs.** Airport hydrant fuel distribution systems, USTs with field-constructed tanks, and USTs that store fuel solely for use by emergency power generators must meet the requirements of this chapter as follows:

(1) airport hydrant fuel distribution systems and USTs with field-constructed tanks must meet the requirements of this chapter except as indicated in 18 AAC 78.705;

(2) USTs that store fuel solely for use by emergency power generators installed on or before October 13, 2015, and previously deferred from the release detection requirements of this chapter, must meet the requirements of 18 AAC 78.060 - 18 AAC 78.072 on or before October 13, 2018;

(3) USTs that store fuel solely for use by emergency power generators installed after October 13, 2015 must meet all applicable requirements of this chapter at installation.

(c) **Exclusions.** The following USTs are excluded from the requirements of this chapter:

(1) any wastewater treatment tank system that is part of a wastewater treatment facility regulated under 33 U.S.C. 1317(b) or 1342 (sec. 307(b) or 402 of the Clean Water Act);

(2) equipment or machinery that contains petroleum for operational purposes, such as hydraulic lift tanks and electrical equipment tanks;

(3) any UST system that contains a de minimis concentration of petroleum; and

(4) any emergency spill or overflow containment UST that is expeditiously emptied after use.

(d) **Partial Exclusions.** The provisions of 18 AAC 78.015 - 18 AAC 78.090, 18 AAC 78.355 - 18 AAC 78.380, and 18 AAC 78.700 - 18 AAC 78.705 do not apply to

(1) wastewater treatment tank systems not covered under (c)(2) of this section;

(2) aboveground storage tanks associated with

(A) airport hydrant fuel distribution systems regulated under 18 AAC 78.700 - 18 AAC 78.705; and

(B) USTs with field-constructed tanks regulated under 18 AAC 78.700 - 18 AAC 78.705;

(3) any USTs containing radioactive material that are regulated under 42 U.S.C. 2011 - 2297h-13 (Atomic Energy Act of 1954); and

(4) any UST that is part of an emergency generator system at nuclear power generation facilities licensed by the United States Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including 10 C.F.R. Part 50.

(e) **Tanks, pipes, and other facilities that are not USTs.** USTs do not include tanks, pipes, or facilities exempted under AS 46.03.450 from the term "underground storage tank." (Eff.

3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 1/22/99, Register 149; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365 AS 46.03.400 AS 46.03.450

18 AAC 78.007. UST procedures manual. The department's *Underground Storage Tanks Procedures Manual* (*UST Procedures Manual*), dated March 22, 2017, is adopted by reference. The department will use this version of the *UST Procedures Manual* in making determinations under this chapter. (Eff. 1/22/99, Register 149; am 6/25/99; Register 150; am 4/16/2000, Register 154; am 1/30/2003, Register 165; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

Authority: AS 46.23.020 AS 46.03.365

Editor's note: The *UST Procedures Manual*, adopted by reference in 18 AAC 78.007, may be viewed at or obtained from the department's Anchorage, Fairbanks, Juneau, and Soldotna offices or the department's Internet website at http://dec.alaska.gov/spar/guidance-forms/.

18 AAC 78.008. Operator training. Repealed. (Eff. 7/25/2012, Register 203; repealed 9/27/2018, Register 227)

18 AAC 78.010. Minimum requirements. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 9/27/2018, Register 227)

18 AAC 78.012. Installation requirements for partially excluded USTs. (a) An owner or operator must install a UST listed in 18 AAC 78.005(d)(1), (3), or (4) storing petroleum, whether of single-wall or double-wall construction, that meets the following requirements:

(1) the UST must prevent releases caused by manufacturing defects, corrosion, or structural failure for the operational life of the UST;

(2) the UST must be cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a non-corrodible material, or designed to prevent the release or threatened release of stored petroleum; and

(3) the UST must be constructed or lined with a material that is compatible with the stored petroleum.

(b) Notwithstanding (a) of this section, a UST without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause the UST to have a release due to corrosion during its operating life. The owner or operator shall

maintain records that demonstrate compliance with the requirements of this subsection for the remaining life of the tank.

(c) The department encourages use of the following codes of practice as guidance for complying with this section:

(1) NACE International Standard Practice RP 0285-2002, *External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection,* 2002;

(2) NACE International Standard Practice SP 0169-2007, *Control of External Corrosion on Underground or Submerged Metallic Piping Systems,* reaffirmed March 15, 2007;

(3) American Petroleum Institute Recommended Practice 1632, *Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems,* Third Edition, May 1996; or

(4) Steel Tank Institute Recommended Practice R892, *Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems*, January 2006. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.015. Registration and fees. (a) Except as provided in (e) of this section, a person who owns or operates a UST, or who intends to install, have installed, return to service, or acquire ownership of a UST, shall

(1) register the UST as required by AS 46.03.380 and pay the fee required by AS 46.03.385 within 30 days after installation, return to service, or acquisition;

(2) if the UST was installed before December 22, 1988, provide the information required by AS 46.03.380(b)(1) and (3);

(3) obtain a current tag, decal, or notice for a UST, as follows, before allowing a petroleum product to be placed in the UST:

(A) for a new UST, the department will provide a tag, decal, or notice not later than 30 days after receiving the registration; the department will not provide a tag for a UST that is permanently closed under 18 AAC 78.085;

(B) for an existing UST, the department will provide a tag, decal, or notice not later than 30 days after receiving proof that the UST is in compliance with this chapter as required under 18 AAC 78.059(g);

(C) a tag, decal, or notice expires on October 31 of the third year after issuance; and

(D) if a tag, decal, or notice is lost, stolen, or destroyed, the owner or operator may obtain a replacement by providing the department with a sworn statement or affidavit that includes the facility number and tank number assigned by the department and an explanation of why a replacement is needed;

(4) permanently affix the tag, decal, or notice described in (3) of this subsection where it

(A) can be easily be seen by a person who attempts to fill the UST; and

(B) cannot reasonably be associated with any UST other than the UST for which it was issued;

(5) ensure that a person does not

(A) tamper with or alter a tag, decal, or notice associated with a UST;

(B) remove a tag, decal, or notice associated with a UST until it expires or is replaced with a new tag, decal, or notice, unless

(i) the tank is permanently closed under 18 AAC 78.085; or

(ii) the return of the tag, decal, or notice is required under 18 AAC 78.059.

(b) The information required by AS 46.03.400 must be provided in the application for initial registration on a form provided by the department.

(c) UST registration expires on December 31 each year. The annual registration renewal fee required by AS 46.03.385(a) must be paid to the department at least 30 days before the registration expires each year and must be accompanied by the information required by AS 46.03.385(d) on a form provided by the department.

(d) If a UST is temporarily taken out of service, or if a UST is permanently closed under 18 AAC 78.085, the owner or operator need not submit the fee and information required under (c) of this section in subsequent years unless the UST is returned to service. The owner or operator of a UST temporarily taken out of service must submit to the department, before taking the UST out of service, the *Taken Out of Service or Temporary Closure* form, dated February 2008 and adopted by reference, and the *Empty Tank Affidavit* form, dated February 2008 and adopted by reference. If the UST is returned to service, the owner or operator shall pay to the department the annual registration fee required by AS 46.03.385(a) no later than 30 days after the UST is returned to service.

(e) The owner or operator of a UST that was taken out of service or permanently closed on or before January 1, 1974, is exempt from the annual registration requirements of this section and AS 46.03.380.

(f) In assessing the late fee required by AS 46.03.385(c), the "day of payment" means the day the fee is received by the department or, if mailed, the day of postmark.

(g) In addition to the requirements of AS 46.03.400, at initial registration or annual registration renewal, the owner or operator of a UST that is installed, upgraded, or reconfigured shall certify that the installation, upgrading, or reconfiguration was performed or supervised by a person certified under this chapter.

(h) An owner or operator of a UST who sells a UST intended for continued use as a UST shall notify the purchaser of the requirements of this chapter. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 8/15/99, Register 151; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375 AS 46.03.380 AS 46.03.385 AS 46.03.395 AS 46.03.400 AS 46.03.405

Editor's Note: As of Register 179 (October 2006), and acting under AS 44.62.125(b)(6), the regulations attorney made a technical revision to the authority citation following 18 AAC 78.015. This change reflects the enactment of sec. 2, ch. 102, SLA 2006, effective August 5, 2006, which repealed AS 46.03.410.

The department's *Taken Out of Service or Temporary Closure* form and *Empty Tank Affidavit* form , adopted by reference in 18 AAC 78.015, are available from the department's Anchorage office or on the department's website at the following Internet address: http://dec.alaska.gov/spar/csp/guidance-forms/.

18 AAC 78.017. Operations inspection. Repealed. (Eff. 8/15/99, Register 151; am 4/16/2000, Register 154; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 7/19/2013, Register 207; repealed 9/27/2018, Register 227)

18 AAC 78.018. Acceptance, delivery, and deposit prohibitions. (a) An owner or operator of a UST may not accept the delivery or deposit of petroleum, and a person may not deliver petroleum to or deposit petroleum in that UST, if

(1) the department determines that the spill prevention equipment, overfill protection equipment, leak detection or corrosion protection equipment is not installed or is not being operated or maintained in accordance with this chapter;

(2) financial responsibility is not maintained in accordance with 18 AAC 78.910;

(3) the department has determined the UST to be a substandard UST under 18 AAC 78.059(h), the owner or operator has not made repairs as required under 18 AAC 78.059(h), and a temporary deferral of the prohibition on the acceptance, delivery, or deposit of petroleum has not been granted under 18 AAC 78.059 and (c) of this section or has expired; or

(4) the owner or operator fails to display a valid tag, decal, or notice as required under 18 AAC 78.015.

(b) If the department determines a UST to be subject to the prohibitions under (a) of this section, the department will, no later than three working days after making the determination,

(1) notify the owner or operator in writing; and

(2) to assist persons in complying with this section, post that UST to the department's list, maintained on the department's website, of USTs without valid tags, decals, or notices required under 18 AAC 78.015(a).

(c) If a prohibition under (a) of this section would jeopardize the availability of or access to motor fuel in remote and rural areas, or jeopardize the availability of or access to heating if the UST is supplying a boiler and an emergency power generator, the department may defer, upon written request by the owner, the prohibition for a period of no more than 180 days after the determination under (a) of this section is made.

(d) The department will withdraw a prohibition under (a) of this section upon receiving written documentation, satisfactory to the department, that

(1) the condition that caused the prohibition to be put into place has been repaired in accordance with 18 AAC 78.055; and

(2) the UST now meets the requirements of 18 AAC 78.040 – 18 AAC 78.055, 18 AAC 78.060 – 18 AAC 78.072 and 18 AAC 78.910.

(e) If it withdraws a prohibition under (d) of this section, the department will, no later than three working days after the date of withdrawal,

(1) notify the owner or operator in writing; and

(2) remove the UST from the list maintained under (b)(2) of this section. (Eff. 7/25/2012, Register 203; am 7/19/2013, Register 207; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.405

Editor's note: The list described in 18 AAC 78.018 of USTs without valid tags, decals, or notices is available at the department's Anchorage office or on the department's website at the following Internet address: http://dec.alaska.gov/spar/ipp/ust/search/default.htm.

18 AAC 78.020. Notification for tanks taken out of service. Repealed. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 7/25/2012, Register 203; repealed 9/27/2018, Register 227)

18 AAC 78.022. Requirements for existing UST systems. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 9/27/2018, Register 227)

18 AAC 78.025. Performance standards for new USTs. (a) **General requirements.** In order to prevent or detect releases caused by manufacturing defects, structural failure, corrosion, or spills or overfills for as long as the UST is used to store petroleum, the owner or operator of a new UST shall meet the requirements of this section.

(b) **Secondary containment and interstitial monitoring for tanks and piping installed on or after July 25, 2012 and before April 11, 2016.** Tanks and piping installed on or after July 25, 2012 and before April 11, 2016 and within 1,000 feet of an existing community water system as defined under 18 AAC 80.1990(a), an existing potable water system as defined under 18 AAC 80.1990(a), or a sole source aquifer as defined under 18 AAC 75.990 must be in secondary containment and use interstitial monitoring for leaks. Secondary containment must be able to contain petroleum released from anywhere in the UST system until it is detected and removed, and must prevent a release of petroleum to the environment at any time during the operational life of the UST system. For the purposes of this subsection,

(1) in the case of a replacement of an existing tank or existing piping, secondary containment and interstitial monitoring is only required for the tank or piping being replaced; and

(2) the 1,000 feet must be measured from the closest part of the tank or piping to the closest part of the existing community water system, potable water system, or sole source aquifer, including well heads for groundwater, the location of the intake points for surface water, water lines, processing tanks and water storage tanks, water distribution and service lines under the control of the community water system operator, and the wellhead of the nearest existing potable drinking water well.

(c) **Secondary containment and interstitial monitoring for tanks and piping installed on or after April 11, 2016.** Tanks and piping installed on or after April 11, 2016 must be in secondary containment and use interstitial monitoring in accordance with 18 AAC 78.065(h), except for suction piping that meets the requirements of 18 AAC 78.060(f)(1)(B)(i) - (v). Secondary containment must be able to contain petroleum leaked from the primary containment until it is detected and the petroleum removed, and must prevent the release of petroleum to the environment at any time during the operational life of the UST. For cases where the piping is considered to be replaced, the entire piping run must be within secondary containment.

(d) **Notification.** At least 15 days, but not more than 60 days, before beginning installation of a UST, the owner or operator shall notify the department in writing that it will do so, on a form provided by the department.

(e) **Tanks.** Each tank must be properly designed, constructed, and installed in a manner that will prevent releases for its operating life due to manufacturing defects, structural failure, or corrosion, in accordance with a nationally recognized code of practice, and meet one of the following requirements:

(1) the tank must be constructed of fiberglass-reinforced plastic; unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(A) Underwriters Laboratories Standard 1316, *Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures*, Second Edition, 1994; and

(B) Steel Tank Institute Specification F894, *ACT-100 Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks*, December 2010;

(2) the tank must be constructed of steel and cathodically protected in the following manner:

(A) the tank must be coated with a suitable dielectric material; for purposes of this subparagraph, suitable dielectric material does not include paint or asphalt coating;

(B) field-installed cathodic protection systems must be designed by a corrosion expert;

(C) impressed current systems must be designed to allow determination of current operating status as required in 18 AAC 78.045(e);

(D) cathodic protection systems must be operated and maintained in accordance with 18 AAC 78.045; and

(E) unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(i) Steel Tank Institute Specification STI-P3, *STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks*, August 2011;

(ii) Underwriters Laboratories, Inc., Standard for Safety 1746, *External Corrosion Protection Systems for Steel Underground Storage Tanks*, Third Edition, January 17, 2007;

(iii) NACE International Standard RP0285-2002, *Standard Recommended Practice-Corrosion Control of Underground Storage Tank Systems by Cathodic Protection*, 2002; and

(iv) Underwriters Laboratories Standard UL 58, *Steel Underground Tanks for Flammable and Combustible Liquids*, Ninth Edition, 1996;

(3) the tank must be constructed of steel and must be clad or jacketed with a non-corrodible material; unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(A) Underwriters Laboratories, Inc., Standard for Safety 1746, *External Corrosion Protection Systems for Steel Underground Storage Tanks*, Third Edition, January 17, 2007;

(B) Steel Tank Institute Specification F894, *ACT-100 Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks*, December 2010;

(4) the tank must be constructed of metal, but additional corrosion protection measures are not required, if

(A) the tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause the tank to have a release due to corrosion during the tank's operating life; and

(B) the owner or operator maintains records that demonstrate compliance with the requirements of (A) of this paragraph for the remaining life of the tank; or

(5) the tank construction and corrosion protection must be determined by the department to be designed to prevent the release or threatened release of any stored petroleum in a manner that is no less protective of human health and the environment than the requirements in (1) - (4) of this subsection.

(f) **Piping.** This subsection applies to the piping that routinely contains petroleum, including all product piping, except for vent lines and except for most tank fill pipes. The piping that routinely contains petroleum and is underground or in contact with the ground must be properly designed, constructed, and installed in a manner that will prevent, for the piping's operating life, releases due to manufacturing defects, structural failure, or corrosion, in accordance with a nationally recognized code of practice, and must meet one of the following requirements:

(1) the piping must be constructed of a non-corrodible material; unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(A) Underwriters Laboratories Standard 1316, *Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures*, Second Edition, 1994; and

(B) Underwriters Laboratories, Inc. Standard for Safety UL 567, *Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings for Petroleum Products and LP-Gas,* Ninth Edition, July 28, 2003;

(2) the piping must be constructed of steel and cathodically protected in the following manner:

(A) the piping must be coated with a suitable dielectric material; for purposes of this subparagraph, suitable dielectric material does not include paint or asphalt coating;

(B) field-installed cathodic protection systems must be designed by a corrosion expert;

(C) impressed current systems must be designed to allow determination of current operating status as required in 18 AAC 78.045(e);

(D) cathodic protection systems must be operated and maintained in accordance with 18 AAC 78.045; and

(E) unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(i) National Fire Protection Association Standard 30, *Flammable and Combustible Liquids Code*, 2008 Edition;

(ii) American Petroleum Institute Recommended Practice 1615, *Installation of Underground Petroleum Storage Systems*, Fifth Edition, March 1996;

(iii) Petroleum Equipment Institute Recommended Practice PEI/RP 100-11, *Recommended Practices for Installation of Underground Liquid Storage Systems*, 2011;

(iv) American Petroleum Institute Recommended Practice 1632, *Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems*, Third Edition, May 1996; and

(v) NACE International Standard SP0169-2007, *Standard Practice: Control of External Corrosion on Underground or Submerged Metallic Piping Systems*, reaffirmed March 15, 2007;

(3) the piping must be constructed of metal, but additional corrosion protection measures are not required, if

(A) the piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause the piping to have a release due to corrosion during the piping's operating life; and

(B) the owner or operator maintains records that demonstrate compliance with the requirements of (A) of this paragraph for the remaining life of the piping; or

(4) the piping construction and corrosion protection must be determined by the department to be designed to prevent the release or threatened release of any stored petroleum in a manner that is no less protective of human health and the environment than the requirements in (1) - (3) of this subsection.

(g) **Spill and overfill prevention equipment.** The requirements for UST spill and overfill prevention equipment are as follows:

(1) except as provided in (2) and (3) of this subsection, to prevent spilling and overfilling associated with transfer of petroleum to the UST, the owner or operator shall use the following spill and overfill prevention equipment:

(A) spill prevention equipment, such as a spill catchment basin, that will prevent release of the petroleum to the environment when the transfer hose is detached from the fill pipe; and

(B) overfill prevention equipment that will

(i) automatically shut off flow into the tank when the tank is no more than 95 percent full; or

(ii) alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm;

(2) the owner or operator is not required to use the spill and overfill prevention equipment specified in (1) of this subsection if

(A) alternative equipment is used that is determined by the department to be no less protective of human health and safety and the environment than the equipment specified in (1)(A) or (B) of this subsection; or

(B) the UST is filled by transfers of no more than 25 gallons at one time;

(3) flow restrictors used in vent lines may not be used to comply with (1)(B) of this subsection when overfill prevention is installed or replaced after October 13, 2015;

(4) spill and overfill prevention equipment must be periodically tested or inspected in accordance with 18 AAC 78.057; and

(5) if a UST system has one or more of the following, the owner or operator of the system may not use a ball float valve or a vent restrictor shut-off device on that system:

(A) a tank that receives a pumped delivery;

(B) suction piping with air eliminators;

(C) remote fill pipes and gauge openings; or

(D) an emergency generator or an oil heating tank.

(h) **Installation.** The installation of a UST is subject to the following:

(1) the owner or operator shall ensure that the installer of a new UST is certified under this chapter;

(2) a person may not install or permit the installation of a UST within 100 feet of a community water system, non-transient non-community water system, or transient non-community water system, or within 25 feet of a private water system, as each of those systems is defined in 18 AAC 80.1990(a);

(3) the department may inspect or require inspection of an installation to determine compliance with this section; if the department requires an inspection, it must be conducted by an independent third party certified under this chapter; and

(4) unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner and the operator of a UST shall ensure that the following are used, the provisions of which are adopted by reference:

(A) American Petroleum Institute Recommended Practice 1615, *Installation of Underground Petroleum Storage Systems,* Fifth Edition, March 1996;

(B) Petroleum Equipment Institute Recommended Practice PEI/RP 100-11, *Recommended Practices for Installation of Underground Liquid Storage Systems*, 2011;

(C) American Society of Mechanical Engineers Code for Pressure Piping, B31, an American National Standard, B31.3, *Process Piping*, 2010 Edition;

(D) American Society of Mechanical Engineers Code for Pressure Piping, B31, an American National Standard, B31.4, *Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*, 2009 Edition;

(E) National Fire Protection Association Standard 30, *Flammable and Combustible Liquids Code*, 2008 Edition;

(F) National Fire Protection Association Standard 30A, *Code for Motor Fuel Dispensing Facilities and Repair Garages*, 2012 Edition;

(G) International Code Council, *International Fire Code*, Chapter 57, (flammable and combustible liquids), 2012; and

(H) International Code Council, *International Fire Code*, Chapter 50, (hazardous materials - general provisions), 2012.

(i) **Certification of installation.** The owner or operator shall ensure that the installer has been certified under this chapter and shall provide certification of compliance to the department on the UST registration form in accordance with 18 AAC 78.035(d).

(j) **Dispenser systems.** Each UST must be equipped with under-dispenser containment for any new dispenser system, replacement of an existing dispenser, or replacement of any piping or equipment below a dispenser installed on or after July 25, 2012. Under-dispenser containment must

(1) be liquid-tight on its sides and bottom, and at any penetrations; and

(2) allow for visual inspection and access to the components in the containment system or be periodically monitored for leaks from the dispenser system at least annually during the walkthrough inspections required under 18 AAC 78.058. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 4/16/2000, Register 154; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's Note: 1. The publications adopted by reference in 18 AAC 78.025 and other sections of this chapter may be reviewed at the department's office in Anchorage or may be obtained directly from the appropriate publisher. The mailing address, telephone number, facsimile number, and website, if available, for each publisher are as follows:

American Petroleum Institute (API), Publications Department, 1220 L St. N.W., Washington, D.C. 20005; telephone: (202) 682-8000; facsimile: (202) 682-8154; Internet address: http://global.ihs.com/?RID=API1;

American Society of Mechanical Engineers (ASME), New Jersey Service Center, 150 Clove Rd. 6th Floor, Little Falls, New Jersey 07424; telephone: (800) 843-2763; facsimile: (973) 882-1717; Internet address: http://www.asme.org/;

American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959; telephone: (610) 832-9585; facsimile: (610) 832-9555; Internet address: http://www.astm.org;

International Code Council, 4501 West Flossmoor Road, Country Club Hills, IL 60478; telephone: (800) 786-4452; facsimile: (866) 891-1695; Internet address: http://iccsafe.org/store;

NACE International, Publications Department, 1440 South Creek Drive, Houston, Texas 77218-8340; telephone: (281) 228-6200 or (800) 797-6223; facsimile: (281) 228-6300; Internet address: http://www.nace.org/;

National Leak Prevention Association (NLPA), P.O. Box 1643, Boise, Idaho 83701; telephone: (815) 301-2785; facsimile: (240) 757-0211; Internet address: http://www.nlpa-online.org;

Petroleum Equipment Institute (PEI), Publications Department, P.O. Box 2380, Tulsa, Oklahoma 74101; telephone: (918) 494-9696; facsimile: (918) 491-9895; Internet address: http://www.pei.org/;

Steel Tank Institute (STI), 944 Donata Court, Lake Zurich, Illinois 60047; telephone: (847) 438-8265; facsimile: (847) 438-8766; Internet address: http://www.steeltank.com/;

Underwriters Laboratories, Inc. (UL), COMM 2000, 151 Eastern Ave., Bensenville, IL 60106; telephone: (888) 853-3503; Internet address: http://ul.com.

2. In addition to the organizations listed in Note 1, above, other sources of nationally recognized codes of practice include

American National Standards Institute (ANSI), Customer Service Department, 25 West 43rd Street, 4th Floor, New York, NY 10036; telephone: (212) 642-4980; facsimile: (212) 392-1286; Internet address: http://www.ansi.org/;

Fiberglass Petroleum Tank & Pipe Institute, 14323 Heatherfield, Houston, TX 77079-7407; Internet address: http://www.fiberglasstankandpipe.com/;

United States Department of Labor, Occupational Safety and Health Administration (OSHA), Publication Office, Francis Perkins Building, 200 Constitution Avenue, NW, Room N-3315, Washington, D.C. 20210; telephone: (202) 693-1888; facsimile: (202) 693-2498; Internet address: http://www.osha.gov/.

3. A UST installed in an area that has been given a special designation for drinking water protection by a local government may be subject to additional requirements imposed by the local government.

18 AAC 78.030. Upgrading existing USTs. (a) An owner or operator shall permanently close in accordance with 18 AAC 78.080 - 18 AAC 78.087 any UST that does not meet the performance standards in 18 AAC 78.025 for new USTs or that has not been upgraded in accordance with (d) - (f) of this section. This subsection does not apply to a previously deferred UST described in 18 AAC 78.700 - 18 AAC 78.705, if an upgrade to the previously deferred UST is performed and the department determines the upgrade to be protective of human health and safety and the environment.

(b) An existing UST must comply with one of the following requirements:

(1) the performance standards in 18 AAC 78.025 for new USTs;

(2) the upgrading requirements in (d) - (f) of this section; or

(3) the closure requirements under 18 AAC 78.080 - 18 AAC 78.087, including applicable requirements for corrective action under 18 AAC 78.200 - 18 AAC 78.280.

(c) A UST must be upgraded by a person certified under this chapter and must be installed using nationally recognized codes of practice specified in 18 AAC 78.025. All parts of the UST must be certified, listed, or approved under 18 AAC 78.050 for use with the fuel stored within the system.

(d) Steel tanks must be upgraded to meet one of the following requirements in accordance with a nationally recognized code of practice as specified in 18 AAC 78.025 and 18 AAC 78.055:

(1) tanks upgraded by internal lining must meet the following requirements:

(A) the lining must be installed in accordance with the requirements of 18 AAC 78.055;

(B) not later than 10 years after lining, and every five years thereafter, the lined tank must be internally inspected and found to be structurally sound with the lining still performing in accordance with the original design specifications; if the internal lining is no longer performing in accordance with original design specifications and cannot be repaired in accordance with a nationally recognized code of practice, the lined tank must be permanently closed in accordance with 18 AAC 78.080 - 18 AAC 78.087; and

(C) a certified copy of the internal lining or lining system specifications and installation instructions, safety precautions, and other documentation must be provided to the department by the manufacturer, including

(i) approvals by independent testing laboratories and other independent evaluation results that demonstrate compliance with the approved standards;

(ii) approvals by other government agencies;

(iii) chemical compatibility data for common fuels; and

(iv) copies of guarantees or warranties;

(2) tanks upgraded by cathodic protection must meet the requirements of 18 AAC 78.025(e)(2)(B) - (D) and the integrity of the tank must have been ensured using one of the following methods:

(A) the tank must be internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes before installing the cathodic protection system;

(B) the tank must have been installed for less than 10 years and must be monitored monthly for releases in accordance with 18 AAC 78.065(e) - (j);

(C) the tank must have been installed for less than 10 years and must be assessed for corrosion holes by conducting two tightness tests that meet the requirements of 18 AAC 78.065(d); the first test must be conducted before installing the cathodic protection system; the second test must be conducted not earlier than three months and not later than six months following the first operation of the cathodic protection system; or

(D) the tank must be assessed for corrosion holes by a method that is determined by the department to prevent releases in a way that is no less protective of human health and safety and the environment than the requirements in (A) - (C) of this paragraph;

(3) tanks upgraded by both internal lining and cathodic protection must meet the following requirements:

(A) the lining must be installed in accordance with the requirements of 18 AAC 78.055; and

(B) the cathodic protection system must meet the requirements of 18 AAC 78.025(e)(2)(B) - (D); or

(4) an STI-P3 steel tank may be upgraded to cathodic protection if the tank can be verified by the Steel Tank Institute to have been constructed in accordance with Steel Tank Institute Specification STI-P3, *STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks,* August 2011, adopted by reference.

(e) Metal piping that routinely contains petroleum and is in contact with the ground must be cathodically protected using nationally recognized codes of practice specified in 18 AAC 78.025(f)(2)(E) and must meet the requirements of 18 AAC 78.025(f)(2)(B) - (D).

(f) To prevent spilling and overfilling associated with product transfer to the UST, an existing UST must comply with UST spill and overfill prevention equipment requirements specified in 18 AAC 78.025(g).

(g) The department may inspect or require inspection of an upgrade to determine compliance with this section. If the department requires an inspection, it must be conducted by an independent third party certified under this chapter.

(h) If an upgrade consists of the removal and installation of a UST, or the removal and installation within a three-year period of more than 50 percent of the piping associated with a single UST, the department will consider the upgrade to be a replacement subject to the requirements of 18 AAC 78.025. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.04.375

18 AAC 78.035. Notification requirements. (a) An owner must submit notice to the department in accordance with 18 AAC 78.015(a) of USTs that are currently in existence, newly installed, returned to service, or transferred in ownership. For a UST that was in the ground on or after May 8, 1986 and was not taken out of operation on or before January 1, 1974, and for which notification was not provided under 42 U.S.C. 6991a(a) (sec. 601(a) of the Hazardous and Solid Waste Amendments of 1984) to the department or under 42 U.S.C. 9603(c) (sec. 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980), an owner or operator of the UST must provide notice of the existence of the UST in accordance with 18 AAC 78.015(a) and may use the department's registration form to provide the required notification.

(b) A person who assumes ownership of a regulated UST, except as described in (a) of this section, must submit a notice of the ownership change to the department in accordance with 18 AAC 78.015(a).

(c) An owner required to submit notices under (a) or (b) of this section must provide notices to the department for each tank that the person owns. The owner may provide notice for several tanks using one notification form, but an owner who owns tanks located at more than one place of operation must file a separate notification form for each separate place of operation.

(d) The owner or operator of a new UST must certify in the UST registration form compliance with the following requirements:

(1) installation of tanks and piping under 18 AAC 78.025(i);

(2) cathodic protection of steel tanks and piping under 18 AAC 78.025(e) and (f);

(3) financial responsibility under 18 AAC 78.910; and

(4) release detection under 18 AAC 78.060 - 18 AAC 78.072.

(e) The owner or operator of a new UST must ensure that the installer certifies in the notification form that the methods used to install the tanks and piping comply with the requirements in 18 AAC 78.025.

(f) A person who sells a tank intended to be used as a UST must notify the purchaser of the UST of the owner's notification obligations under (a) of this section. The following statement, when used on shipping tickets and invoices, may be used to comply with this requirement: "Note. A federal law (the Solid Waste Disposal Act, as amended), requires owners of certain underground storage tanks to notify the Alaska Department of Environmental Conservation (department) of the existence of their tanks. Notifications must be made not later than 30 days after the tank is placed into use. Consult the department’s regulation at 18 AAC 78.035 to determine if you are affected by this law."

(g) An owner or operator who intends to significantly reconfigure a UST shall notify the department at least 15 days, but not more than 60 days before beginning work on the proposed change, using a form provided by the department. (Eff. 3/25/91, Register 118; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.390
AS 46.03.365

18 AAC 78.040. Spill and overfill control. (a) The owner or operator of a UST shall ensure that

(1) releases due to spilling or overfilling do not occur;

(2) the volume available in the tank is greater than the volume of petroleum to be transferred to the tank before the transfer is made;

(3) the transfer operation is constantly monitored to prevent overfilling or spilling;

(4) the distributor is provided with the current UST tag, decal, or notice before the transfer is made; and

(5) any spill or overfill is reported and investigated, and that appropriate corrective action is completed.

(b) Guidance, the use of which the department encourages, on spill and overfill prevention appears in American Petroleum Institute Recommended Practice 1621, *Bulk Liquid Stock Control at Retail Outlets*, Fifth Edition, May 1993. The department encourages the use of the transfer procedures described in the following documents as guidance for complying with this section:

(1) National Fire Protection Association Standard 385, *Standard for Tank Vehicles for Flammable and Combustible Liquids*, 2012 Edition; or

(2) American Petroleum Institute Recommended Practice 1007 Edition 1 (2001/R2011), *Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles*.

(c) The owner or operator shall report, investigate, and complete corrective action on any spills or overfills in accordance with 18 AAC 78.200 - 18 AAC 78.276. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 1/30/2003, Register 165; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365

18 AAC 78.045. Operation and maintenance of corrosion protection. (a) The owner or operator of a steel UST with corrosion protection shall comply with the requirements of this section to ensure that a release caused by corrosion is prevented until the UST is permanently closed or undergoes a change-in-service under 18 AAC 78.085.

(b) A corrosion protection system must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contains petroleum and that is in contact with the ground. This requirement applies to single and double wall steel tanks and piping. For purposes of this subsection, piping that routinely contains petroleum includes all product piping, except for vent lines and except for most tank fill pipe configurations.

(c) A UST equipped with a cathodic protection system must be inspected for proper operation by a cathodic protection tester who is certified under 18 AAC 78.410 in accordance with the following requirements:

(1) a cathodic protection system must be tested not later than six months after installation and at least every three years after that, or according to another reasonable testing schedule approved by the department; and

(2) the criteria used to determine if cathodic protection is adequate as required under this section must be in accordance with one of the following requirements:

(A) NACE International Standard RP0285-2002, *Standard Recommended Practice-Corrosion Control of Underground Storage Tank Systems by Cathodic Protection,* 2002, adopted by reference;

(B) NACE International Test Method TM0101-2012, *Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems*, March 2012, adopted by reference;

(C) NACE International Test Method TM0497-2012, *Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems,* June 2012, adopted by reference;

(D) Steel Tank Institute Recommended Practice R051, *Cathodic Protection Testing Procedures for STI-P3® USTs*, January 2006, adopted by reference;

(E) NACE International Standard Practice SP0169-2007, *Control of External Corrosion on Underground or Submerged Metallic Piping Systems*, reaffirmed March 15, 2007, adopted by reference; or

(F) another standard that is no less protective of human health and safety and the environment and approved by the department.

(d) Repealed 9/27/2018.

(e) A UST with an impressed current cathodic protection system must be inspected every 60 days to ensure that the equipment is running properly. The owner or operator shall document the findings of each inspection. The owner or operator may use a form provided by the department or an equivalent form to document those findings. If the inspection of the impressed current cathodic protection system indicates a redline of zero, the owner or operator shall notify the department and take corrective action to investigate and, if necessary, to correct the problem.

(f) For a UST with cathodic protection records of the operation of the cathodic protection system must be maintained in accordance with 18 AAC 78.056 to demonstrate compliance with the performance standards in this section. The records must provide the following:

(1) the results of the last three inspections required in (e) of this section; and

(2) the results of testing from the last two inspections required in (c) of this section. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: Information about how to review or obtain a copy of the document referred to in 18 AAC 78.045 is in the editor's note at 18 AAC 78.025.

18 AAC 78.050. Compatibility. (a) An owner or operator shall use a UST made of or lined with materials that are compatible with the petroleum stored in the UST.

(b) An owner or operator must notify the department at least 30 days before switching to a petroleum product containing greater than 10 percent ethanol or greater than 20 percent biodiesel. In addition, an owner or operator with USTs storing these blends must meet one of the following requirements:

(1) demonstrate compatibility of the UST, including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment; an owner or operator may demonstrate compatibility of the UST by using one of the following options:

(A) certification or listing of UST equipment or components by a nationally recognized, independent testing laboratory for use with the petroleum stored; or

(B) equipment or component manufacturer approval; the manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer; or

(2) use another option that the department determines to be no less protective of human health and safety and the environment than the options listed in (1) of this subsection.

(c) An owner or operator shall maintain records in accordance with 18 AAC 78.056(c) documenting compliance with (b) of this section for as long as the UST is used to store the petroleum.

(d) To comply with the requirements of this section, the owner or operator may use the American Petroleum Institute Recommended Practice 1626, *Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations*, 2nd Edition August 2010, Errata February 2011, the provisions of which are adopted by reference.

(e) For purposes of this section, "compatible" means that the UST, and any UST lining, is designed to prevent the release or threatened release of the stored substance. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

Editor's note: The publications adopted by reference in 18 AAC 78.050 are available for review at the department’s Anchorage office, or a copy may be obtained from the appropriate publisher at the address listed in the editor’s note at 18 AAC 78.025.

18 AAC 78.055. Repairs allowed. (a) The owner or operator of a UST shall ensure that any repairs to the UST will prevent a release caused by manufacturing defects, structural failure, or corrosion while the UST is used to store petroleum. Repairs must meet the following requirements:

(1) repairs must be conducted using a nationally recognized code of practice and must be conducted by a person certified under this chapter;

(2) repairs to fiberglass-reinforced plastic tanks must be made by the manufacturer's authorized representative or in accordance with a nationally recognized code of practice;

(3) metal pipe sections and fittings that have released petroleum as a result of corrosion or other damage must be replaced;

(4) non-corrodible pipes and fittings must be repaired in accordance with the manufacturer’s specifications;

(5) not later than 30 days after the date of completion of the repairs and before the UST is placed back in operation, repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping must have the secondary containment tested for tightness in accordance with the manufacturer’s instructions or a nationally recognized code of practice; all other repairs to tanks and piping must be tested for tightness as required under 18 AAC 78.065(d) and 18 AAC

78.070(c) not later than 30 days after the date of completion of the repairs and before the UST is placed back in operation, except if one of the following test methods is used:

(A) the repaired tank is internally inspected, using a nationally recognized code of practice;

(B) the repaired portion of the UST is monitored monthly for releases, using a method specified in 18 AAC 78.065(e) - (j); or

(C) another test method is used that the department determines to be no less protective of human health and the environment than those listed in (A) and (B) of this paragraph;

(6) within six months after the repair of a cathodically protected UST, the cathodic protection system must be tested as required under 18 AAC 78.045(c) and (e) to ensure that it is operating properly;

(7) not later than 30 days after any repair to spill or overfill prevention equipment, the repaired spill or overfill prevention equipment must be tested or inspected, as appropriate, in accordance with 18 AAC 78.057 to ensure that it is operating properly; and

(8) unless the department approves another procedure, code, or standard it determines to be no less protective of human health and safety and the environment, the owner or operator shall ensure that the following are used, the provisions of which are adopted by reference:

(A) National Fire Protection Association Standard 30, Flammable and Combustible Liquids Code, 2008 Edition;

(B) American Petroleum Institute Recommended Practice 2200, Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines, Fourth Edition, September 2010;

(C) American Petroleum Institute Standard 1631, Interior Lining and Periodic Inspection of Underground Storage Tanks, Fifth Edition, June 2001;

(D) National Leak Prevention Association Standard 631, Chapters A, B, and C, Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks, 1991;

(E) Steel Tank Institute Recommended Practice R012, Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks, April 2007;

(F) Fiberglass Tank and Pipe Institute RP 2007-2, Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space, 2007; and

(G) Petroleum Equipment Institute Recommended Practice RP1200 12, Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities, 2012.

(b) The owner or operator shall maintain records of each repair in accordance with 18 AAC 78.056 until the UST is permanently closed or undergoes a change-in-service in accordance with 18 AAC 78.085.

(c) Repealed 9/27/2018.

(d) For purposes of this section, after a release has occurred, "repair"

(1) means to correct or restore a UST, or any part of a UST, that routinely contains petroleum, including repairs to the tank vessel, pipes, valves, fillpipes, or vents;

(2) does not include routine maintenance; for purposes of this paragraph, “routine maintenance” means the normal operational upkeep to prevent a UST system from releasing product. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: Information about how to review or obtain a copy of the publications adopted by reference in 18 AAC 78.055 is in the editor's note at 18 AAC 78.025.

18 AAC 78.056. Reporting and recordkeeping requirements. (a) The owner or operator of a UST shall cooperate fully

(1) during inspections, monitoring, and testing conducted by the department, its designee, or a representative of the United States Environmental Protection Agency; and

(2) in response to requests for document submission, testing, and monitoring by the owner or operator under 42 U.S.C. 6991d (sec. 9005 of the Solid Waste Disposal Act).

(b) The owner or operator of a UST shall submit the following information to the department:

(1) the applicable registration information and forms required under AS 46.03.380(b), 46.03.385(d), 46.03.400, and 18 AAC 78.015;

(2) notification for all USTs in accordance with 18 AAC 78.035; the notification includes certification in accordance with 18 AAC 78.025(i) of installation for new USTs and notification in accordance with 18 AAC 78.035(b) when any person assumes ownership of a UST;

(3) notification in accordance with 18 AAC 78.025(d) before installation and notification in accordance with 18 AAC 78.035(g) before a change in configuration;

(4) notification in accordance with 18 AAC 78.050(b) before USTs switch to certain products;

(5) if applicable, reports of all releases including

(A) suspected releases in accordance with 18 AAC 78.200;

(B) spills or overfills in accordance with 18 AAC 78.212;

(C) confirmed releases in accordance with 18 AAC 78.220; and

(D) corrective actions planned or taken, including

(i) initial abatement measures in accordance with 18 AAC 78.230;

(ii) release investigation in accordance with 18 AAC 78.235;

(iii) free product removal in accordance with 18 AAC 78.240;

(iv) soil and groundwater cleanup in accordance with 18 AAC 78.600 - 18 AAC 78.625; and

(v) a copy of the corrective action plan in accordance with 18 AAC 78.250;

(6) notification in accordance with 18 AAC 78.085(a) before permanent closure or change-in-service;

(7) a post-closure notification form in accordance with 18 AAC 78.085(c)(6)(A) after permanent closure or change-in-service;

(8) a notification in accordance with 18 AAC 78.085(c)(6)(B) indicating whether closure requirements were met;

(9) a site assessment in accordance with 18 AAC 78.090 after closure or change-in-service; and

(10) an operations inspection report in accordance with 18 AAC 78.059.

(c) The owner or operator shall maintain the following information for the time period specified in the referenced section unless indicated otherwise in this subsection:

(1) in accordance with 18 AAC 78.025(e)(4) and (f)(3), a corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used;

(2) documentation in accordance with 18 AAC 78.045(f) of operation of corrosion protection;

(3) documentation in accordance with 18 AAC 78.050(c) of compatibility for USTs;

(4) documentation in accordance with 18 AAC 78.030 of UST upgrades and documentation in accordance with 18 AAC 78.055(b) of UST repairs;

(5) documentation in accordance with 18 AAC 78.057(c) of compliance for spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping;

(6) documentation in accordance with 18 AAC 78.058(b) of periodic walkthrough inspections and documentation in accordance with 18 AAC 78.059 of operations inspection reports;

(7) documentation in accordance with 18 AAC 78.072 of compliance with release detection requirements under 18 AAC 78.060 - 18 AAC 78.072;

(8) results in accordance with 18 AAC 78.085 of any site characterization or site assessment conducted at permanent closure or change-in-service;

(9) documentation in accordance with 18 AAC 78.380 of operator training; and

(10) information about any suspected or confirmed release and corrective actions for as long as the UST is used to store petroleum.

(d) The owner or operator shall keep the records required under this section at the UST site and immediately available for inspection by the department, or shall keep them at a readily available alternative site and provide the records to the department upon request. However, in the case of permanent closure records required under 18 AAC 78.087, the owner or operator may mail closure records to the department if they cannot be kept at the site or at an alternative site. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.390 AS 46.03.400
AS 46.03.365 AS 46.03.395 AS 46.03.405
AS 46.03.380

18 AAC 78.057. Periodic testing of spill prevention equipment and containment sumps used for interstitial monitoring of piping, and periodic inspection of overfill prevention equipment. (a) The owner or operator of a UST with spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping must meet the following requirements to ensure that the equipment is operating properly and will prevent releases to the environment:

(1) spill prevention equipment, such as a catchment basin, spill bucket, or other spill containment device, and containment sumps used for interstitial monitoring of piping must prevent releases to the environment by meeting one of the following requirements:

(A) the equipment must be double-walled and the integrity of both walls must be periodically monitored at a frequency not less than the frequency of the walkthrough inspections described in 18 AAC 78.058; an owner or operator must begin meeting (B) of this paragraph and conduct a test not later than 30 days after discontinuing periodic monitoring of this equipment; or

(B) to ensure that the equipment is liquid-tight, the spill prevention equipment and containment sumps used for interstitial monitoring of piping must be tested at least once every three years by using vacuum, pressure, or liquid testing in accordance with one of the following criteria:

(i) requirements developed by the manufacturer, if the manufacturer has developed requirements;

(ii) a nationally recognized code of practice; or

(iii) requirements determined by the department to be no less protective of human health and the environment than the requirements listed in (i) and (ii) of this subparagraph;

(2) overfill prevention equipment must be inspected at least once every three years; at a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level specified in 18 AAC 78.025(g) and will activate when petroleum reaches that level; inspections must be conducted in accordance with one of the criteria in (1)(B)(i) - (iii) of this subsection; and

(3) to meet the requirements of (1)(B) and (2) of this subsection, an owner or operator shall ensure that one of the following is used:

(A) Petroleum Equipment Institute Recommended Practice RP1200-12, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*, 2012, adopted by reference; or

(B) another procedure, code, or standard that is no less protective of human health and safety and the environment and approved by the department.

(b) The owner or operator shall begin meeting the requirements of (a) of this section as follows:

(1) for USTs in use on or before October 13, 2015, the initial spill prevention equipment test, containment sump test, and overfill prevention equipment inspection must be conducted not later than October 13, 2018; and

(2) for USTs brought into use after October 13, 2015, these requirements apply at installation.

(c) The owner or operator shall maintain records as follows, in accordance with 18 AAC 78.056, for spill prevention equipment, containment sumps used for interstitial monitoring of piping, and overfill prevention equipment:

(1) all records of testing or inspection must be maintained for three years; and

(2) for spill prevention equipment and containment sumps used for interstitial monitoring of piping not tested every three years, documentation showing that the prevention equipment is double walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.058. Periodic operation and maintenance walkthrough inspections. (a) To properly operate and maintain USTs, and not later than October 13, 2018, an owner or operator must meet one of the following requirements:

(1) conduct a walkthrough inspection that, at a minimum, checks the following equipment at the following specified times:

(A) every 30 days, except that spill prevention equipment at USTs receiving deliveries at intervals greater than every 30 days may be checked before each delivery,

(i) the owner or operator shall visually check spill prevention equipment for damage, remove liquid or debris, check for and remove obstructions in the fill pipe, and, for double-walled spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area; and

(ii) the owner or operator shall check release detection equipment to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present, and the owner or operator shall ensure that records of release detection testing are reviewed and current; and

(B) annually,

(i) the owner or operator shall visually check containment sumps for damage, leaks to the containment area, or releases to the environment, remove liquid in contained sumps, remove debris, and, for double-walled sumps with interstitial monitoring, check for a leak in the interstitial area; and

(ii) the owner or operator shall check hand-held release detection equipment, such as tank gauge sticks or groundwater bailers, for operability and serviceability;

(2) conduct operation and maintenance walkthrough inspections according to a standard nationally recognized code of practice that checks equipment in a manner comparable to the checks required under (1) of this subsection; to meet the requirements of this paragraph, an owner or operator shall ensure that one of the following are used:

(A) Petroleum Equipment Institute Recommended Practice RP 900-08, *Recommended Practices for the Inspection and Maintenance of UST Systems*, 2008, adopted by reference; or

(B) another procedure, code, or standard that is no less protective of human health and safety and the environment and approved by the department; or

(3) conduct operation and maintenance walkthrough inspections developed by the department that checks equipment in a manner comparable to the checks required under (1) of this subsection.

(b) The owner or operator shall maintain records of operation and maintenance walkthrough inspections in accordance with 18 AAC 78.056. Records must include a list of each area checked, whether each area checked was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every 30 days due to infrequent deliveries. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.059. Operations inspection. (a) Except as provided in (b) and (c) of this section, the owner or operator of a UST system shall have each UST inspected at least every three years to determine compliance with the release detection, spill and overfill prevention, and corrosion protection requirements of this chapter. Each inspection must be performed by an inspector who is certified under 18 AAC 78.410 and must include, as applicable, examination, assessment, testing, and documentation of the following for the UST system inspected:

(1) equipment;

(2) procedures;

(3) operations;

(4) maintenance; and

(5) recordkeeping.

(b) Unless another date is approved under (d) of this section, an initial inspection of each UST at the facility must occur no sooner than April 30 and no later than August 31 of the year specified in the following table:

Initial Inspection Requirements		
Last Digit of ADEC Facility ID Number	For UST registered on or before June 1, 2000	For UST registered after June 1, 2000
	Year Inspection due	Year Inspection Due
1	2000	The third calendar year after registration.
2	2000	
3	2000	
4	2000	
5	2001	
6	2001	
7	2001	
8	2002	
9	2002	
0	2002	

(c) For a UST facility with multiple registration dates, all USTs shall be inspected no later than the earliest applicable date specified in the table in (b) of this section.

(d) In a geographic area of the state in which obtaining an inspection may cost more because an inspector does not routinely offer services in that area, two or more owners or operators may arrange for an inspector to inspect a group of USTs in that area at the same time. The inspection must be completed on or before the earliest applicable date specified in the table in (b) of this section unless the department grants an extension. The department will grant an extension for a group of tanks under this subsection, upon request, if the department determines that an earlier date is not practicable. The department will not grant an extension beyond the last applicable date specified in the table in (b) of this section for a facility in the group receiving the extension. The department will provide a temporary extension tag, decal, or notice for a UST that receives an extension under this subsection.

(e) An inspection is not required for a tank that is permanently out of service.

(f) A person performing an inspection must be a certified inspector under 18 AAC 78.410 and shall ensure that the inspection conforms to the requirements in 18 AAC 78.455(a)(5).

(g) Not later than 30 days after a satisfactory operations inspection is completed or not later than September 30 of the year the inspection is due, whichever is earlier, the inspector who performed the inspection of the UST system shall provide to the department the results of the inspection on a form provided by the department. The form must be signed by the certified inspector who conducted the inspection and the owner or operator of the UST system.

(h) If, after inspection, the inspector finds that the UST system is not in compliance with this chapter,

(1) the inspector shall notify the owner or operator of non-compliance;

(2) not later than 10 days after the inspection was performed, the inspector shall submit the inspection report to the department;

(3) the department will consider the UST system to be a substandard UST until required repairs are completed in accordance with 18 AAC 78.055;

(4) the department will place the UST on the acceptance, delivery, and deposit prohibition under 18 AAC 78.018(a), and the owner or operator shall return, not later than 60 days after the inspection was performed, the tag, decal, or notice for the UST system to the department, unless

(A) the required repairs have been completed in accordance with 18 AAC 78.055 and the department receives documentation of those repairs; or

(B) the department

(i) receives from the owner or operator a written request accompanied by detailed repair information and a schedule of repairs; and

(ii) grants a temporary deferral under 18 AAC 78.018(c) of any prohibition on the acceptance, delivery, or deposit of petroleum; and

(5) the UST system must be temporarily taken out of service not later than 90 days after the date of inspection, unless the department has granted a temporary deferral under (4) of this subsection and 18 AAC 78.018(c); a substandard UST must be permanently closed under 18 AAC 78.085 not later than 15 months after the date of inspection unless an earlier date is required under 18 AAC 78.080(f).

(i) The owner or operator shall maintain the results of inspections performed under this section for as long as the UST is used to store petroleum. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375 AS 46.03.380 AS 46.03.385 AS 46.03.395 AS 46.03.400 AS 46.03.405

18 AAC 78.060. Release detection requirements for USTs. (a) The owner or operator of a UST shall provide a method, or combination of methods, of release detection that

(1) can detect a release from any portion of the tank and the connected underground piping that routinely contains petroleum;

(2) is installed and calibrated in accordance with the manufacturer's instructions;

(3) meets the performance requirements in 18 AAC 78.065 or 18 AAC 78.070, or 18 AAC 78.705 with any performance claims and the manner of determination described in writing by the equipment manufacturer or installer;

(4) is capable of detecting a leak as specified in 18 AAC 78.065(c), (d), (e), (i), or (j), 18 AAC 78.070(b), (c), or (d), or 18 AAC 78.705 with a probability of detection of 95 percent and a probability of false alarm of five percent; and

(5) is operated and maintained, and electronic and mechanical components are tested for proper operation, in accordance with the manufacturer's instructions, a nationally recognized code of practice, or requirements determined by the department to be no less protective of human health and the environment than the requirements listed in (1) and (2) of this subsection; as follows, the owner or operator shall perform a test of the proper operation at least annually and, at a minimum, as applicable to the facility, shall cover the following components and criteria:

(A) the owner or operator shall test the automatic tank gauge and other controllers, including a test of the alarm, verification of system configuration, and a test of the battery backup;

(B) the owner or operator shall test the probes and sensors, including an inspection for residual buildup, shall ensure that floats move freely, shall ensure that the shaft is not damaged, shall ensure that cables are free of kinks and breaks, shall test alarm operability and communication with the controller, and shall remove probes from the tank to be properly inspected;

(C) the owner or operator shall test the operation of the automatic line leak detector to meet criteria in 18 AAC 78.070(b) by simulating a leak;

(D) the owner or operator shall test vacuum pumps and pressure gauges to ensure proper communication with sensors and the controller;

(E) the owner or operator shall test hand-held electronic sampling equipment associated with groundwater and vapor monitoring to ensure proper operation; and

(F) to meet the requirements of this paragraph, an owner or operator shall ensure that one of the following is used:

(i) Petroleum Equipment Institute Publication RP1200-12, Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities, 2012, adopted by reference; or

(ii) another procedure, code, or standard that is no less protective of human health and safety and the environment and approved by the department

(b) When a release detection method operated in accordance with the performance standards in 18 AAC 78.065, 18 AAC 78.070, or 18 AAC 78.700 – 18 AAC 78.705 indicates a

release may have occurred, the owner or operator shall notify the department as required under 18 AAC 78.200 – 18 AAC 78.280.

(c) repealed 11/3/95.

(d) The owner or operator of an existing UST who cannot apply a method of release detection meeting the requirements of this section shall permanently close the UST in accordance with 18 AAC 78.085. For previously deferred USTs described in 18 AAC 78.005 and 18 AAC 78.700 - 18 AAC 78.705, this subsection applies after

(1) October 13, 2018, for a UST described in 18 AAC 78.005(b)(2);

(2) October 13, 2015, for a UST described in 18 AAC 78.005(b)(3); and

(3) October 13, 2018, for a UST described in 18 AAC 78.700(a).

(e) Tanks must be monitored for releases as follows:

(1) tanks installed on or before April 11, 2016 must be monitored for releases at least every 30 days using one of the methods listed in 18 AAC 78.065(e) - (j), except that

(A) USTs that meet the performance standards in 18 AAC 78.025 or 18 AAC 78.030, and that meet the monthly inventory control requirements in 18 AAC 78.065(b) or the manual tank gauging requirements in 18 AAC 78.065(c), may use tank tightness testing in accordance with 18 AAC 78.065(d) at least every five years until October 13, 2025; and

(B) tanks with a capacity of 550 gallons or less and tanks with a capacity of 551 to 1,000 gallons that meet the tank diameter criteria in 18 AAC 78.065(c) may use manual tank gauging in accordance with 18 AAC 78.065(c);

(2) tanks installed on or after July 25, 2012 and before April 11, 2016 and within 1,000 feet of an existing community water system as defined under 18 AAC 80.1990(a), an existing potable water system as defined under 18 AAC 80.1990(a), or a sole source aquifer as defined under 18 AAC 75.990 must be monitored for releases at least every 30 days; and

(3) tanks installed after April 11, 2016 must be monitored for releases at least every 30 days in accordance with 18 AAC 78.065(h).

(f) Underground piping that routinely contains petroleum must be monitored for releases in a manner that meets one of the following requirements:

(1) piping installed on or before April 11, 2016 must meet one of the following requirements:

(A) underground piping that conveys petroleum under pressure must

(i) be equipped with an automatic line leak detector in accordance with 18 AAC 78.070(b); and

(ii) have an annual line tightness test conducted in accordance with 18 AAC 78.070(c) or have monthly monitoring conducted in accordance with 18 AAC 78.070(d); or

(B) underground piping that conveys petroleum under suction must either have a line tightness test conducted at least every three years and in accordance with 18 AAC 78.070(c) or use a monthly monitoring method conducted in accordance with 18 AAC 78.070(d); release detection is not required for suction piping that is designed and constructed to meet the following standards:

(i) the below-grade piping operates at less than atmospheric pressure;

(ii) the below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

(iii) only one check valve is included in each suction line;

(iv) the check valve is located directly below and as close as practical to the suction pump; and

(v) a method is provided that allows compliance with (ii) - (iv) of this subparagraph to be readily determined;

(2) piping installed on or after July 25, 2012 and before April 11, 2016 and within 1,000 feet of an existing community water system as defined under 18 AAC 80.1990(a), an existing potable water system as defined under 18 AAC 80.1990(a), or a sole source aquifer as defined under 18 AAC 75.990 must be monitored for releases at least every 30 days; and

(3) piping installed or replaced after April 11, 2016 must meet one of the following requirements:

(A) piping that conveys petroleum under pressure must be monitored for releases at least every 30 days in accordance with 18 AAC 78.065(h) and be equipped with an automatic line leak detector in accordance with 18 AAC 78.070(b); or

(B) piping that conveys petroleum under suction must be monitored for releases at least every 30 days in accordance with 18 AAC 78.065(h); release detection is not required for suction piping that meets (1)(B)(i) - (v) of this subsection. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.395

18 AAC 78.065. Release detection methods for tanks. (a) **General requirements.** Each method of release detection for tanks that is used to meet the requirements of 18 AAC 78.060 must meet the requirements of this section.

(b) **Inventory Control.** Inventory control must be capable of detecting a release of at least 1.0 percent of flow-through plus 130 gallons monthly. Inventory control must be conducted monthly as follows:

(1) inventory volume measurements are recorded each operating day for petroleum

(A) inputs;

(B) withdrawals; and

(C) amount remaining in the tank;

(2) the equipment used is capable of measuring the level of petroleum over the full range of the tank's height to the nearest one-eighth of an inch;

(3) at the time of delivery, inputs of petroleum are reconciled with delivery receipts, by measurement of the tank inventory volume before and after delivery;

(4) deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(5) dispensing is metered and recorded within state standards for meter calibration;

(6) at least once a month, the measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch; and

(7) the information generated under this subsection must be reviewed, analyzed and certified by signature monthly by the owner or operator; and

(8) to meet the requirements of this subsection, an owner or operator shall ensure that one of the following are used:

(A) practices described in the American Petroleum Institute Recommended Practice RP 1621, Bulk Liquid Stock Control at Retail Outlets, Fifth Edition, May 1993, adopted by reference; or

(B) another procedure, code, or standard that is no less protective of human health and safety and the environment and approved by the department.

(c) **Manual tank gauging.** Manual tank gauging must meet the following requirements:

(1) tank liquid level measurements must be taken at the beginning and end of a period, using the appropriate minimum duration of test value in Table A of this subsection, during which no liquid is added to or removed from the tank;

(2) level measurements must be based on an average of two consecutive stick readings at both the beginning and ending of the period;

(3) the equipment used must be capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch;

(4) testing must be conducted at least once each week, and the four weekly results must be averaged to obtain a monthly result; a release is suspected and subject to the requirements of 18 AAC 78.200 - 18 AAC 78.280 if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table A of this subsection; and

(5) owners and operators of tanks with a nominal capacity of 550 gallons or less, and owners and operators of tanks with a nominal capacity of 551 to 1,000 gallons and a tank diameter of 48 or 64 inches may use the method in this subsection as the sole method of release detection; owners and operators of all other tanks with a nominal capacity of 551 to 2,000 gallons may use the method in this subsection in combination with periodic tank tightness testing in place of inventory control in (b) of this section; owners and operators of tanks with a nominal capacity greater than 2,000 gallons may not use the method in this subsection to meet the requirements of this section.

TABLE A

Nominal tank capacity	**Minimum duration of test**	**Weekly standard (one test)**	**Monthly standard (four test average)**
550 gallons or less	36 hours	10 gallons	5 gallons
551 - 1,000 gallons, when tank diameter is 64 inches	44 hours	9 gallons	4 gallons
551 - 1,000 gallons, when tank diameter is 48 inches	58 hours	12 gallons	6 gallons
551 - 1,000 gallons, when tank diameter is not 48 or 64 inches	36 hours	13 gallons	7 gallons
1,001 - 2,000 gallons	36 hours	26 gallons	13 gallons

(d) Tank tightness testing. Tank tightness testing, or another test of equal performance, must be capable of detecting a 0.1 gallon per hour leak rate from any part of a tank, including the associated piping, that routinely contains petroleum, while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. To satisfy the requirements of this subsection,

(1) the owner or operator may use only tank tightness tests that have been developed and reviewed by a nationally recognized association or third-party testing laboratory and that meet or exceed the criteria for the detection of leaks set out in the United States Environmental Protection Agency's manuals Standard Test Procedures for Evaluating Leak Detection Methods: Volumetric Tank Tightness Testing Methods, March 1990 (EPA/530/UST-90/004), and Standard Test Procedures for Evaluating Leak Detection Methods: Nonvolumetric Tank Tightness Testing Methods, March 1990 (EPA/530/UST-90/005), the provisions of which are adopted by reference;

(2) the tests required under this subsection must be performed by a person certified under this chapter;

(3) the owner or operator shall submit to the department a certified copy of the evaluation results indicating that the criteria have been met or exceeded and a copy of the manufacturer's test protocol;

(4) an owner or operator may use tank tightness testing only if

(A) the UST meets the performance standards set out in 18 AAC 78.025 or 18 AAC 78.030; and

(B) the owner or operator complies with the monthly inventory control requirements set out in (b) of this section or the manual tank gauging requirements set out in (c) of this section;

(5) if tank tightness testing is used, the test must be conducted every five years for 10 years after the tank is installed or upgraded, whichever is later;

(6) the combination of tank tightness testing and either inventory control or manual tank gauging is a temporary release detection method and may not be used for more than the period of time indicated in 18 AAC 78.060(e)(1)(A); after that period, a permanent monthly release detection method must be used; and

(7) the department may disapprove a tank tightness test or testing system under this subsection if the

(A) test or testing system fails to disclose leaks that fall within the boundaries of the criteria stated in this subsection; or

(B) tester is not certified by the manufacturer of the test or testing system

(e) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of petroleum and conducts inventory control must meet the following requirements:

(1) the automatic product level monitor test must be able to detect a 0.2 gallon per hour leak rate from any part of the tank that routinely contains petroleum and a release of 150 gallons within a 30-day period;

(2) the automatic tank gauging equipment must meet the inventory control, or other test of equivalent performance, requirements of (b)(6) of this section; and

(3) the test must be performed with the system operating in one of the following modes:

(A) in-tank static testing conducted at least once every 30 days; or

(B) continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the tank at least once every 30 days.

(f) **Soil Gas Vapor Monitoring.** Vapor monitoring may be used only at certain sites and only with department approval. The department will, in its discretion, approve the testing or monitoring of soil gas vapors in the excavation zone if the following requirements are met:

(1) material used as backfill is sufficiently porous to readily allow diffusion of vapors from a release into the excavation area; for purposes of this paragraph, gravel, sand, or crushed rock are "sufficiently porous" materials;

(2) the stored petroleum, or a tracer compound placed in the tank system, is sufficiently volatile to result in a vapor level that is detectable by the monitoring devices located in the excavation zone if a release from the tank occurs; for purposes of this paragraph, gasoline is “sufficiently volatile;”

(3) the measurement of vapors by the monitoring device is not rendered inoperative by groundwater, rainfall, soil moisture, other local climatological, geologic, or hydrogeologic conditions, or other known interference so that a release could go undetected for more than 30 days;

(4) the level of background contamination in the excavation zone will not interfere with the method used to detect a release from the tank;

(5) the vapor monitors are designed and operated to detect any significant increase in concentration above background of

(A) petroleum stored in the tank system;

(B) a component or components of the petroleum; or

(C) a tracer compound placed in the tank system;

(6) the UST excavation zone is assessed as required by 18 AAC 78.090 to

(A) ensure compliance with (1) - (4) of this subsection; and

(B) establish the number and positioning of observation wells that will detect a release within the excavation zone from any part of a tank that routinely contains petroleum; and

(7) observation wells are clearly marked and secured to avoid unauthorized access and tampering.

(g) Groundwater monitoring. Groundwater monitoring may be used with department approval. Testing or monitoring for liquids in the groundwater must meet the following requirements:

(1) the petroleum stored must be immiscible in water and must have a specific gravity of less than one;

(2) groundwater may not be, at any point, more than 20 feet from the ground surface and the hydraulic conductivity of the soil between the UST and the monitoring wells or devices may not be less than 0.01 centimeters per second;

(3) the slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of petroleum on the water table into the well under both high and low groundwater conditions;

(4) monitoring wells must be sealed from the ground surface to the top of the filter pack;

(5) monitoring wells or devices must intercept the excavation zone or be as close to it as is technically feasible;

(6) the continuous monitoring devices or manual methods used must be able to detect the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells;

(7) within and immediately below the UST excavation zone, the site must be assessed to ensure compliance with the requirements in (1) - (5) of this subsection and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains product; and

(8) monitoring wells must be clearly marked and secured to avoid unauthorized access and tampering.

(h) **Interstitial Monitoring.** Interstitial monitoring between the UST or pipe and a secondary barrier immediately around or beneath the UST or pipe may be used only if the system

(1) is designed, constructed, and installed to detect a leak from any part of a tank or pipe that routinely contains petroleum; and

(2) meets one of the following requirements:

(A) for a double-walled UST, including piping, the sampling or testing method is capable of detecting a release through the inner wall in any part of a tank or pipe that routinely contains petroleum;

(B) for a UST with a secondary barrier within the excavation zone, the sampling or testing method used is capable of detecting a release between the UST and the secondary barrier as follows:

(i) the secondary barrier around or beneath the UST consists of artificially constructed material that is sufficiently thick and impermeable to direct a release to the monitoring point and permit its detection; for purposes of this clause, "sufficiently thick and impermeable" means having a permeability of at least 10^{-6} cm/sec for the petroleum stored;

(ii) the barrier is compatible with the petroleum stored so that a release from the UST will not cause a deterioration of the barrier and allow a release to pass through undetected;

(iii) for a cathodically protected tank, the secondary barrier must be installed so that it does not interfere with proper operation of the cathodic protection system;

(iv) groundwater, soil moisture, or rainfall will not render the testing or sampling method inoperative so that a release could go undetected for more than 30 days;

(v) the site is assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year floodplain, unless the barrier and monitoring designs are for use under those conditions; and

(vi) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering; or

(C) for a tank with an internally fitted liner, an automated device is capable of detecting a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.

(i) **Statistical Inventory Reconciliation.** Third-part reviewed and certified release detection methods based on the application of statistical principles to inventory data similar to those described in (b) of this section must meet the following requirements:

(1) the release detection methods must be capable of detecting a leak rate of 0.2 gallons per hour or a release of 150 gallons not later than 30 days;

(2) the release detection methods must use a threshold that does not exceed one-half the minimum detectable leak rate; and

(3) the release detection methods must report a quantitative result with a calculated leak rate.

(j) **Other Methods**. Any other type of release detection method, or combination of such other methods, may be used with prior approval, if the method or combination of methods can, for volumetric release detection methods, detect a 0.2 gallon per hour leak rate or a release of 150 gallons in a 30-day period with a probability of detection of 95 percent and a probability of a false alarm of five percent. For non-volumetric release detection methods, the department may approve another method of release detection not described in (d) – (i) of this section, if the owner or operator shows that the method can detect a release as effectively as any of the methods allowed in (d) - (i) of this section. In comparing methods, the department will consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner or operator shall comply with any conditions imposed by the department on its use to ensure the protection of human health and safety and the environment.

(k) **Certification of performance standards.** The National Work Group on Leak Detection Evaluations' *List of Leak Detection Evaluations for Underground Storage Tank (UST) Systems,* 17th Edition, January 11, 2010, shall be used to determine compliance with the applicable performance standards for automatic tank gauging, statistical inventory reconciliation, tightness testing, electronic interstitial monitoring, and automatic line leak detectors. The *List of Leak Detection Evaluations for Underground Storage Tank (UST) Systems,* 17th Edition, January 11, 2010, is adopted by reference. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 6/25/99, Register 150; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: 1. The American Petroleum Institute Recommended Practice 1621, *Bulk Liquid Stock Control at Retail Outlets*, Fifth Edition, May 1993, adopted by reference in 18 AAC 78.065(b), may be reviewed at the Department of Environmental Conservation’s office in Anchorage.

2. The provisions outlined in the Steel Tank Institute's *Standard for Dual Wall Underground Steel Storage Tanks,* F841, revised January 2006 , may be used as guidance for aspects of the design and construction of underground steel double-walled tanks as described in (h)(2)(A) of this section.

3. The National Work Group on Leak Detection Evaluation’s *List of Leak Detection Evaluations for Underground Storage Tank (UST) Systems,* 17th Edition, January 11, 2010, adopted by reference in 18 AAC 78.065, may be reviewed at the Department of Environmental Conservation’s office in Anchorage or may be obtained on the Internet at http://www.nwglde.org.

4. The tank tightness testing documents referred to in Notes 1 and 2 may be reviewed at the Department of Environmental Conservation’s office in Anchorage or may be obtained from the publisher at the address listed in the editor's note at 18 AAC 78.025.

5. The United States Environmental Protection Agency tank tightness testing documents referred to in 18 AAC 78.065(d) may be reviewed at the Department of Environmental Conservation's office in Anchorage or may be obtained from:

United States Environmental Protection Agency (EPA), Office of Underground Storage Tanks, 1200 Pennsylvania Ave., NW, Mail Code 5401P, Washington, D.C. 20460; telephone: (703) 603-9900; Internet address: http://www.epa.gov/;

United States Government Bookstore, 717 North Capitol St. NW, Washington, D.C. 20401; telephone: (866) 512-1800; facsimile: (202) 512-2104; Internet address: http://bookstore.gpo.gov/.

18 AAC 78.070. Release detection methods and monitoring for piping. (a) **General requirement.** Each method of release detection for piping used to meet the requirements of 18 AAC 78.060 must be conducted as required under this section.

(b) **Automatic line leak detection.** An automatic leak detection method that alerts the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or by triggering an audible or visual alarm may be used only if that method is capable of detecting a leak of three gallons per hour at 10 pounds per square inch line pressure within one hour. An annual test of the operation of the leak detector must be conducted in accordance with 18 AAC 78.060(a)(5). A stand-alone sump sensor is not sufficient to meet this requirement.

(c) **Line tightness testing.** A periodic tightness test of piping may be conducted only if the tightness test is capable of detecting a 0.1 gallon per hour leak rate at one and one half times the line's normal operating pressure. The test must be performed by a person certified under this chapter. Where a line leak detector is installed on the piping that has the same leak detection capability as the tightness test specified in 18 AAC 78.065(d), the tightness test may be omitted.

(d) **Applicable tank methods.** Except as described in 18 AAC 78.060(e), any monitoring method set out in 18 AAC 78.065(f) - (j) may be used if that method is designed to detect a release from any part of the underground piping that routinely contains petroleum and that method is used monthly. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.072. Release detection recordkeeping. (a) The owner or operator of a UST shall maintain records in accordance with 18 AAC 78.056 demonstrating compliance with all applicable requirements of this section. The records must include the information required under this section.

(b) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, must be maintained for five years from the date of installation or as long as the release

detection system is in service, whichever period is longer. Records of site assessments required under 18 AAC 78.065(f)(6) and (g)(7) must be maintained for as long as the methods are used. Records of site assessments must be signed by a qualified environmental professional.

(c) The results of any sampling, testing, or monitoring must be maintained for at least one year, except as follows:

(1) the results of annual operation tests conducted in accordance with 18 AAC 78.060(a)(5) must be maintained for three years; at a minimum, the results must list each component tested, indicate whether each component tested meets criteria in 18 AAC 78.060(a)(5) or needs to have action taken, and describe any action taken to correct an issue;

(2) the results of tank tightness testing conducted in accordance with 18 AAC 78.065(d) must be retained until the next test is conducted; and

(3) the results of tank tightness testing, line tightness testing, and vapor monitoring using a tracer compound placed in the tank system conducted in accordance with 18 AAC 78.705(d) must be retained until the next test is conducted.

(d) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on site must be maintained for at least one year after the servicing work is completed. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer must be retained for five years from the date of installation. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.075. Release detection monitoring requirements. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/30/2003, Register 165)

18 AAC 78.080. Temporary closure. (a) If a UST is temporarily closed, an owner or operator shall notify the department on a form supplied by the department and shall continue operation and maintenance of corrosion protection in accordance with 18 AAC 78.045 and any release detection in accordance with 18 AAC 78.060 – 18 AAC 78.072 and 18 AAC 78.700 – 18 AAC 78.705.

(b) If a release is suspected or confirmed during the temporary closure, the applicable requirements of 18 AAC 78.200 - 18 AAC 78.280 must be met.

(c) Release detection and release detection operation, maintenance testing, and inspections are not required if the UST is empty and taken out of service and the owner or operator submits to the department an *Empty Tank Affidavit* form, adopted by reference in 18 AAC 78.015(d). The UST is empty when all materials have been removed using commonly employed practices so that not more than 2.5 centimeters (one inch) of residue, or 0.3 percent by

weight of the total capacity of the UST, remain in the system. In addition, spill and overfill operation and maintenance testing and inspections are not required.

(d) If a UST is temporarily closed for three months or longer, the owner or operator shall

(1) leave vent lines open and functioning; and

(2) cap and secure all other lines, pumps, manways, and ancillary equipment.

(e) A substandard UST may be temporarily closed or temporarily taken out of service for more than 12 months only with department approval. The department may grant approval under this subsection only if

(1) the UST meets the performance standards in 18 AAC 78.025 for a new UST, or the upgrading requirements of 18 AAC 78.030, except that the spill and overfill equipment requirements of 18 AAC 78.030(f) need not be met; and

(2) a site assessment is completed as required by 18 AAC 78.090.

(f) Unless the department has approved temporary closure or temporarily taken out of service for more than 12 months under (e) of this section, the owner or operator shall

(1) after 12 months permanently close a substandard UST as required by 18 AAC 78.085; and

(2) complete a site assessment as required by 18 AAC 78.090.

(g) No person may use temporary closure to avoid the upgrading requirements of 18 AAC 78.030.

(h) The owner or operator of a UST that is temporarily closed on a seasonal basis, because of weather or other seasonal conditions, may apply to the department for a waiver under this section. No waiver will be granted for the requirements of (b) or (d) of this section.

(i) An owner or operator of a UST that is temporarily closed or temporarily taken out of service shall maintain financial responsibility as required in 18 AAC 78.910. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.085. Permanent closure and change-in-service. (a) At least 15 days, but not more than 60 days, before beginning permanent closure under (c) of this section or a change-in-service under (d) of this section, the owner or operator shall notify the department, in writing, on a form provided by the department. The department will waive the minimum 15-day notification period if the owner or operator demonstrates that meeting the notification deadline would prevent the project from being completed or would be detrimental to human health or

safety or to the environment. The owner or operator shall report a change in the stated date of closure or change-in-service to the department office in Anchorage at least three days before the scheduled closure or change-in-service. If closure does not occur within 60 days after the date given in the notice, the owner or operator shall submit a new notice to the department, indicating the actual closure date. The requirements of this subsection do not apply if

(1) the closure or change-in-service is in response to corrective action under 18 AAC 78.200 - 18 AAC 78.240; in that case, notification is as specified in 18 AAC 78.200 - 18 AAC 78.240; or

(2) a UST is taken out of service or closed because of an emergency; in that case, the owner or operator shall notify the

(A) department within 24 hours; and

(B) applicable local government and fire department; the owner or operator might be subject to additional requirements imposed by those agencies.

(b) A site characterization and assessment, if required, must be performed in accordance with 18 AAC 78.090 after notifying the department, local government, and fire department, but before completion of permanent closure or change-in-service.

(c) To permanently close a tank, the owner or operator shall

(1) empty and clean it by removing all liquid and accumulated sludge;

(2) describe in the notice required under (a) of this section the intended method for disposal of the liquid and accumulated sludge;

(3) remove from the ground all tanks and associated piping taken out of service permanently, fill them with an inert or solid material, or close them in place in a manner approved by the department; a permanently closed UST or a UST associated with a known release must be removed from the ground unless the department allows the tank to remain in place with a professional engineer's signed statement that removal of the tank would endanger existing structures; the resulting excavation must be investigated and corrective action completed as required under 18 AAC 78.230 - 18 AAC 78.280 and 18 AAC 78.600 - 18 AAC 78.625; the owner or operator shall document the name of the disposal firm, the disposal method, and the disposal location for all liquids, sludges, and UST components, including tanks, piping, and equipment;

(4) conduct a site characterization in accordance with 18 AAC 78.090;

(5) conduct either a site assessment or a release investigation in accordance with 18 AAC 78.090 and 18 AAC 78.235; and

(6) not later than 30 days after closure,

(A) submit a completed post-closure notice;

(B) notify the department as to whether all applicable local, state, and federal closure requirements were met; and

(C) comply with 18 AAC 78.090 and, if applicable, 18 AAC 78.210.

(d) Continued use of a UST to store a substance other than petroleum, or to store heating oil for consumptive use on the premises as the sole use of the UST, is a change-in-service. The owner or operator shall,

(1) before a change in service,

(A) empty and clean the tank by removing all liquid and accumulated sludge;

(B) conduct a site characterization as prescribed in 18 AAC 78.090;

(C) conduct either a site assessment or a release investigation as prescribed in 18 AAC 78.090 and 18 AAC 78.235; and

(D) describe in the notice required under (a) of this section the intended method for disposal of the liquid and accumulated sludge; and

(2) not later than 30 days after the change-in-service, submit a completed post-closure notice and comply with 18 AAC 78.090 and 18 AAC 78.210, if applicable.

(e) Repealed 9/27/2018.

(f) Repealed 9/27/2018.

(g) The following UST cleaning and closure procedures, the provisions of which are adopted by reference, must be used to comply with this section, unless the department, in its discretion, approves an alternate procedure determined by the department to be no less protective of human health and safety and of the environment:

(1) American Petroleum Institute Recommended Practice 1604, *Closure of Underground Petroleum Storage Tanks*, Third Edition, 1996;

(2) American Petroleum Institute Standard 2015-2001, *Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks*, Sixth Edition, August 2001, reaffirmed May 1, 2006;

(3) American Petroleum Institute Standard 1631, *Interior Lining and Periodic Inspection of Underground Storage Tanks*, Fifth Edition, June 2001; and

(4) New England Interstate Water Pollution Control Commission, *Tank Closure Without Tears: An Inspector's Safety Guide*, 1988.

(h) The owner or operator of a UST installed or in service after January 1, 1974, and taken out of service after that date, shall notify the department that the UST was taken out of service by completing and returning a notification form available from the department. If a UST is permanently closed under this section, the owner or operator shall return, not later than 30 days after the UST is permanently closed, all tags issued to that UST.

(i) If the owner or operator of a UST that was closed between December 22, 1988 and September 5, 1990 reported the closure to the department as required by 40 C.F.R. 280.71, as that provision was set out in 1994, that closure notification fulfills the requirements of (h) of this section. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.395 Sec. 7, ch.96, SLA 1990
AS 46.03.365 Sec. 5, ch.96, SLA 1990

Editor's note: 1. The requirements of 18 AAC 78.085(c) might be affected by a local ordinance requiring removal as the only acceptable method of permanent closure. The owner or operator should check with the local fire department to determine if in-place closure is allowed.

2. The documents adopted by reference in 18 AAC 78.085 may be reviewed at the Department of Environmental Conservation’s office in Anchorage or may be obtained from the publisher at the address listed in the editor’s note at 18 AAC 78.025.

18 AAC 78.086. Applicability to previously closed USTs. If the department determines that a release from a UST that was permanently closed before December 22, 1988 might pose a current or potential threat to human health, safety, or the environment, the department will direct the owner or operator of the UST to assess the site as required under 18 AAC 78.090 and to close the UST as required under 18 AAC 78.085. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.087. Closure records. The owner or operator shall maintain records in accordance with 18 AAC 78.056 that are capable of demonstrating compliance with closure requirements under this section. The results of the site characterization or assessment required in 18 AAC 78.090 must be maintained for at least three years after completion of a permanent closure or change-in-service in one of the following ways:

(1) by the owner or operator who took the UST out of service;

(2) by the current owner or operator of the UST site; or

(3) by mailing these records to the department if they cannot be maintained at the closed facility. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.395

18 AAC 78.088. Qualified environmental professionals and qualified samplers. (a) An owner or operator shall ensure that a qualified environmental professional

(1) conducts or supervises the collection of field data and the interpretation and reporting of site characterization and site assessment data required under 18 AAC 78.090(e);

(2) conducts or supervises the collection and interpretation of field data and the reporting of release investigation data required under 18 AAC 78.235(b);

(3) prepares a corrective action plan required under 18 AAC 78.250;

(4) prepares an interim cleanup activities cost estimate, if the estimate is part of a corrective action plan prepared under 18 AAC 78.250;

(5) conducts or supervises sampling and analysis required under 18 AAC 78.271(a)(3), or that a qualified sampler performs sampling described in 18 AAC 78.271(a)(3) if the department approves the use of a qualified sampler under 18 AAC 78.271(a)(3);

(6) prepares a post-treatment sampling and analysis plan required under 18 AAC 78.273(a)(1)(C);

(7) conducts, under 18 AAC 78.275(a), soil and groundwater sampling for a release investigation or associated with a corrective action;

(8) prepares a final corrective action report required under 18 AAC 78.276(a);

(9) conducts or supervises the collection, interpretation, and reporting of data under 18 AAC 78.600;

(10) prepares and signs a report to justify a request for a waiver under 18 AAC 78.930.

(b) For purposes of this chapter, an individual is a qualified environmental professional if the individual

(1) is an impartial third party;

(2) is qualified to perform site characterization and cleanup activities, including

(A) fate and transport analysis;

(B) remediation design; and

(C) other activities associated with contaminated sites;

(3) actively practices in the field of environmental science or another related scientific field;

(4) has not been found to have falsified environmental data or committed other acts of fraud directly related to environmental work; and

(5) meets one or more of the following minimum educational qualification and experience requirements:

(A) has a four-year undergraduate or a graduate degree from a nationally or internationally accredited postsecondary institution in environmental science or another related scientific field, and has 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 subparagraph was obtained;

(B) has a four-year degree from a nationally or internationally accredited postsecondary institution in any field or a two-year associate degree from a nationally or internationally accredited postsecondary institution in environmental science or another related scientific field, and has at least three years of professional experience in contaminated site characterization and cleanup activities under the direct supervision of a qualified environmental professional completed after a degree described in this subparagraph was obtained;

(C) is certified as an environmental technician under an apprenticeship program with a registration under 29 C.F.R. Part 29, and has at least three years of professional experience in contaminated site characterization and cleanup activities under the direct supervision of a qualified environmental professional completed after the certification described in this subparagraph was obtained.

(c) For purposes of this chapter, an individual is a qualified sampler if the individual

(1) is an impartial third party;

(2) collects samples of environmental media for laboratory analysis; in this paragraph, "environmental media"

(A) includes soil, groundwater, and surface water;

(B) does not include air or soil gas;

(3) has not been found to have falsified environmental data or committed other acts of fraud directly related to environmental work;

(4) has successfully completed

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

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

(5) has at least three months of experience in environmental sampling under the direct supervision of a qualified environmental professional completed after the training described in (4)(A) or (B) of this subsection was obtained.

(d) In this section, "another related scientific field" includes engineering, geology, physical science, hydrology, biology, and chemistry. (Eff. 6/17/2015, Register 214)

Authority: AS 46.03.020 AS 46.03.405 AS 46.03.822
AS 46.03.050 AS 46.03.710 AS 46.04.020
AS 46.03.365 AS 46.03 740 AS 46.04.070
AS 46.03.375 AS 46.03.745 AS 46.09.020
AS 46.04.380

18 AAC 78.090. Site characterization and assessment. (a) When performing permanent closure or a change-in-service, the owner or operator shall complete a site characterization, and depending on the results of the site characterization, perform a site assessment or a release investigation.

(b) A site characterization must include one or more of the following:

(1) a visual inspection of the site;

(2) photographs documenting the site;

(3) surface or subsurface soil and water sampling and analytical testing;

(4) personal interviews; and

(5) data review.

(c) If the results of the site characterization indicate that a release of petroleum has

(1) not occurred, the owner or operator shall perform a site assessment in accordance with (d) of this section; or

(2) occurred, or is likely to have occurred, the owner or operator shall proceed with corrective action under 18 AAC 78.200 - 18 AAC 78.280, including release notification and release investigation.

(d) A site assessment, if conducted, must be conducted as follows:

(1) the site assessment must include an evaluation of the UST site to

(A) check for obvious leaks at the dispensers and at exposed pumps and piping;

(B) check for obvious soil or water contamination caused by a release or leakage from a UST;

(C) review the UST inventory control and repair records for indications of a release; and

(D) determine the

(i) general nature of the stored substance;

(ii) general nature of the subsurface soils; and

(iii) estimated depth to groundwater; and

(2) the site assessment must include the collection of soil samples; the number and location of samples collected is determined as follows:

(A) for an in-place assessment

(i) of an individual tank that occupies a surface area less than 250 square feet, at least two borings or test pits must be placed within five feet of the tank, each at the midpoint along two sides of an imaginary rectangle drawn around the tank, with one of the borings or pits located on the side parallel to the end of the tank that has the fill point and the second boring or pit located on the side parallel to the length of the tank where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*;

(ii) of an individual tank that occupies a surface area equal to or greater than 250 square feet, at least two borings or test pits must be placed within five feet of the tank, as required under (i) of this subparagraph; one additional sample must be collected for each additional 250 square feet of surface area, or portion thereof over the initial 250 square feet, at points where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*; for example, if the total surface area is 1,270 square feet, five additional samples are required;

(iii) of multiple tanks, the borings or test pits for each tank must be placed according to (i) or (ii) of this subparagraph, as applicable; the same boring or test pit may be used to satisfy the requirements applicable to more than one tank, if that boring or test pit meets the requirements for each tank separately;

(iv) of dispensing areas, at least one boring or test pit must be placed adjacent to any UST dispensing equipment; if multiple dispensers exist on a common dispensing island, then one boring or test pit may be placed at the midpoint between the dispensers; if multiple dispensing islands exist, then additional borings or test pits are required at each island; if a canopy exists in a configuration that prevents excavating or boring equipment from operating adjacent to the dispensers or dispenser islands, samples may be collected as close as possible to the dispenser islands;

(v) of in-place piping, at least one boring or test pit must be placed adjacent to the piping at points where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*;

(vi) soil samples for assessments under this subparagraph must be collected from each boring or test pit at an elevation that is below, and within two feet of, the tank bottom and that is within two feet below the lowest point of the piping for the UST dispensing equipment; and

(vii) in this subparagraph, "surface area" is the sum of the tank length plus five feet multiplied by the sum of the tank diameter, or width for square tanks, plus five feet;

(viii) all excavated soil must be assessed for levels of contamination to include field screening and analytical samples taken and tested in accordance with the *UST Procedures Manual*;

(B) for assessment of a closure by removal

(i) of an individual tank with an excavated pit area less than 250 square feet, at least two samples must be collected from two different positions in the pit area, with position one on the longitudinal axis, centered between the ends of the tank, underneath where the tank was located, and position two on the longitudinal axis, underneath where the tank was located, where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*, but not including position one;

(ii) of an individual tank with an excavated pit area equal to or greater than 250 square feet, at least two samples must be collected from the pit area as required under (i) of this subparagraph; one additional sample must be collected for each additional 250 square feet of pit area, or portion thereof over the initial 250 square feet, at points where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*; for example, if the total pit area is 1,270 square feet, five additional samples are required;

(iii) of multiple tanks, by taking the samples for each excavated pit area according to (i) or (ii) of this subparagraph, as applicable; the same sample location may be used to meet the requirements applicable to more than one tank, if that sample location meets the requirements for each tank separately;

(iv) of dispensing areas, at least one sample must be collected where the dispenser had been located;

(v) of piping trenches, at least one sample must be taken at points along the piping trench where contamination is most likely to be present;

(vi) soil samples for assessments under this subparagraph must be collected from native soils located at an elevation that is below, and within two feet of the bottom of, the excavated pit, and that is within two feet below the lowest point of the piping for the UST dispensing equipment; and

(vii) in this subparagraph, "the excavated pit area" is determined by the amount of ground surface that was excavated;

(viii) all excavated soil must be assessed for levels of contamination to include field screening and analytical samples taken and tested in accordance with the *UST Procedures Manual.*

(C) repealed 1/22/99;

(D) if the borings or test pits cannot be placed or if samples cannot be collected in the manner described in (A) and (B) of this paragraph, any alternative sample location plans must be approved by the department; and

(E) if the tank or associated piping will be removed as part of closure activities, the minimum site assessment sampling for the portion of the UST system removed must be conducted as provided in (B) of this paragraph;

(3) if groundwater is encountered while undertaking the requirements of this subsection and the groundwater prevents the collection of representative soil samples as required in (2) of this subsection, then

(A) soil samples must be collected within the first six inches of the vadose zone above the zone of seasonal water table fluctuation as close as possible to the locations described in (2) of this subsection; and

(B) for the removal of an individual tank, soil samples must be collected from the walls of the excavation next to the ends of the tank at the soil/water interface; for the removal of multiple tanks from the same pit area, soil samples must be collected from each of the four walls of the excavation at the soil/water interface;

(4) if groundwater or the seasonal high water table is known or suspected to exist at a depth from the surface to within five feet below the bottom of the tank, then

(A) at least one boring or test pit must reach groundwater or the zone of seasonal water table fluctuation in an undisturbed portion of the excavation pit area or adjacent to the excavation; and

(B) at least one soil sample must then be collected from the first six inches of groundwater-saturated soil or the zone of seasonal water table fluctuation in accordance with the *UST Procedures Manual*; and

(5) within 60 days after closure or a change-in-service, the owner or operator shall provide to the department a site assessment report that includes a compilation of the information collected and results obtained under (1) - (4) of this subsection and

(A) the owner's name and address;

(B) the operator's name and address, if different from the owner;

(C) the location of the UST, including the legal description by

(i) subdivision lot, block, or tract information; or by section lot, tax lot, or government lot number; or

(ii) meridian, township, range, section, and nearest quarter section locations within the section if the location cannot be described under (i) of this subparagraph;

(D) the UST registration number assigned by the department;

(E) the name and business address of each person who supervised the site assessment;

(F) a site sketch that approximately shows

(i) the location and configuration of tanks and piping;

(ii) the sample locations, including depth below grade;

(iii) the proximity to property, buildings, and residences;

(iv) any sites where a release has occurred;

(v) any sites where free product has been or is located;

(vi) the facility and property boundaries;

(vii) a bar scale and north arrow; and

(viii) any other pertinent information;

(G) a narrative description of activities conducted at the site and the dates the activities occurred;

(H) any historical information encountered during the assessment regarding a previous release, repair, spill, or corrective action; and

(I) the data report required in the *UST Procedures Manual*, Section 8.4;

(e) The collection of field data and the interpretation and reporting of site characterization and site assessment data must be conducted or supervised by a qualified environmental professional in accordance with the *UST Procedures Manual*.

(f) Repealed 6/17/2015.

(g) Laboratory analyses submitted to fulfill the requirements of this section must be performed by a laboratory approved by the department under 18 AAC 78.800 - 18 AAC 78.815.

(h) The owner or operator shall use the analytical methods set out in Table 1, Chapter 2 of the *UST Procedures Manual* for site assessment analysis.

(i) repealed 1/30/2003.

(j) Further investigation is not required if

(1) the assessment, observations, and investigations of the UST site indicate that a release has not occurred; and

(2) the results of sample analysis indicate that

(A) groundwater cleanup levels in 18 AAC 75.345 are not exceeded at the UST site;

(B) surface water quality standards in 18 AAC 70.020(b) are not exceeded at the UST site; and

(C) soil cleanup levels in 18 AAC 75.340 – 18 AAC 75.341 are not exceeded at the UST site.

(k) If contaminated soil, petroleum vapor, contaminated surface water, or contaminated groundwater is discovered during a site assessment, or at any other time, the owner or operator shall proceed with corrective action under 18 AAC 78.200 - 18 AAC 78.280, including release notification and release investigation. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119;

am 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365

18 AAC 78.095. Applicability to previously closed UST systems. Repealed. (Eff. 3/25/91, Register 118; repealed 9/27/2018, Register 227)

18 AAC 78.100. Inspection, reporting, and recordkeeping requirements. Repealed. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 8/15/99, Register 151; am 1/30/2003, Register 165; repealed 9/27/2018, Register 227)

Article 2. Corrective Action for Leaking Underground Storage Tanks.

Section

18 AAC 78.200. Investigating and reporting a suspected release. (a) If a release of petroleum is suspected, the owner or operator of the UST shall investigate the UST site using methods required under 18 AAC 78.210 and shall report to the department within the period specified for any of the following conditions:

(1) not later than 24 hours after the owner, operator, or another person discovers released petroleum at the UST site or in the surrounding area, including the presence of free product, soil contamination, surface water or groundwater contamination, or the presence of vapors in soils, basements, sewer or utility lines, or nearby surface water or groundwater;

(2) not later than seven days after the owner, operator, or another person observes unusual operating conditions, including the erratic behavior of dispensing equipment, the sudden loss of petroleum from the UST, an unexplained presence of water in the tank, or liquid in the interstitial space of secondary containment systems, unless;

(A) the system equipment or component is found not to be releasing petroleum to the environment

(B) any defective system equipment or component is immediately repaired; and

(C) for secondary containment systems, except as provided for in 18 AAC 78.065(h)(2)(B)(iv), any liquid in the interstitial space is immediately removed; however liquid used as part of the interstitial monitoring system, such as a system that uses a brine-filled interstitial space, need not be removed; and

(3) not later than seven days after monitoring results, including investigation of an alarm, from a release detection method required under 18 AAC 78.060 indicate a release may have occurred unless

(A) the monitoring device is found to be defective and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result;

(B) in the case of inventory control described in 18 AAC 78.065(b), a second month of data does not confirm the initial result or the investigation determines that no release has occurred

(C) the leak is contained in the secondary containment and

(i) except as provided for in 18 AAC 78.065(h)(2)(B)(iv), any liquid in the interstitial space is immediately removed; however, liquid used as part of the interstitial monitoring system, such as a system that uses a brine-filled interstitial space, need not be removed; and

(ii) any defective system equipment or component is immediately repaired or replaced; or

(D) the alarm was investigated and determined to be a non-release event, such as a power surge or a result of filling the tank during release detection testing.

(b) The department will, in its discretion, require the owner or operator of a UST system to investigate for a release of petroleum as required by 18 AAC 78.210 to determine if a UST is the source of off-site impacts. For purposes of this subsection, "off-site impacts" include the discovery of free product, soil contamination, surface water or groundwater contamination, or the presence of vapors in soils, basements, sewer and utility lines, or nearby surface water or groundwater as directly observed by the department or brought to the department's attention by another person. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.210. Release investigation and confirmation steps. (a) **General investigative requirements.** Unless corrective action is taken under 18 AAC 78.220 - 18 AAC 78.270, the owner or operator of a UST shall immediately investigate and confirm the suspected release of petroleum requiring reporting under 18 AAC 78.200 within seven days by conducting either a site assessment under 18 AAC 78.090 or a system test as described in this section. The department may require both a site assessment and a system test. The department may grant a written request for an extension of the seven-day time period.

(b) **System Test.** The owner or operator shall conduct a test according to the requirements for tightness testing in 18 AAC 78.065(d) and 18 AAC 78.070(c) or, as appropriate, secondary containment testing described in 18 AAC 78.055(a)(5). The following apply to the systems test:

(1) the test must determine whether

(A) a leak exists in that portion of the tank that routinely contains petroleum or the attached delivery piping; or

(B) a breach of either wall of the secondary containment has occurred;

(2) if the test confirms a leak into the interstice or a release, the owner or operator shall repair, upgrade, or close the UST; in addition, the owner or operator shall begin corrective action in accordance with 18 AAC 78.220 - 18 AAC 78.270 if the test results for the system, tank, or delivery piping indicate that a release exists;

(3) further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a release exists and if environmental contamination is not the basis for suspecting a release; and

(4) the owner or operator shall conduct a site assessment as described in 18 AAC 78.090 if the test results for the system, tank, and delivery piping do not indicate that a release exists but environmental contamination is the basis for suspecting a release .

(c) **Site Assessment.** If a site assessment conducted under (a) of this section indicates that a release has occurred, the owner or operator shall conduct a release investigation under 18 AAC 78.235 and begin corrective action as required by 18 AAC 78.220 - 18 AAC 78.280. No further investigation is required if

(1) the site assessment indicates that a release has not occurred;

(2) observations and investigations indicate that free product is not present; and

(3) test results indicate that

(A) groundwater cleanup levels in 18 AAC 75.345 are not exceeded at the UST site;

(B) surface water quality standards in 18 AAC 70.020(b) are not exceeded at the UST site; and

(C) soil cleanup levels in 18 AAC 75.340 and 18 AAC 75.341 are not exceeded at the UST site. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.212. Reporting and cleanup of spills and overfills. The owner or operator of a UST must contain and immediately clean up a spill or overfill, report to the department, and begin corrective action in accordance with 18 AAC 78.220 - 18 AAC 78.280,

(1) as soon as the person has knowledge of a release that is known or suspected to be 55 gallons or more;

(2) not later than 24 hours after the person has discovered soil or water contamination, by direct observation, through site characterization or assessment under 18 AAC 78.090, or through any other means, of

(A) a belowground release from the UST in any amount;

(B) an aboveground release to land in excess of 10 gallons; or

(C) an aboveground release to water of the state if the release causes a sheen or discoloration of the water surface; and

(3) not later than seven days after discovering a release of less than 10 gallons to land, or a release of less than one-half pint to water. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.755

18 AAC 78.220. Initial response. (a) Upon confirmation of a release in accordance with 18 AAC 78.210 or after a release from the UST is identified in any other manner, the owner or operator of a UST shall report the release as specified under 18 AAC 78.212 and perform the following initial response actions not later than 24 hours after discovery of a release:

(1) the owner or operator shall take immediate action to prevent any further release of the petroleum into the environment, including removal of the petroleum from the UST if removal is necessary to meet the requirements of this paragraph; and

(2) the owner or operator shall identify and mitigate any fire, explosion, or vapor hazard.

(b) Unless directed to do otherwise by the department, the owner or operator shall conduct initial abatement, release investigation, and corrective action as required under 18 AAC 78.230 - 18 AAC 78.270. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 1/22/99, Register 149; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.755

18 AAC 78.230. Initial abatement measures and site assessment. Unless directed in writing by the department to do otherwise, the owner or operator of a UST with a release of petroleum confirmed in accordance with 18 AAC 78.210 shall perform the following abatement and containment measures after meeting the requirements of 18 AAC 78.220:

(1) the owner or operator shall cease using the system and remove the petroleum from the UST not later than seven days after the release to prevent further release of petroleum to the environment, unless the petroleum has already been removed in accordance with 18 AAC 78.220(a)(1); the UST may not be refilled until the system is repaired, replaced, or upgraded so that a further release cannot occur;

(2) the owner or operator shall visually inspect any aboveground release or exposed belowground release and prevent further migration of petroleum into surrounding soils and groundwater;

(3) the owner or operator shall continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures, including basements, sewers, and utility lines;

(4) the owner or operator shall properly stockpile excavated contaminated soils to prevent water run-on and run-off in accordance with 18 AAC 78.274 and remedy a hazard posed by contaminated soils that are excavated or exposed as a result of release confirmation, site characterization, site assessment, abatement, or corrective action activities; if these remedies include treatment, stockpiling, or disposal of contaminated soils, the owner or operator shall use a method that the department determines will adequately protect human health and safety, and the environment;

(5) the owner or operator shall measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site assessment required under 18 AAC 78.210(c) or the closure site characterization or assessment under 18 AAC 78.090; in selecting sample types, sample locations, and measurement methods, the owner or operator must consider the nature of the stored substance, the type of backfill, depth to groundwater, and other factors as appropriate for identifying the presence and source of the release; and

(6) the owner or operator shall investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with 18 AAC 78.240 (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 1/22/99, Register 149; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.235. Release investigation. (a) After meeting the requirements of 18 AAC 78.220 and 18 AAC 78.230, the owner or operator of a UST with a confirmed release of petroleum shall perform a release investigation to characterize the release and actual or potential threat to human health and safety, and to the environment. If applicable to the site, an investigation under this section must include the following:

(1) soil samples, sufficient in number and location to represent the conditions of the soil, must be taken to adequately characterize the horizontal and vertical distribution of the release in the soil and to identify soil properties that are likely to influence the type and rate of migration of the released petroleum;

(2) sample collection and other investigations of the site geology and hydrogeology must be conducted to adequately characterize the horizontal and vertical distribution of the release in groundwater and those features that affect the fate and transport of the petroleum; if groundwater contamination is confirmed, the owner or operator shall notify the department within 24 hours and identify public and private drinking water wells that are located within one-quarter mile of the release site;

(3) sample collection and other investigations of surface waters must be conducted to adequately characterize significant hydrologic features such as surface drainage patterns and quantities, surface waters, floodplains, and actual or potential contaminant migration routes toward or within these features; and

(4) a hazard ranking evaluation must be conducted to measure the potential risk to human health and safety and to the environment; data collected must include information on toxicity and quantity of the contaminants, release information, site access, air exposure, surrounding populations, water use and exposure, surrounding environmental and recreation areas, and observed environmental impacts; the hazard ranking evaluation must be submitted on a form provided by the department;

(5) a sampling and analysis plan must be submitted to and approved by the department, if the owner or operator plans to use a statistical method referenced in 18 AAC 78.276(e) for site closure and final compliance with the soil cleanup levels under 18 AAC 78.600 - 18 AAC 78.610.

(b) The collection and interpretation of field data and the reporting of release investigation data must be conducted or supervised by a qualified environmental professional in accordance with the *UST Procedures Manual*.

(c) Repealed 6/17/2015.

(d) Laboratory analyses submitted to fulfill the requirements of this section must be performed by a laboratory approved by the department under 18 AAC 78.800 - 18 AAC 78.815.

(e) After completing a release investigation required under this section, the owner or operator shall undertake corrective action as prescribed in 18 AAC 78.240 - 18 AAC 78.276 unless directed by the department to do otherwise as necessary to ensure protection of human health or safety, or of the environment.

(f) In a release investigation, the owner or operator shall use the analytical methods set out in Table 1, Chapter 2 of the *UST Procedures Manual*.

(g) Within 45 days after the date of release confirmation, as established under (h) of this section, the owner or operator shall submit a release investigation report to the department, summarizing the initial abatement measures conducted under 18 AAC 78.230 and including

(1) the owner's name and address;

(2) the operator's name and address, if different from the owner;

(3) the location of the UST, including the legal description by

(A) subdivision lot, block, or tract information; or by section lot, tax lot, or government lot number; or

(B) meridian, township, range, section, and nearest quarter section locations within the section if the location cannot be described under (A) of this paragraph;

(4) the UST registration number assigned by the department;

(5) the name and business address of each person who supervised the release investigation;

(6) all sample analyses and test results received, reported as required in the *UST Procedures Manual*, Section 8.4;

(7) data on the nature and estimated amount of the release;

(8) data summarizing the hazard ranking evaluation conducted under (a)(4) of this section, on a form provided the department;

(9) information gained through soil, groundwater, geology, and surface water investigations conducted under this section;

(10) a narrative description of activities conducted at the site and the dates the activities occurred;

(11) a site sketch that approximately shows

(A) the location and configuration of tanks and piping;

(B) the sample locations, including depth below grade;

(C) the proximity to property, buildings, and residences;

(D) any sites where a release has occurred;

(E) any sites where free product has been or is located;

(F) the facility and property boundaries;

(G) a bar scale and north arrow; and

(H) any other pertinent information;

(12) a UST site history, including previous releases, repairs, spills, or corrective action activities; and

(13) an evaluation of the existence of petroleum vapors within any nearby occupied structure.

(h) The date of release confirmation is established by the earlier of the following events:

(1) the receipt, by the owner or operator, of a report under 18 AAC 78.090 or 18 AAC 78.210, if the report indicates petroleum contamination; or

(2) the owner's or operator's first observation, or first knowledge of an observation, of petroleum contamination. (Eff. 11/3/95, Register 136; am 1/22/99, Register 149; am 1/30/2003, Register 165; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

Authority: AS 46.03.020 AS 46.03.365

Editor's note: The hazard ranking evaluation form mentioned in 18 AAC 78.235(a)(4) is located in the department's *UST Procedures Manual* as Appendix E.

18 AAC 78.240. Corrective action. (a) If the release of petroleum from a UST is confirmed and corrective action is required under 18 AAC 78.235(e), the owner or operator of the UST shall undertake soil and water corrective actions as prescribed in 18 AAC 78.240 - 18 AAC 78.276 and 18 AAC 78.600 - 18 AAC 78.625. The department will direct the owner or operator to perform corrective action to mitigate an inhalation hazard, if the department determines that corrective action is necessary to protect human health or safety, or the environment. As part of that corrective action and as necessary, the owner or operator shall operate a vapor monitoring system in one or more occupied structures near the site.

(b) At a site where an investigation indicates the presence of free product, the owner or operator shall remove measurable free product to the maximum extent practicable, while continuing, as necessary, an action taken under 18 AAC 78.210 - 18 AAC 78.235 or preparing for an action required by 18 AAC 78.240 - 18 AAC 78.280. To meet the requirements of this subsection, the owner or operator shall

(1) notify the department within 24 hours after the discovery of free product;

(2) conduct free product removal in a manner that

(A) minimizes the spread of contamination into an uncontaminated area by using containment, recovery, and disposal techniques appropriate to site conditions;

(B) avoids additional discharges;

(C) disposes of the recovered free product in compliance with applicable local, state, and federal requirements; and

(D) minimizes, to the maximum extent practicable, the time necessary for corrective action;

(3) ensure that each free product removal system is designed to minimize free product migration; and

(4) ensure that a flammable substance is handled in a manner that avoids fires or explosions.

(c) Within 60 days after the date of release confirmation, as established under 18 AAC 78.235(h), the owner or operator shall submit to the department

(1) an interim corrective action report informing the department of the status of corrective actions required by (a) of this section; and

(2) a free product removal report that shows free product was removed in compliance with (b) of this section and that provides at least the following information:

(A) the name and address of the person supervising or responsible for implementing the free product removal;

(B) the estimated amount, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(C) the type of free product recovery system used;

(D) whether any discharge has occurred or will occur on or off site during the recovery operation and where this discharge occurred or will occur;

(E) the type of treatment applied to, and the effluent quality resulting or expected from, any substance that has been or will be discharged;

(F) the steps that have been or are being taken to obtain necessary permits for any discharge; and

(G) the disposition of the recovered free product, dissolved phase product, or contaminated soil.

(d) The department will, in its discretion, extend the deadline for a report required under (c) of this section. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 11/3/95, Register 136; am 1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.250. Corrective action plan. (a) At any time after reviewing the information submitted under 18 AAC 78.210 - 18 AAC 78.240, if the department determines that a threat to human health or safety, or to the environment exists, the department will require the owner or operator to

(1) submit additional information; or

(2) develop and submit a corrective action plan to respond to contaminated soil, surface water, and groundwater.

(b) If a corrective action plan is required under (a) of this section, the owner or operator shall submit the plan for approval according to a schedule and format established by the department. To obtain approval, the plan must

(1) provide for adequate protection of human health and safety, and of the environment, as determined by the department;

(2) include the elements listed in (e) of this section; and

(3) be prepared by a qualified environmental professional.

(c) The owner or operator may, after fulfilling the requirements of 18 AAC 78.210 - 18 AAC 78.240, voluntarily submit a corrective action plan to respond to contaminated soil and groundwater. That corrective action plan must meet the requirements of (b)(1) and (b)(3) of this section. The owner or operator shall modify the plan as necessary to demonstrate that the plan meets the requirements of (b)(1) of this section.

(d) To minimize environmental contamination and perform more effective corrective actions, the owner or operator may begin corrective actions to respond to contaminated soil and groundwater, before the department approves a corrective action plan, if the owner or operator

(1) notifies the department of the intent to begin corrective actions;

(2) complies with any conditions imposed by the department, including halting corrective action or mitigating adverse consequences from corrective action activities; and

(3) incorporates any self-initiated corrective action measures in the corrective action plan, or as amendments to the plan.

(e) The corrective action plan must include the following elements:

(1) a schedule for conducting field work, monitoring, corrective action activities, and submittal of interim and final corrective action reports;

(2) sampling and analysis plan, including

(A) final verification sampling protocol; and

(B) provisions for handling, transporting, and disposing of investigation-derived wastes including

(i) purged water from a boring or monitoring well;

(ii) cuttings, mud, and other wastes from well or boring installation and development; and

(iii) contaminated equipment and materials;

(3) detailed specification for each proposed corrective action technique, and copies of all previous communications with the department regarding the proposed technique;

(4) provisions for minimizing contaminant migration to previously unaffected areas, except under an approved corrective action technique under this section;

(5) provisions for transporting contaminated soil as a covered load in accordance with 18 AAC 60.015;

(6) provisions for the disposal of contaminated soil and groundwater, including the location and method of disposal;

(7) a list of chemical additives proposed for use, and their potential effects on

(A) the hazardous substances at the site; and

(B) human health and safety, and the environment;

(8) a site control plan, if necessary to protect human health or safety or the environment, including engineering measures, such as the installation of caps or liners, and provisions for restricting access, such as the use of fences, signs, or other barriers;

(9) a demonstration that site work and the corrective action will comply with the air quality standards and requirements of 18 AAC 50;

(10) a plan for ensuring that contaminated soil does not come in contact with uncontaminated soil during the corrective action process, except under an approved corrective action technique under this section or an approved operations plan under 18 AAC 78.273;

(11) a nondomestic wastewater system plan under 18 AAC 72.600, if the corrective action requires construction, alteration, installation, modification, or operation of a nondomestic wastewater treatment works or disposal system;

(12) for ex-situ corrective action techniques,

(A) provisions for containment and handling of leachate, if leachate is produced;

(B) a demonstration that site work and the corrective action will comply with soil storage, movement, and disposal requirements in 18 AAC 78.274;

(C) if using a hot asphalt batch plant, written certification by a registered engineer that processes incorporating contaminated soils meet current industry standards for asphalt paving;

(D) if combining contaminated soil with asphalt for the purposes of cold asphalt recycling, a cold asphalt recycling plan that includes

(i) a pavement structure design study for incorporating the excavated material; the study must be certified by a registered engineer;

(ii) approval for use of the specific leaching assessment or model used to determine contaminant migration; and

(iii) results of the pre-approved contaminant leaching assessment or model, referenced under (ii) of this subparagraph; those results must demonstrate that contaminant concentrations in the soil will not migrate;

(E) if using bioremediation, a bioremediation plan that includes detailed descriptions of

(i) cultured microbes, unless using an indigenous microbe population;

(ii) electron acceptors and nutrient sources for microbes;

(iii) the expected rate of biodegradation;

(iv) intermediate and final breakdown products;

(v) the type and amount of contamination to be bioremediated;

(vi) any potential adverse effects on human health or safety, or on the environment; and

(vii) other information requested by the department; the department will request additional information if the department determines that the information is necessary to ensure protection of human health or safety, or of the environment;

(F) if using solidification, a solidification plan that includes

(i) a demonstration that contaminant concentrations in the contaminated media do not exceed 5,000 mg/kg for the total range of petroleum hydrocarbons described in the *UST Procedure Manual* and do not exceed 100 mg/kg of BTEX;

(ii) a demonstration that contaminant concentrations in the solidified material will not migrate;

(iii) results of structural testing on the solidified material to demonstrate that the solidified material has an unconfined compressive strength of 2,000 psi or more after 28 days;

(iv) results of leachability testing of the solidified material; and

(v) specifications for the ratio of the mass of contaminated media to the mass of reagent;

(G) if using soil contaminated with petroleum hydrocarbons as a base for a physical barrier, a physical barrier base plan that includes

(i) a demonstration that contaminant concentrations in contaminated soil used for the base do not exceed 5,000 mg/kg for the total range of petroleum hydrocarbons described in the *UST Procedures Manual*, or that do not exceed 100 mg/kg of BTEX;

(ii) a demonstration that the contaminated soil that is used for the base will be blended with uncontaminated soil only if necessary to meet design specifications;

(iii) a physical barrier design study, certified by a registered engineer;

(iv) approval for use of the specific leaching assessment or model used to determine contaminant migration;

(v) results of the pre-approved contaminant leaching assessment or model, as specified under (iv) of this subparagraph; those results must demonstrate that contaminant concentrations in the soil will not migrate;

(vi) a demonstration that the base under the physical barrier will use no more than 18 vertical inches of material containing contaminated soil;

(vii) a demonstration that the contaminated zone will be compacted to 95 percent or more of the maximum density as specified in American Society for Testing and Materials (ASTM) D 1557 - 91, *Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort*, updated January 1997 and adopted by reference, or ASTM D 4253 - 93, *Standard Test Methods for Maximum Index Density and Unit Weight or Solids Using Vibratory Table*, updated February 1993 and adopted by reference;

(viii) a demonstration that the material containing contaminated soil will be placed in a zone directly beneath the final base course with at least 18 inches of impervious pavement extending beyond the horizontal limit of the material containing contaminated soil;

(ix) a demonstration that at least six feet will separate the seasonal high groundwater point from the lowest point of the material containing contaminated soil; and

(x) as-built drawings, certified by a registered engineer, that show the final location of the material containing contaminated soil;

(H) if using soil contaminated with metals for a base as a physical barrier, and if that use if approved on a site-specific basis, the elements required by (G) of this paragraph; and

(I) if using an offsite or portable treatment facility, a demonstration that only an offsite or portable treatment facility with an operations plan approved under 18 AAC 78.273 will be used;

(13) for in-situ corrective techniques;

(A) a site monitoring plan showing proposed locations of monitoring wells;

(B) a hydrogeologic description of the site, including

(i) soil and sediments present;

(ii) stratigraphy;

(iii) aquifer characteristics, including groundwater gradient, confining layers, perched water, permeability, and aquifer transmissivity;

(iv) percolation rates from precipitation; and

(v) other relevant factors;

(C) results of hydrogeologic modeling performed to address capture zones, effects of hydraulic loading, and plume migration; and

(D) if using bioremediation, a demonstration of compliance with (12)(E) of this subsection.

(f) The owner or operator shall submit and obtain approval for each of the applicable elements specified in (e) of this section before work on that element begins, and for additional approval if a modification to an element is anticipated. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 6/17/2015, Register 214)

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 46.03.365 AS 46.04.020

Editor's note: The ASTM International methods adopted by reference in 18 AAC 78.250 may be reviewed in the department's Anchorage, Fairbanks, Juneau, and Soldotna offices, and may be obtained from ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; telephone (610) 832-9585; fax (610) 832-9555, or at www.astm.org.

18 AAC 78.260. Corrective action plan approval. (a) The department will approve or deny a corrective action plan after receipt of all information required or requested under 18 AAC 78.250 and any comments on the plan under 18 AAC 78.280(c), and only after determining whether implementation of the plan will adequately protect human health, safety, and the environment.

(b) In making a determination under (a) of this section, the department will consider

(1) the physical and chemical characteristics of the petroleum, including its toxicity, persistence, and potential for migration;

(2) the hydrogeologic characteristics of the facility and surrounding area;

(3) the proximity, quality, and current and future uses of nearby surface water and groundwater;

(4) the potential effects of residual contamination on nearby surface water and groundwater;

(5) an exposure evaluation;

(6) the overall cost effectiveness of the corrective action measures proposed;

(7) any information gathered and submitted in compliance with 18 AAC 78.200 - 18 AAC 78.250; and

(8) the qualifications of each person involved with the corrective action planning and activities.

(c) The department will, in its discretion, and upon a documented finding of public endangerment, require that the corrective action plan provide for

(1) adequate alternative drinking water systems, that meet the requirements of 18 AAC 80, for affected consumers; and

(2) the temporary relocation of persons affected by a contaminated water supply.

(d) At any time after reviewing the information submitted under 18 AAC 78.250, the department will, in its discretion, require the owner or operator to submit additional information by a schedule and in a format established by the department.

(e) Upon approval of a corrective action plan, or as directed by the department, the owner or operator shall implement the plan, including modifications to the plan made by the department. The owner or operator shall monitor, evaluate, and report the results of implementing the plan in a final corrective action report as specified by 18 AAC 78.276. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.270. Corrective action plan revisions. (a) The owner or operator of the UST must have written department approval before taking an action that constitutes a substantive revision to or deviation from an approved corrective action plan.

(b) The department will require the owner or operator to take corrective action to bring any change or revision into compliance with this chapter, if the department determines that corrective action is necessary to ensure protection of human health and safety, and of the environment. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.271. General corrective action requirements. (a) The owner or operator of a facility at which a release of petroleum from a UST has occurred and for which corrective action is required under 18 AAC 78.240 shall

(1) comply with 18 AAC 78.240 - 18 AAC 78.276;

(2) ensure that the collection, interpretation, and reporting of data are in accordance with the *UST Procedures Manual*; and

(3) ensure that required sampling and analysis is conducted or supervised by a qualified environmental professional; however, a qualified sampler may conduct sampling of soil stockpiles, bioremediation systems, surface water, or groundwater monitoring wells when a qualified environmental professional is not available.

(b) The owner and operator of an offsite or portable treatment facility shall ensure that a qualified environmental professional conducts or supervises soil sampling to verify that cleanup levels are met. Soil sampling and analysis must be conducted as required by the *UST Procedures Manual*.

(c) Laboratory analyses that are submitted to comply with this section must be performed by a laboratory approved under 18 AAC 78.800 - 18 AAC 78.815 for each analyte and matrix analyzed and analytical method used. The owner or operator shall ensure that reports submitted to the department include the current state laboratory identification number for the laboratory that performed the analysis.

(d) Petroleum-contaminated soil that originates from a UST site and that is stockpiled must comply with 18 AAC 78.274.

(e) The owner and operator shall ensure that the person conducting corrective action under this chapter complies with the corrective action requirements in 18 AAC 78.240 - 18 AAC 78.276. (Eff. 1/22/99, Register 149; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.273. Offsite or portable soil treatment facilities. (a) An owner or operator of an offsite or portable soil treatment facility shall

(1) obtain approval of an operations plan before that person accepts or treats contaminated soil; the department will approve the plan if the department determines that the operations proposed are protective of human health and safety, and of the environment; a plan submitted under this paragraph must include

(A) a facility diagram that shows the location of

(i) each soil treatment, storage, and transportation area;

(ii) major roads within or bordering the site or facility; and

(iii) monitoring wells, surface water, water supply wells, facility boundaries, and public or private buildings within 500 feet of the facility boundary;

(B) a detailed process description including a discussion of

(i) air, water, and solid waste process streams;

(ii) startup and shutdown procedures;

(iii) maximum process flow rate;

(iv) air pollution control equipment;

(v) water treatment systems;

(vi) the projected maximum time necessary for the treatment method to fully remediate contaminated soil; and

(vii) a detailed description of any additive to be used;

(C) a post-treatment sampling and analysis plan prepared by a qualified environmental professional to verify that the applicable cleanup levels have been met;

(D) provisions for complete containment of the contaminated soil before, during, and after treatment until the contaminated soil meets the applicable cleanup levels; alternatively, if the treatment process, such as landfarming or landspreading, will not contain the contaminated soil, the owner or operator of the offsite or portable treatment facility must demonstrate that there will be no uncontrolled leachate from the treatment area;

(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, engineering plans and engineering record drawings for contaminated soil and water containment structures; the *Operation Requirements for Soil Treatment Facilities*, dated March 15, 2013, is adopted by reference; and

(F) site monitoring procedures that will measure for secondary contamination at the treatment facility;

(2) if the facility is a Category C or a Category D facility, as described in the *Operation Requirements for Soil Treatment Facilities*, adopted by reference in (1) of this subsection, submit the following to the department before the owner or operator accepts or treats contaminated soil:

(A) proof of a performance bond or other approved means of fiscal responsibility that will provide the department with a source of funds to clean up contaminated soils that have been received for treatment if the facility operator fails to treat the contaminated soils in accordance with this chapter; a performance bond must be executed by an insurance company licensed in the state and include a bond amount that

will cover cleanup of the contaminated soils at the treatment facility; the bond shall be based on

(i) the quantity of contaminated soil allowed at the facility specified in the facility's approved operation plan; and

(ii) the cost per ton for treating contaminated soil at that facility location; and

(B) proof of pollution liability insurance that will provide the department with a source of funds to clean up secondary contamination at the facility property that is caused by the soil treatment facility during soil treatment operations;

(3) perform confirmation sampling of treated soil in accordance with a sampling and analysis plan approved under this subsection to verify that applicable cleanup levels have been met;

(4) submit to the department an assessment of background contamination at the facility before initial startup of the treatment facility; and

(5) submit to the department within 90 days after terminating operation of the treatment facility, a closure assessment demonstrating that secondary contamination did not occur at the facility; if secondary contamination did occur at the facility, the owner or operator of the portable treatment facility shall perform a cleanup of the contamination by in-situ or ex-situ treatment within two years after terminating operation.

(b) If the owner or operator of an offsite or portable treatment facility fails to process soils to the department's satisfaction in accordance with the plan approved under (a)(1) of this section, the department will withdraw its approval under (a)(1) of this section, and that person may not process or receive contaminated soil.

(c) For purposes of this section,

(1) "background contamination" means the concentration of a hazardous substance that is consistently present in the environment or in the vicinity of a site and that is naturally present or is the result of human activities unrelated to a discharge or release at the site;

(2) "engineering plans" means a set of plans approved and sealed by a registered engineer;

(3) "engineering record drawings" means the approved original plans prepared for construction and department approval under (a)(1) of this section, revised to reflect how the containment structure or system was constructed or installed, and sealed by a registered engineer;

(4) "facility" has the meaning given in AS 46.03.900; "facility" includes the land, structures, and equipment associated with treatment of contaminated soil;

(5) "offsite or portable treatment facility" has the meaning given in the *Soil Treatment Facility Guidance*, adopted by reference in (a)(1) of this section;

(6) "owner or operator" has the meaning given to "owner" and "operator" in AS 46.03.826;

(7) "performance bond" means a written agreement between the owner or operator and the department guaranteeing performance of the obligations covered by the agreement;

(8) "registered engineer" means a professional engineer registered to practice in the state under AS 08.48. (Eff. 1/22/99, Register 149; am 1/30/2003, Register 165; am 6/17/2015, Register 214)

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 46.03.365 AS 46.04.020

Editor's note: The department's *Operation Requirements for Soil Treatment Facilities*, adopted by reference in 18 AAC 78.273(a)(1), 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.

18 AAC 78.274. Storage, movement, and disposal of soil and groundwater. (a) Unless the department approves the activity in question as protective of human health and safety, and of the environment, the owner or operator may not blend contaminated soil with uncontaminated soil, and shall

(1) segregate contaminated soil based on

(A) the intended corrective action techniques; and

(B) the specific contaminants present;

(2) store contaminated soil

(A) 100 feet or more from surface water, a private 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(a)(2); and

(B) 200 feet or more from a water source serving a community water system, non-transient non-community water system, or transient non-community water system;

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

TABLE B. 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° Fahrenheit	-60° Fahrenheit
Black carbon content (ASTM D 1603-14, updated 2014)	two percent or greater	two percent or greater
Tensile strength (ASTM D 751-06(2011), updated 2011)	125 pounds (warp)	N/A
Mullen burst (ASTM D 751-06(2011), updated 2011)	250 pounds per square inch (psi)	N/A
One inch tensile strength (ASTM D 882-12, updated August 2012)	N/A	25 pounds (warp)
One inch elongation MD (machine direction)	N/A	550 percent
Nominal thickness	10 mil	10 mil
Oil resistance (ASTM D 471-12a, updated December 2012)	No signs of deterioration and more than 80 percent retention of tensile and seam strength after immersion for 30 days at 73° Fahrenheit	No signs of deterioration and more than 80 percent retention of tensile and seam strength after immersion for 30 days at 73° Fahrenheit
Long-term storage of petroleum-contaminated soil (180 days to two years)		
Cold crack (ASTM D 2136-02(2012), updated 2012)	-60° Fahrenheit	-60° Fahrenheit
Black carbon content (ASTM D 1603-12, updated May 2012)	two percent or greater	two percent or greater
Tensile strength (ASTM D 751-06(2011), updated 2011)	300 pounds (warp)	N/A
Mullen burst (ASTM D 751-06(2011), updated May 2011)	500 pounds per square inch (psi)	N/A
One inch tensile strength (ASTM D 882-12, updated August 2012)	N/A	45 pounds (warp)
One inch elongation MD (machine direction)	N/A	625 percent
Nominal thickness	20 mil	20 mil
Oil resistance (ASTM D 471-12a, updated December 2012)	No signs of deterioration and more than 80 percent retention of tensile and seam strength after immersion for 30 days at 73° Fahrenheit	No signs of deterioration and more than 80 percent retention of tensile and seam strength after immersion for 30 days at 73° Fahrenheit
The ASTM International methods referred to in this table are adopted by reference. "N/A" means not applicable.		

(4) cover and protect the contaminated soil stockpile from weather with no less than a six-mil, reinforced polyethylene liner or its equivalent, with the edge of the cover lapped over the bottom liner to prevent water running through the soil; and

(5) inspect and maintain the contaminated soil stockpile regularly to ensure that the cover remains intact and that the soil and any liquid leachate derived from the soil is contained.

(b) An owner or operator shall obtain approval before moving or disposing of contaminated soil or groundwater subject to the requirements under this chapter. (Eff. 1/22/99, Register 149; am 6/25/99, Register 150; am 4/16/2000, Register 154; am 6/17/2015, Register 214; am 5/3/2019, Register 230)

Authority:	AS 46.03.020	AS 46.03.710	AS 46.04.020
	AS 46.03.050	AS 46.03.740	AS 46.04.070
	AS 46.03.365	AS 46.03.745	AS 46.09.020

Editor's note: The ASTM International methods adopted by reference in Table B of 18 AAC 78.274(a) may be reviewed at the department's Anchorage, Fairbanks, Juneau, and Soldotna offices, or may be obtained from ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; telephone (610) 832-9285; fax (610) 832-9555, or at www.astm.org.

As of Register 215, (October 2015), the regulations attorney made technical corrections under AS 44.62.125(b)(6), to 18 AAC 78.274(a), Table B.

18 AAC 78.275. Sampling and analysis. (a) The owner or operator shall ensure that soil and groundwater sampling for a release investigation or associated with a corrective action is conducted by a qualified environmental professional in accordance with 18 AAC 78.605 and the *UST Procedures Manual*.

(b) The owner or operator of an offsite or portable treatment facility under 18 AAC 78.273 shall ensure that the collection, interpretation, and reporting of data, and the required sampling and analysis are conducted or supervised by a qualified environmental professional in accordance with the *UST Procedures Manual.*

(c) If a contaminant is suspected at the site because of empirical evidence or prior analysis, but is not detected or is detected at a concentration below the practical quantitation limit, and the practical quantitation limit is higher than the cleanup level for that substance, the department will

(1) determine the owner or operator to have attained the cleanup level, if additionally the more stringent of the following conditions is met:

(A) the practical quantitation limit is no greater than 10 times the method detection limit; or

(B) the practical quantitation limit is no greater than the practical quantitation limit referred to in Table 1 of the *UST Procedures Manual*; or

(2) as the department determines necessary to ensure protection of human health or safety or of the environment, require the use of a specialized analytical method to improve the accuracy, precision, method detection limit, or practical quantitation limit for the contaminant.

(d) Among the analytical methods set out in Table 1 of the *UST Procedures Manual*, if there is more than one analytical method for a contaminant, an owner or operator 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 Alaska methods for petroleum hydrocarbons referred to in Table 1 of the *UST Procedures Manual*.

(e) Laboratory analysis submitted to comply with this chapter must be performed by a laboratory approved under 18 AAC 78.800 - 18 AAC 78.815 for each analyte and matrix analyzed and analytical method used.

(f) The owner or operator shall submit the results of the laboratory analyses for samples collected under this chapter and shall include the current state laboratory identification number for the laboratory that performed the analyses. (Eff. 1/22/99, Register 149; 6/25/99, Register 150; am 4/16/2000. Register 154; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

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

Editor's note: As of Register 164 (January 2003), the regulations attorney made a technical revision under AS 44.62.125(b)(6), to Table B in 18 AAC 78.275(c)(1)(A) and (B).

18 AAC 78.276. Final corrective action reporting requirements and site closure. (a) The owner or operator shall submit a written final corrective action report to the department for each UST site at which corrective action activities have been completed. Based on analytical results, the report must demonstrate that the site meets the applicable cleanup levels and requirements specified in 18 AAC 78.600 - 18 AAC 78.625. The report must be prepared by a qualified environmental professional.

(b) The written report required by (a) of this section must contain, as applicable,

(1) the date and time of the discharge or release;

(2) the location of the discharge or release, including latitude and longitude coordinates;

(3) the name and physical address of the site, facility, or operation;

(4) the name, mailing address, and telephone number of the owner and of the operator of the site, facility, or operation;

(5) the type and amount of each contaminant discharged or released;

(6) a description of any environmental damage caused by the discharge, release, or containment to the extent the damage can be identified;

(7) a demonstration that the free product removal report required in 18 AAC 78.240(c) was submitted to the department and that free product was recovered in compliance with 18 AAC 78.240;

(8) a summary of each applicable soil and groundwater cleanup level approved for the site under 18 AAC 78.600 - 18 AAC 78.625 and a description of the factors used in developing each applicable cleanup level;

(9) a description of the corrective actions taken, including

(A) a demonstration that corrective action was conducted in accordance with the corrective action plan project elements, including modifications to the project elements, approved under 18 AAC 78.250;

(B) sampling reports and a description of the soil and groundwater sampling protocol and sampling locations;

(C) a summary of the laboratory reports for the final verification samples collected at the site; the laboratory or the owner or operator shall keep these reports and make them available to the department upon request for at least 10 years after submission of the summary to the department;

(D) a demonstration that contaminated soil and groundwater were stored, treated, and disposed of in an approved manner;

(E) a description of any site-specific modification to any procedures in the *UST Procedures Manual*;

(F) an estimate of the extent of any remaining residual contamination, above and below the applicable cleanup levels;

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

(H) other information requested by the department, as the department determines necessary to ensure protection of human health or safety, or of the environment; and

(10) a demonstration of compliance with applicable institutional control requirements under 18 AAC 78.625.

(c) repealed 6/25/99.

(d) The owner or operator shall keep a copy of the corrective action report submitted under this section for at least 10 years after that report is submitted to the department.

(e) The department will determine final compliance with the

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

(A) the number and location of samples taken;

(B) whether large variations in contaminant concentrations relative to the mean concentration exist; and

(C) whether a large percentage of concentrations are below the method detection limit; and

(2) groundwater cleanup levels, based on an analysis of unfiltered groundwater samples unless the owner and operator demonstrates that a filtered sample provides a more representative measure of groundwater quality; compliance will be determined based on the maximum concentrations of a contaminant detected in the final confirmation samples; before closure, the size of the dissolved plume must be steady state or shrinking and concentrations of the contaminant must be decreasing.

(f) After reviewing the final corrective action report submitted under this section, if the department determines that

(1) a site has been adequately characterized and has achieved the applicable cleanup levels and requirements in 18 AAC 78.600 - 18 AAC 78.625, the department will issue the owner or operator a written determination that corrective action is complete, subject to a future department determination that the corrective action is not protective of human health or safety, or of the environment; or

(2) the corrective action and applicable institutional controls are not protective of human health or safety, or of the environment, the department will, as necessary to ensure protection of human health or safety, or of the environment, require the owner or operator to

conduct additional actions that meet the requirements of this chapter. (Eff. 1/22/99, Register 149; am 6/25/99, Register 150; am 6/17/2015, Register 214)

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 46.03.365 AS 46.03.755 AS 46.09.010
AS 46.03.710

18 AAC 78.280. Public participation. (a) If a confirmed release of petroleum requires a corrective action plan under 18 AAC 78.250(a)(2), the department will notify members of the public who are directly affected by the release and the planned corrective action, using methods the department finds appropriate, including public notice in a local newspaper, block advertisement, public service announcement, publication in a state register, letters to individual households, personal contacts by field staff, posting of notice in the location scheduled for corrective action, or a combination of any of these methods.

(b) The department will make site release information and decisions concerning the corrective action plan available for public inspection upon request.

(c) Before approving a corrective action plan, the department will, in its discretion, hold a public meeting to consider comments on the proposed plan if there is sufficient public interest, or for any other reason.

(d) The department will give public notice under (a) of this section if implementation of an approved plan does not achieve the applicable cleanup levels in the plan and termination of that plan is being considered by the department. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.365

Article 3. UST Operators and Operator Training.

Section

Editor's note: As of Register 149, effective 1/22/99, the provisions of former 18 AAC 78.300 - 18 AAC 78.350 were incorporated into 18 AAC 78.600 - 18 AAC 78.625.

18 AAC 78.300. Applicability; general cleanup requirements. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.310. Soil cleanup options. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.311. Soil storage and disposal. Repealed. (Eff. 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.312. Soil remediation requirements. Repealed. (Eff. 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.315. Soil cleanup levels. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.320. Soil sample number and location. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.322. Groundwater and surface water cleanup. Repealed. (Eff. 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.325. Soil sample collection methods. (Eff. 3/25/91, Register 118; repealed 11/3/95; Register 136)

18 AAC 78.327. Groundwater and surface water sample number, sample location, and long-term monitoring. Repealed. (Eff. 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.330. Soil analytical methods and documentation. Repealed. (Eff. 3/25/91, Register 118; repealed 11/3/95, Register 136)

18 AAC 78.335. Submission and evaluation of analytical results. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/98, Register 149)

18 AAC 78.340. Analytical reporting requirements. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.345. Surface water and groundwater cleanup. Repealed. (Eff. 3/25/91, Register 118; repealed 11/3/95, Register 136)

18 AAC 78.350. Risk assessment. Repealed. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; repealed 1/22/99, Register 149)

18 AAC 78.355. General requirements for operators for all USTs. (a) Each UST facility must have a designated Class A operator, Class B operator, and Class C operator who meet the requirements of this chapter.

(b) A facility shall post, in an area easily accessible to a Class C operator, and next to the alarm panel if any is installed, emergency response procedures and emergency contact information in case of an alarm or release. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.360. Designation of Class A, B, and C operators. (a) The owner or operator of a UST shall designate

(1) at least one Class A operator for each UST or group of USTs at a facility; a Class A operator is not required to be on site; and

(2) at least one Class B operator for each UST or group of USTs at a facility; a Class B operator is not required to be on site at all times.

(b) Each Class C operator shall be designated by the Class A operator or Class B operator in writing. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.365. Requirements for operator training. (a) General requirements. The owner or operator of a UST shall ensure that Class A, Class B, and Class C operators meet the requirements of this section. Any individual designated for more than one operator class must successfully complete the required training program or comparable examination according to the operator class in which the individual is designated.

(b) **Class A operators.** Each designated Class A operator must be trained in accordance with (1) and (2) of this subsection, pass a comparable examination in accordance with (f) of this section, or have received comparable training from another state in accordance with (g) of this section. A Class A operator must have a general knowledge of the UST system requirements so as to ensure compliance with operation, maintenance, and recordkeeping requirements of this chapter. A Class A operator who is responsible for more than one facility must receive training on each UST system present at each facility for which the operator is responsible. At a minimum the training program must

(1) teach the Class A operators, as applicable, about the purpose, methods, and function of

(A) spill and overfill prevention;

(B) release detection;

(C) corrosion protection;

(D) emergency response;

(E) product compatibility with systems and equipment used at the facility;

(F) financial responsibility requirements and documentation;

(G) reporting, recordkeeping, testing, and inspection requirements;

(H) notification and registration requirements;

(I) release and suspected release reporting;

(J) temporary out-of-service requirements and temporary and permanent closure requirements; and

(K) operator training requirements; and

(2) evaluate Class A operators to determine

(A) that these individuals have the knowledge and skills to make informed decisions regarding compliance; and

(B) whether appropriate individuals are fulfilling the operation, maintenance, and recordkeeping requirements for USTs in accordance with (1) of this subsection.

(c) **Class B operators.** Each designated Class B operator must be trained in accordance with (1) and (2) of this subsection, pass a comparable examination in accordance with (f) of this section, or have received comparable training from another state in accordance with (g) of this section. A Class B operator must be trained in systems and equipment specific to the facility for which the operator is responsible. At a minimum the training program must

(1) teach the Class B operator, as applicable, about the purpose, methods, and function of

(A) components of the UST system;

(B) materials used in the construction of the UST system;

(C) the methods of release detection and release prevention used on the UST system;

(D) operation, maintenance, and inspection requirements of the UST system in accordance with this chapter, including

(i) spill and overfill prevention;

(ii) release detection; and

(iii) corrosion protection;

(E) emergency response;

(F) product compatibility with systems and equipment used at the facility;

(G) release and suspected release reporting;

(H) reporting, recordkeeping, testing, and inspection requirements; and

(I) operator training requirements; and

(2) evaluate Class B operators to determine that these individuals have the knowledge and skills to implement applicable UST regulatory requirements in the field on the components of typical USTs or, as applicable, site-specific equipment used at a UST facility in accordance with (1) of this subsection.

(d) **Class C operators.** Each designated Class C operator must be trained by a Class A or Class B operator in accordance with (1) and (2) of this subsection, complete a training program in accordance with (1) and (2) of this subsection, or pass a comparable examination in accordance with (f) of this section. A Class C operator must successfully complete training on site-specific emergency response procedures and equipment, emergency shutoff systems, contact information, types of alarms, how to respond to an alarm, and how to read alarm panels if installed. At a minimum, the training program must

(1) teach the Class C operators to take appropriate actions, including notifying appropriate authorities, in response to emergencies or alarms caused by spills or releases resulting from the operation of the UST; and

(2) evaluate Class C operators to determine that these individuals have the knowledge and skills to take appropriate action, including notifying appropriate authorities, in response to emergencies or alarms caused by spills or releases from an underground storage tank system.

(e) **Training program.** A training program must meet the minimum requirements of this section, must include an evaluation through testing, a practical demonstration, or another approach acceptable to the department, and must provide the operators a certificate of successful completion of the training. The department will maintain a list of classroom and Internet-delivered training programs that provide training and evaluation of operator knowledge in the required areas.

(f) **Comparable examination.** A comparable examination must, at a minimum, test the knowledge of the Class A, Class B, or Class C operators in accordance with the requirements of (b), (c), or (d) of this section, as applicable.

(g) **Comparable training.** Comparable training from another state must, at minimum, evaluate operator knowledge of areas listed in (b)(1)(A) - (K) or (c)(1)(A) - (I) of this section, as appropriate for the operator classification for which the individual is now designated. The department will require additional training as necessary for the operator to comply with requirements of this chapter. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.370. Timing of operator training. (a) An owner or operator must ensure that designated Class A, Class B, and Class C operators meet the requirements in 18 AAC 78.365.

(b) Class A and Class B operators must successfully complete operator training in accordance with 18 AAC 78.365 not later than 30 days after being assigned to the position.

(c) Class C operators must successfully complete training before the individual is assigned to the position. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.375. Additional training. (a) Class A and Class B operators of USTs determined by the department to be out of compliance with this chapter or that failed a third-party inspection under 18 AAC 78.059 must successfully complete a training program or comparable examination in accordance with 18 AAC 78.365. The training program or comparable examination must be developed or administered by an independent organization or the department. At a minimum, the training must cover the area determined to be out of compliance. The UST owner or operator shall ensure that Class A and Class B operators are retrained under this section not later than 30 days from the date the department determines that the facility is out of compliance with this chapter or the date on which the UST failed a third-party inspection, whichever is earlier.

(b) A Class C operator must repeat training annually.

(c) If a UST undergoes an upgrade or improvement, the department will require a Class A, Class B, or Class C operator to successfully complete refresher training in each area that pertains to the new equipment, as appropriate to the classification of the operator. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.380. Documentation. (a) The owner or operator of a UST must maintain at the facility a list of designated Class A, Class B, and Class C operators and records verifying that training has been completed in accordance with 18 AAC 78.365 - 18 AAC 78.370 and that additional training, as applicable, has been completed in accordance with 18 AAC 78.375 as follows:

(1) the list must

(A) identify each Class A, Class B, and Class C operator currently designated for the facility; and

(B) for each operator include the operator's name, the class of operator trained, the date when the operator assumed duties, the date when the operator completed initial training, and any additional training that the operator is required to complete under 18 AAC 78.375; and

(2) each record verifying completion of initial training or of additional training under 18 AAC 78.375 must be a paper or electronic record for each Class A, Class B, and Class C operator; each record, at a minimum, must identify the name of the trainee, the date when the individual was trained, the operator training class completed, the name of each trainer or examiner, and each training company name, address, and telephone number; the owner or operator shall maintain these records for the duration of the Class A and B operator's employment plus five years and the duration of the Class C operator's employment plus three years; the following requirements also apply to the following types of training:

(A) each record from each classroom or field training program, including Class C operator training provided by the Class A or Class B operator, or a comparable examination must, at a minimum, be signed by the trainer or examiner;

(B) each record from computer-based training must, at a minimum, provide the name of the training program and the provide the program's website address, if the program is Internet-based;

(C) each record of additional training must include those areas on which the Class A or Class B operator has received additional training; and

(D) if the Class C operator receives training from a facility's Class A or Class B operator, a checklist of the subjects presented and successfully completed must be kept at the facility and must include the signatures of the trainer and Class C operator and the date of training.

(b) The owner or operator shall meet the following reporting requirements:

(1) each Class A operator and Class B operator shall be designated in writing to the department; and

(2) each operator must provide to the department a copy of the certificate of successful completion of training not later than 30 days after completion of the training. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.385. Definition for 18 AAC 78.355 - 18 AAC 78.385. In 18 AAC 78.355 - 18 AAC 78.385, "training program" means a program that provides information to and evaluates the knowledge of a Class A, Class B, or Class C operator through

(1) testing;

(2) practical demonstration; or

(3) another approach acceptable to the department regarding requirements for USTs that meets the requirements of 18 AAC 78.355 - 18 AAC 78.385. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

Article 4. Certification of Underground Storage Tank Workers and Inspectors.

Section

18 AAC 78.400. Certification required. (a) A person may not conduct, and an owner or operator may not allow a person to conduct any part of a UST installation, repair, reconfiguration, closure, tank tightness test, cathodic protection, or inspection unless the person

(1) is certified under this chapter; or

(2) meets the requirements of AS 46.03.375(d).

(b) The requirements of this section also apply to a person who is an officer or employee of the owner or operator of a UST and who performs an activity described in this section.

(c) The requirements of this section do not prohibit the employment of an uncertified person on the job site if a certified person exercises responsible supervisory control and is physically present onsite during the installation, repair, closure, reconfiguration, or while the tank tightness test, cathodic protection test, or inspection is being conducted.

(d) Repealed 8/15/99. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136; am 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: As of August 15, 1999, the substance of 18 AAC 78.400 appears in 18 AAC 78.499.

18 AAC 78.410. Categories of certification. (a) If the certification requirements of 18 AAC 78.415 are met, the division will issue a certification for one or more of the following categories:

(1) installation, including repairs and significant reconfiguration;

(2) closure, including removal;

(3) tank tightness testing;

(4) cathodic protection testing;

(5) inspection.

(b) Subject to 18 AAC 78.480(a), a department employee may obtain a department inspector certification in any category listed in (a)(1)-(4) of this section if the requirements of 18 AAC 78.415 are met. Department inspector certification is for compliance inspection purposes only. A department employee certified as an inspector may not conduct an activity described in 18 AAC 78.400(a).

(c) A certification issued under this chapter may not be assigned. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.415. Certification requirements. (a) A person seeking certification under this chapter shall submit a completed application to the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development on a form provided by the division, and shall pay the applicable fees set by 18 AAC 78.495.

(b) An applicant must

(1) be an individual;

(2) meet the work experience or educational requirements at 18 AAC 78.425;

(3) pass the examination required by 18 AAC 78.420; and

(4) have all other licenses applicable to the profession for which certification is sought.

(c) If the application is for tank tightness testing, the applicant shall designate the type or types of tightness test for which certification is sought, and show proof that he or she is certified by the manufacturer of the particular tank tightness test. The test method must meet the requirements of 18 AAC 78.065(d). The manufacturer's certification must remain in effect for the duration of a certification issued under this chapter. The department will, in its discretion,

recommend that the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development revoke certification under this chapter if the requirements of this subsection are not met.

(d) If the application is for inspection, the applicant shall also obtain and maintain certification in UST installation and cathodic protection. An applicant may apply for certification in UST inspection while an application for certification in UST installation or cathodic protection is pending; however, the division will not issue or renew a certification for inspection unless the applicant is certified in UST installation and cathodic protection.

(e) A person whose UST certification is suspended or revoked under this chapter, or by another state if certification is received through reciprocity under 18 AAC 78.475, will not be certified under this chapter until the period of suspension or revocation has expired. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: With Register 180, January 2007 and under the authority of AS 44.62.125, the regulation attorney changed obsolete terminology concerning division of occupational licensing and the division of banking and securities in conformity with ch. 14, SLA 2005 and to reflect the transfer of certain corporations functions within the Department of Commerce, Community, and Economic Development.

18 AAC 78.420. Examination requirements. A person who seeks certification or renewal of certification under this chapter shall take an examination approved by the department and administered by the division. The examination must test the extent of the applicant's knowledge regarding the category of certification sought, the state statutes and regulations relating to USTs, including familiarity with the nationally-recognized codes of practice listed in this chapter, and the unique environmental conditions affecting USTs in the state. A score of 75 or more is required to pass an examination. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.425. Work experience and education requirements. A person seeking a certification under this chapter, other than inspector certification, must have satisfactory work performance on at least two UST projects in the category for which the certification is sought during the three years immediately before application. Satisfactory work performance must be verified by an endorsement from a person certified under this chapter or under an equivalent program established outside of the state. The division will, in its discretion, accept applicable vocational training for any or all of the work experience required by this section.

(b) A person seeking to become a certified inspector shall show proof of completion within two years before the date of application of

(1) at least one nationally recognized training course, class, examination, or workshop dealing with UST design, installation, testing, or inspection; and

(2) an inspector orientation course provided by the department. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.430. Display of certificate. A certificate, or a copy of a certificate, issued under this chapter must be readily available when work that requires certification is being performed. (Eff. 3/25/91, Register 118)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.435. Term of certification. (a) Except as provided in (b) of this section, a certification issued under this chapter is valid until the next certification expiration date. The certification expiration date is December 31, 1995, and reoccurs every December 31 of odd-numbered years.

(b) If a person is issued certification within 90 days before the next certification expiration date, the person's certification is valid until the following certification expiration date. (Eff. 3/25/91, Register 118; am 8/4/94, Register 131)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.440. Renewal requirements. (a) A person who seeks to renew a certification under this chapter shall renew the certification before it expires in accordance with (c) of this section. If the person’s certification expires before it is renewed, the person must meet the requirements for a new certification under 18 AAC 78.415, unless renewal under (c) of this section occurs within 90 days after expiration. A person whose certification has expired may not perform work described in 18 AAC 78.455 unless the

(1) person obtains written department approval before doing the work;

(2) work is necessary to respond to an emergency that threatens human health or the environment; and

(3) the work is performed in the first 90 days after certification expires.

(b) The division will mail a renewal form at least 30 days before the next certification expiration date to a person certified under this chapter. The form will be mailed to the person's last address of record with the division. Failure to receive a renewal form does not relieve a person of the responsibility to renew certification before the current certification expires. A renewal form may also be requested from the division.

(c) To qualify for a renewed certification, a person certified under this chapter shall

(1) submit a completed renewal form to the division;

(2) pay the applicable fee as set out in 18 AAC 78.495;

(3) pass the examination required by 18 AAC 78.420, except as provided in (d) and (e) of this section; and

(4) have all other licenses applicable to the profession for which certification is requested.

(d) A person certified under this chapter who was examined within one year before the certification expiration date is exempt from taking an examination required by (c)(3) of this section.

(e) Notwithstanding the exam requirement of (c)(3) of this section, a person who has maintained certification in a specific category under 18 AAC 78.410 for at least six consecutive years is only required to pass the examination required by 18 AAC 78.420 for every third renewal of that category of certification thereafter, so long as that person performs at least two UST projects in the category during the calendar year before each renewal for which an examination is not required under this subsection.

(f) The division will renew a certification under this section effective as of

(1) January 1 of the first year of the new certification period, if the submittal required by (c) of this section is legibly postmarked or received by the division before that date; or

(2) the date the submittal is legibly postmarked or the date the division receives the submittal required by (c) of this section, whichever is earlier, if that date is after January 1 of the first year of the new certification period.

(g) The division will prorate the first license renewal fee following initial licensure in accordance with 12 AAC 02.020. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136; am 12/21/95, Register 137; am 1/30/2003, Register 165)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.450. Technical review committee. (a) The department will designate a technical review committee to review and to advise the department on examination questions for the categories of certification established by 18 AAC 78.410. The committee will meet at the request of the department.

(b) The technical review committee is comprised of the following members, each of whom must be certified under this chapter:

(1) an employee of the department familiar with UST requirements, regulations, and standards of practice;

(2) an employee of the division familiar with the certification regulations in this chapter; and

(3) one to three persons per certification category to represent the category in which they are certified.

(c) The members of the technical review committee serve at the pleasure of the commissioner of the department. (Eff. 8/4/94, Register 131)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.455. Standards of practice. (a) Except for a person certified under 18 AAC 78.480, a person certified under this chapter

(1) for installation or reconfiguration, shall be at the job site when work requiring certification of installation or reconfiguration is being performed, including

(A) preparation of an excavation before receiving backfill and while the backfill is being placed;

(B) any movement of a tank at a job site, including a transfer of the tank from a vehicle used to transport the tank to the job site;

(C) placement of a tank and its associated piping into the excavation, including placement of an anchoring device, backfill, or strapping;

(D) placement or connection of a piping system to a tank;

(E) installation of cathodic protection;

(F) completion of a backfill and filling of an installation;

(G) covering a UST with concrete, asphalt, or other similar substance;

(H) preparation for and installation of a tank lining system; and

(I) installation, replacement, or repair of release detection equipment; and

(2) for closure, shall be at the job site when work requiring certification of closure is being performed, including

(A) excavation of a tank or piping before removal from the ground;

(B) emptying the contents of a tank or its piping, cleaning a tank, or filling a tank with a solid, inert material;

(C) removal or disposal of a tank's contents after cleaning; and

(D) movement of a tank on the job site, including transfer of the tank to a vehicle used to transport the tank from the job site; the requirements of this subparagraph do not apply to a tank that has been cleaned in accordance with the requirements of *American Petroleum Institute Standard 2015*, adopted by reference in 18 AAC 78.085(g)(2);

(3) for tank tightness testing, shall

(A) be at the job site when tightness testing of the UST or associated piping is being performed; or

(B) verify the tightness testing results if a statistical inventory reconciliation method is being used;

(4) for cathodic protection testing shall be at the job site when testing of cathodic protection is being performed;

(5) for inspection, shall

(A) refer to the department’s operations inspection report form; and

(B) no later than 30 days after completing the inspection, sign and submit to the owner or operator a completed inspection report on a form supplied by the department; the report must contain a description of any

(i) deficiencies found;

(ii) corrective action taken by the inspector or a person certified under this chapter; and

(iii) recommendations of the inspector or a person certified under this chapter for further necessary corrections;

(6) may perform only those installations, repairs, reconfigurations, closures, tightness tests, cathodic protection tests, and inspections for which the person is certified under this chapter and which

(A) conform to accepted technical standards imposed by federal, state, and local law;

(B) safeguard human life, health, safety, and property; and

(C) protect the environment;

(7) shall immediately report to the owner or operator a release or suspected release of petroleum detected at a job site or the surrounding area;

(8) shall sign or affix the person's certification number only to an installation, repair, closure, reconfiguration, tightness test, cathodic protection test, or inspection that was done under the person's direct control and supervision; and

(9) shall, after completing a UST installation, reconfiguration, repair, closure, test, or inspection file with the owner or operator a completed checklist on a form supplied by the department that

(A) bears the person's signature and certification number;

(B) provides the registration number of the tank; and

(C) verifies that the items on the checklist have been completed for the tank.

(b) The requirements of this section

(1) must be disclosed by a person certified under this chapter to the person's client or employer; and

(2) are in addition to the certification requirements of 18 AAC 78.415.
(Eff. 3/25/91, Register 118; am 8/4/94, Register 131; am 11/3/95, Register 136; am 1/22/99, Register 149; 8/15/99, Register 151; am 1/30/2003, Register 165)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.460. Board of storage tank assistance. (In effect 3/25/91 - 7/22/91, by em adopt., Register 118)

18 AAC 78.465. Dispute resolution. (In effect 3/25/91 - 7/22/91, by em. adopt., Register 118)

18 AAC 78.470. Suspension or revocation; disciplinary action. (a) Upon written finding, the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development will, in its discretion, suspend certification for a period recommended by the department, or revoke a certification if a certified tank worker

(1) fraudulently obtained certification;

(2) fails at any time to meet the requirements for certification;

(3) fails to comply with this chapter;

(4) fails to meet any applicable federal, state, or local law relating to the service performed under the certification; or

(5) falsifies a document regarding work done under this chapter.

(b) If the department receives a complaint regarding the work performance of a person certified under this chapter, or if the department initiates a complaint under (a) of this section, the department will

(1) notify the certified worker of the nature of the complaint and explain all rights and duties under the law;

(2) keep the name of the certified worker confidential unless it finds that disciplinary action, as described in (c) of this section, is warranted;

(3) if the complainant is a third party, request from the complainant the specific nature of the alleged violation, including the statute, regulation, or industry standard that was allegedly violated by the certified worker, if known, and any other documentation the department believes is necessary to determine the validity of the complaint; and

(4) fully review the documentation obtained and determine whether disciplinary or other action is warranted.

(c) If the department finds that disciplinary action is appropriate under (a) or (b) of this section, it will notify the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development of its recommended action, including reasons for the recommendation. The department will, in its discretion, recommend suspension of the certificate for a specific period, or revocation of the certificate. If a certificate is suspended under this subsection, the period of suspension will not exceed the remaining life of the certificate.

(d) If the department finds that disciplinary or other action is not warranted, it will notify the certified worker and the complainant in writing that the allegations were found to be untrue or that the evidence was insufficient. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: With Register 180, January 2007 and under the authority of AS 44.62.125, the regulation attorney changed obsolete terminology concerning division of occupational licensing and the division of banking and securities in conformity with ch. 14, SLA 2005 and to reflect the transfer of certain corporations functions within the Department of Commerce, Community, and Economic Development.

18 AAC 78.475. Reciprocity. (a) The division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development will, in its discretion, issue a certificate to a person who has a certificate or license as a tank worker from another state if the division finds that the program in that state is comparable to the requirements of this chapter.

(b) To obtain certification under this section, a person shall apply for certification under 18 AAC 78.415 and shall demonstrate knowledge regarding state statutes and regulations relating to USTs, including familiarity with the nationally-recognized codes of practice listed in this chapter, and the unique environmental conditions affecting USTs and their installation by passing that part of the examination described in 18 AAC 78.420.

(c) A certificate issued under this section is limited to the term set out in 18 AAC 78.435, and is subject to the renewal requirements of 18 AAC 78.440. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: With Register 180, January 2007 and under the authority of AS 44.62.125, the regulation attorney changed obsolete terminology concerning division of occupational licensing and the division of banking and securities in conformity with ch. 14, SLA 2005 and to reflect the transfer of certain corporations functions within the Department of Commerce, Community, and Economic Development.

18 AAC 78.476. Conflict of interest prohibition. An inspector may not perform or supervise an inspection at a UST facility if the inspector owns or has a significant financial interest in the facility. (Eff. 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.480. Certification of department employees. (a) Within one year after employment begins, a department employee shall become certified as an underground storage tank department inspector under this chapter if the employee's assigned duties and responsibilities include

(1) investigating discharges to determine if the discharge is related to potentially faulty UST installation, closure, repair, or reconfiguration; or

(2) field enforcement of the department's regulations regarding UST installation, closure, repair, reconfiguration, or testing.

(b) A department employee will be certified as an underground storage tank inspector if the employee's duties include those listed in (a) of this section and if the employee meets the certification requirements of 18 AAC 78.415(a) - (c). A department employee need not meet the requirements of 18 AAC 78.455.

(c) The department employee's supervisor shall determine the category of certification appropriate for the employee's duties and responsibilities.

(d) A department employee certified under this chapter is subject to the renewal requirements set out in 18 AAC 78.440 other than the fee requirement.

(e) Certification issued to a department employee under this chapter expires automatically on the employee's last day of employment with the department. If the employee wishes to become certified as an underground storage tank worker after leaving department employment, he or she must meet the requirements of all applicable state laws, including 18 AAC 78.415 and 18 AAC 78.455, and pay all required fees.

(f) A state agency that owns or operates a UST may request the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development to certify an employee of that agency under the terms of this section. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136; 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.375 AS 46.03.395
AS 46.03.365

Editor's note: With Register 180, January 2007 and under the authority of AS 44.62.125, the regulation attorney changed obsolete terminology concerning division of occupational licensing and the division of banking and securities in conformity with ch. 14, SLA 2005 and to reflect the transfer of certain corporations functions within the Department of Commerce, Community, and Economic Development.

18 AAC 78.490. Administration. The division will

(1) keep a list of the names and certification numbers of all persons certified under this chapter, provide that list to the department, and make it available for public distribution;

(2) keep a file on a person certified under this chapter;

(3) notify an applicant for certification under this chapter, including a department employee applying under 18 AAC 78.480, within 60 days after taking an examination under 18 AAC 78.420, of whether the applicant qualifies for certification, or whether additional information is required; if the applicant qualifies, the notice must be accompanied by a certificate and certification number;

(4) administer, or arrange to have administered, the required examination for each category of certification as determined necessary by the division, and publish notice of the examination and the final filing date in a newspaper of general circulation at least 60 days before the examination;

(5) notify a person certified under this chapter

(A) within five days after the division

(i) receives a complaint regarding the person under 18 AAC 78.470(b); or

(ii) learns of a suspected violation of a federal, state, or local law by the person; and

(B) within 15 days after a disciplinary action decision has been made by the division regarding a complaint or suspected violation;

(6) publish notice jointly with the department, in a newspaper of general circulation in the area where a continuing education course or workshop related to USTs will be offered;

(7) collect fees required for certification under this chapter; and

(8) inactivate an applicant's application or examination results if 12 months or more have elapsed since a correspondence was last received by the division from or on behalf of the applicant. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131)

Authority: AS 44.66.010 AS 46.03.365
AS 46.03.020 AS 46.03.375

18 AAC 78.495. Fees. (a) The following fees are established for purposes of this chapter:

(1) application fee, $100;

(2) certification fee for each category for which an applicant seeks certification, $60;

(3) certification fee for each category for which an applicant seeks renewal, $60; and

(4) reciprocity certification fee for each category for which an applicant seeks certification through reciprocity, $60.

(b) An applicant shall submit a fee required under this section to the division at the time of application, renewal, or request for duplicate certificate. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 8/4/94, Register 131; am 11/3/95, Register 136; am 10/19/97, Register 144; am 12/3/2016, Register 220; am 9/29/2019, Register 231)

Authority: AS 46.03.375

18 AAC 78.499. Definitions. For purposes of 18 AAC 78.400 – 18 AAC 78.499,

(1) "certified inspector" means a person who is certified in inspection under this chapter;

(2) "inspect" or "inspection" means to perform a third party inspection, using standards of practice set out in 18 AAC 78.455; "inspect" does not include routine maintenance or an inspection performed by a department inspector;

(3) "repair" means to correct or restore, after a release has occurred, a UST or any part of a UST that routinely contains petroleum, and includes repairs to the tank vessel, pipes, valves, fillpipes, or vents; "repair" does not include routine maintenance. (Eff. 8/15/99, Register 151)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Article 5. Storage Tank Assistance Fund.

Section

18 AAC 78.500. Applicability. Deleted. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.505. General requirements for financial assistance. Deleted. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/27/94, Register 129; am 6/23/94, Register 130; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.506. Form of eligibility certification for cleanup assistance. Deleted. (Eff. 8/24/99, Register 151; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.507. Form of eligibility certification for upgrade and closure assistance. Deleted. (Eff. 8/24/99, Register 151; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.508. Application requirements. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000; am 1/30/2003, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.509. Additional requirements for upgrading, closure, and cleanup funding applications. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 4/16/2000, Register 154; am 1/30/2003, Register 165; deleted as of Register 179, October 2006)

18 AAC 78.510. Tank tightness and site assessment incentive program eligibility requirements. Repealed. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; repealed 1/27/94, Register 129)

18 AAC 78.511. Continuation grants and loans. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.513. Determination and conditions of financial assistance. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.514. Ineligible costs. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.515. Tank cleanup grant program eligibility requirements. Deleted. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/6/93, Register 125; am 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.517. Emergency grants. Repealed. (Eff. 8/21/91, Register 119; repealed 1/27/94, Register 129)

18 AAC 78.520. Tank upgrading and closure program eligibility requirements. Deleted. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.521. Tank cleanup loan application process. Deleted. (Eff. 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.523. Tank cleanup loan examination. Deleted. (Eff. 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.524. Tank cleanup loan committee. Deleted. (Eff. 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.525. Reimbursement program eligibility requirements. Repealed. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/27/94, Register 129; am 6/23/94, Register 130; repealed 4/16/2000, Register 154)

18 AAC 78.526. Disbursement of loan money. Deleted. (Eff. 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.528. Reconsideration of a loan request. Deleted. (Eff. 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.529. Confidentiality of loan information. [Annulled; see editor's note]. (a) The following information is not confidential and is available for public inspection upon request:

(1) a document that is readily available for public inspection as described in 6 AAC 96.100(b), including a deed of trust, a financing statement, a warranty deed, a bill of sale, a mortgage, a judgment or lien, or a vehicle title;

(2) general information regarding loans; that information includes the original loan amount, loan terms, personal guarantees, or disbursement and repayment schedules;

(3) insurance matters, including title insurance policies and correspondence with insurance companies or borrowers regarding losses, accident reports, and nonpayment of premiums;

(4) foreclosure and default proceedings.

(b) The following information is considered confidential and is not subject to public disclosure unless ordered by a court:

(1) financial information, including income tax returns, financial statements, business income statements, pro forma profit and loss statements, credit information obtained directly from banks and other creditors, and reports from consumer credit reporting agencies; and

(2) memoranda and minutes of a loan committee appointed under 18 AAC 78.524, containing information relating to the creditworthiness of an applicant.

(c) Information not described in (a) or (b) of this section may be subject to public disclosure. A request for disclosure must be made, and will be determined, in accordance with 6 AAC 96. Upon receipt of a request for disclosure of information not listed in (a) or (b) of this section, the department will make reasonable efforts to notify the loan applicant and other persons with a privacy interest in the request to permit them to present reasons why the requested information should not be disclosed. (Eff. 4/16/2000, Register 154)

Authority: AS 40.25.110 AS 46.03.020 AS 46.03.440
AS 40.25.120

Editor's note: As of Register 176 (January 2006), and acting under AS 44.62.125(b)(6), the regulations attorney made technical changes to 18 AAC 78.529(a)(1) and (c), to reflect Executive Order 113 (2005). Executive Order 113 eliminated the Telecommunications Information Council and transferred its functions related to public information and records to the governor and to the Department of Administration. Effective August 5, 2006, 18 AAC 78.529 was annulled by sec. 3, ch. 102, SLA 2006.

18 AAC 78.530. Ineligible costs. Repealed. (Eff. 3/25/91, Register 118; repealed 1/27/94, Register 129)

18 AAC 78.534. Project priority ranking procedure. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; am 1/30/2003, Register 165; deleted as of Register 179, October 2006)

18 AAC 78.535. Program funding allocation. Deleted. (Eff. 3/25/91, Register 118; am 1/27/94, Register 129; am 6/23/94, Register 130; am 4/16/2000, Register 154; am 1/30/2003, Register 165; deleted as of Register 179, October 2006)

18 AAC 78.537. Emergency grants or loans. Deleted. (Eff. 1/27/94, Register 129; am 6/23/94, Register 130; am 11/3/95, Register 136; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.540. Project priority ranking procedure. Repealed. (Eff. 3/25/91, Register 118; repealed 1/27/94, Register 129)

18 AAC 78.545. Application requirements. Repealed. (Eff. 3/25/91, Register 118; repealed 1/27/94, Register 129)

18 AAC 78.550. Determination and conditions of financial assistance. Repealed. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; repealed 1/27/94, Register 129)

18 AAC 78.555. Payment procedures. Deleted. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/27/94, Register 129; am 6/23/94, Register 130; am 1/22/99, Register 149; am 4/16/2000, Register 154; deleted as of Register 179, October 2006)

18 AAC 78.560. Compliance agreement. Deleted. (Eff. 3/25/91, Register 118; am 1/27/94, Register 129; am 6/23/94, Register 130; readopt 4/16/2000, Register 154; deleted as of Register 179, October 2006)

Article 6. Cleanup Levels

Section

18 AAC 78.600. Cleanup levels: general requirements. (a) Soil samples from an excavation or stockpile created as part of a corrective action must be collected as required by 18 AAC 78.605, analyzed in accordance with Chapter 2 of the *UST Procedures Manual*, analyzed by a laboratory approved by the department under 18 AAC 78.800 – 18 AAC 78.815, and reported as required by 18 AAC 78.276. If laboratory results indicate that the concentrations of a contaminant are below the applicable soil cleanup levels determined under 18 AAC 75.340 and 18 AAC 75.341, the department will determine soil corrective actions to be adequate, unless subsequent evidence shows that the testing was not representative or that sampling did not detect all contamination.

(b) The identity of a released refined petroleum product must be assumed to be unknown unless the owner or operator demonstrates, by analysis done as required by the *UST Procedures Manual*, that the product is only gasoline, or only a refined nongasoline product. The department will waive the requirement that a product be identified by analysis if the owner or operator demonstrates that only one type of product was stored or distributed during the facility's operational life.

(c) Soils additionally contaminated with a hazardous substance other than a petroleum product are subject to 18 AAC 75 and as applicable, 18 AAC 60, 18 AAC 62, 18 AAC 70, 18 AAC 72, or another chapter of this title.

(d) 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, the owner or operator shall ensure that, after completing site corrective action activities, the risk from contaminants does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and a cumulative noncarcinogenic risk standard at a hazard index of one, reported to one significant figure across all exposure pathways. Instructions for determining cumulative risk are provided in the department's *Procedures for Calculating Cumulative* Risk, dated September 15, 2016, and adopted by reference.

(e) 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)(3), the owner or operator shall ensure that the risk from contaminants does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and a cumulative noncarcinogenic risk standard at a hazard index of one, reported to one

significant figure, across all exposure pathways. Instructions for determining cumulative risk are provided in the department's *Procedures for Calculating Cumulative Risk,* adopted by reference in (d) of this section.

(f) An owner or operator requesting approval of a cleanup level for soil or groundwater based on a site-specific risk assessment under 18 AAC 75.340(f) or 18 AAC 75.345(b)(3) shall reimburse the department for its expenses to hire a contractor to review a risk assessment report.

(g) An owner or operator shall provide for long-term care and management of a site subject to corrective action under this chapter, including proper operation and maintenance of

(1) corrective action techniques and equipment;

(2) monitoring wells and equipment, if required; and

(3) institutional controls if required under 18 AAC 78.625.

(h) An owner or operator shall obtain approval before disposing of soil or groundwater from a site

(1) that is subject to this chapter; or

(2) for which the owner or operator has received a written determination from the department under 18 AAC 78.276(f).

(i) The collection, interpretation, and reporting of data under this section must be conducted or supervised by a qualified environmental professional. (Eff. 1/22/99, Register 149; am 8/27/2000, Register 155; am 1/30/2003, Register 165; am 6/17/2015, Register 214; am 7/1/2017, Register 222)

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 46.03.365	AS 46.03.822	AS 46.09.020
	AS 46.03.710		

Editor's note: The department's *Procedures for Calculating Cumulative Risk,* adopted by reference in 18 AAC 78.600(d), 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

As of Register 188 (January 2009), the regulations attorney made technical revisions under AS 44.62.125(b)(6), to 18 AAC 78.600(e) and (f), reflecting the Department of Environmental Conservation's renumbering of paragraphs in 18 AAC 78.345(b), effective 10/9/2008 (Register 188).

18 AAC 78.605. Soil sample number and location. (a) The owner or operator of a UST shall collect and analyze soil samples to verify that a site subject to corrective action meets the cleanup levels and requirements of this chapter. Soil samples must be collected and analyzed in accordance with 18 AAC 78.271.

(b) The minimum number of final verification grab samples required for excavated soil that have been treated is set out in Table C of this section.

TABLE C
NUMBER OF SAMPLES FOR POST-TREATMENT EXCAVATED SOIL

Cubic Yards of Soil	Minimum Number of Samples
0-10	1
11-50	2
51-100	3
101-500	5
501-1000	7
1001-2000	10
More than 2000	10 samples, plus one additional sample for each additional 500 cubic yards, or additional samples as the department determines necessary to ensure protection of human health and safety, and of the environment

(c) For untreated stockpiled soil, at least two grab samples must be collected from stockpiles of 50 cubic yards or less, with at least one additional sample collected from each additional 50 cubic yards of soil or portion thereof over the initial 50 cubic yards.

(d) Samples for any soil remaining in place at the site must be sufficient in number and location to represent the condition of the soil. (Eff. 1/22/99, Register 149; am 6/25/99, Register 150)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.610. Soil cleanup levels. (a) The owner or operator shall ensure that corrective action activities at the site meet applicable soil cleanup levels as determined under 18 AAC 75.340 - 18 AAC 75.341. If the department, as part of its approval of soil cleanup levels under 18 AAC 75.340 - 18 AAC 75.341, determines that compliance with an institutional control is required, the department will make that determination under 18 AAC 78.625.

(b) If an analysis of soil samples as required in this chapter shows soil to be contaminated with a hazardous substance other than a petroleum product, the owner or operator is subject to 18 AAC 75 and, as applicable, 18 AAC 60, 18 AAC 62, 18 AAC 70, 18 AAC 72, or another chapter of this title.

(c) Except as provided in 18 AAC 75.340(c) - (f), soil at a site where groundwater has been impacted by petroleum leachate must meet the soil cleanup levels in 18 AAC 75.341(a), Table A1, Part B, Category A unless the department approves another soil cleanup level under 18 AAC 75.340. (Eff. 1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.050 AS 46.03.365

18 AAC 78.615. Groundwater and surface water sample number and location. (a) If available evidence indicates that groundwater contains a hazardous substance in concentrations exceeding the applicable cleanup level determined under 18 AAC 75.345, or that surface water contains a hazardous substance in concentrations exceeding the applicable standard in 18 AAC 70.020(b), the owner or operator of the UST that caused or contributed to the groundwater or surface water contamination shall, collect and analyze water samples to verify that the corrective action activities met the corrective action requirements of this chapter.

(b) Groundwater monitoring wells must be installed, developed, and decommissioned in accordance with an approved method that is protective of human health and safety, and of the environment. Samples must be collected in accordance with the *UST Procedures Manual*.

(c) If a hazardous substance at a UST site has impacted surface water quality, the owner or operator of the UST that caused or contributed to the impact shall, after corrective action, collect and analyze surface water samples to verify that the corrective action activities met the corrective action requirements of this chapter. Analysis of water samples must be conducted in accordance with the *UST Procedures Manual*. (Eff. 1/22/99, Register 149; am 6/25/99, Register 150; am 7/1/2017, Register 222)

Authority: AS 46.03.020 AS 46.03.050 AS 46.03.365

18 AAC 78.620. Groundwater and surface water cleanup levels. The owner or operator shall complete corrective action activities and ensure that the site meets applicable groundwater cleanup levels determined under 18 AAC 75.345 and the applicable surface water quality standards and requirements of 18 AAC 70. If the department, as part of its approval of those cleanup levels, determines that compliance with an institutional control is required, the department will make that determination under 18 AAC 78.625. (Eff. 1/22/99, Register 149)

Authority: AS 46.03.020 AS 46.03.050 AS 46.03.365

18 AAC 78.625. Institutional controls. (a) The department will, after consultation with each landowner of the site, determine that the use of an institutional control is necessary, on a site-specific basis, if the department determines that controls are required to ensure

(1) compliance with an applicable cleanup level;

(2) protection of human health or safety, or of the environment; or

(3) the integrity of site corrective action activities or improvements.

(b) Institutional controls include

(1) the requirement for and maintenance of physical measures, such as fences and signs to limit an activity that might interfere with corrective action or result in exposure to a contaminant at the site;

(2) the requirement and maintenance of engineering measures such as liners and caps to limit exposure to a contaminant;

(3) restrictive covenants, easements, deed restrictions, or other measures that would be examined during a routing title search, and that limit site use or site conditions over time or provide notice of any residual contamination; and

(4) a zoning restriction or land use plan by a local government with land use authority.

(c) The use of institutional controls must, to the maximum extent practicable, be

(1) appurtenant to and run with the land so that the control is binding on each future owner of the site; and

(2) maintained by each owner or operator of the site.

(d) If the department determines any of the following are necessary to protect human health or safety, or the environment, the department will require that institutional controls be designed to accomplish one or more of the following:

(1) prohibit activities on the site that might interfere with the site corrective action activities, operation and maintenance, monitoring, or other response actions;

(2) prohibit activities that might result in the release of a contaminant that was contained as a part of the site corrective action activities;

(3) require written notice to the department of any proposal to use the site in a manner that is inconsistent with a restrictive covenant or other measure described in (b)(3) of this section; and

(4) grant the department and its designated representatives the right to enter the property at reasonable times to evaluate compliance with the institutional control, including the right to take samples, inspect any corrective actions taken at the site, and inspect records relating to the operation and maintenance of the institutional control.

(e) If the department determines that financial assurance is necessary to ensure protection of human health or safety, or of the environment, the department will require the owner or operator to provide financial assurance sufficient to cover costs of operation and maintenance, including compliance monitoring and corrective measures, for any institutional control.

(f) If the concentrations of all residual contaminants remaining at the site are subsequently determined to be below the applicable cleanup levels, the department will approve, at the owner's request, elimination of the institutional control. (Eff. 1/22/99, Register 149)

Authority:	AS 46.03.020	AS 46.03.740	AS 46.04.110
	AS 46.03.050	AS 46.03.745	AS 46.09.060
	AS 46.03.365	AS 46.04.020	AS 46.09.070
	AS 46.03.710	AS 46.04.070	

Article 7. Airport Hydrant Fuel Distribution Systems and USTs with Field-Constructed Tanks.

Section

18 AAC 78.700. General requirements. (a) The owner or operator shall comply with the requirements of this chapter for airport hydrant systems and USTs with field-constructed tanks as follows:

(1) for USTs installed on or before October 13, 2015, the requirements apply according to the following schedule:

(A) October 13, 2018 for

(i) upgrading existing USTs under 18 AAC 78.030;

(ii) general operating requirements under 18 AAC 78.040 - 18 AAC 78.059;

(iii) operator training under 18 AAC 78.355 - 18 AAC 78.385; and

(iv) release detection requirements under 18 AAC 78.060 - 18 AAC 78.072; and

(B) except as provided in (b) of this section, October 13, 2015 for

(i) release reporting, response, and investigation under 18 AAC 78.200 - 18 AAC 78.280;

(ii) closure under 18 AAC 78.080 - 18 AAC 78.087;

(iii) financial responsibility under 18 AAC 78.910; and

(iv) registration notification under 18 AAC 78.035; and

(2) for USTs installed after October 13, 2015, the requirements apply at installation.

(b) Not later than October 13, 2018, all owners of previously deferred USTs described in (a) of this section must submit a notice of a tank system's existence to the department, using the registration form supplied by the department in accordance with 18 AAC 78.035(a). The owner or operator of a UST in use as of October 13, 2015 must demonstrate, as required under 18 AAC 78.910, financial responsibility at the time of submission of the registration form.

(c) Except as provided in 18 AAC 78.705, the owner or operator shall comply with the requirements of this chapter.

(d) When designing, constructing, and installing airport hydrant systems and USTs with field-constructed tanks, an owner or operator may use

(1) the codes of practice listed in 18 AAC 78.025; or

(2) military construction criteria, such as Unified Facilities Criteria (UFC) 3 460 01, *Design: Petroleum Fuel Facilities*, revised as of June 17, 2015 and adopted by reference. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365

Editor's note: The publication adopted by reference in 18 AAC 78.700(d) may be reviewed at the department's office in Anchorage or may be obtained directly from the Whole Building Design Guide website: http://dod.wbdg.org/.

18 AAC 78.705. Additions, exceptions, and alternatives for airport hydrant systems and USTs with field-constructed tanks. (a) **Exception to piping secondary containment requirements.** An owner or operator may use single-walled piping when installing or replacing piping associated with USTs with field-constructed tanks greater than 50,000 gallons and piping associated with airport hydrant systems. Piping associated with USTs with field-constructed tanks less than or equal to 50,000 gallons and that are not part of an airport hydrant system must meet the secondary containment requirements of 18 AAC 78.025(c) when installed or replaced.

(b) **Upgrade requirements.** Not later than October 13, 2018, airport hydrant systems and USTs with field-constructed tanks where installation commenced on or before October 13, 2015 must meet the following requirements or be permanently closed under 18 AAC 78.085:

(1) UST components in contact with the ground that routinely contain petroleum must meet one of the following corrosion protection requirements:

(A) except as provided in (a) of this section, the components must meet the performance standards for new tanks under 18 AAC 78.025(e) and for new piping under 18 AAC 78.025(f); or

(B) the components must be constructed of metal and cathodically protected according to a nationally recognized code of practice and must meet the following requirements:

(i) cathodic protection must meet the requirements of 18 AAC 78.025(e)(2)(B), (C), and (D) for tanks, and 18 AAC 78.025(f)(2)(B), (C), and (D) for piping; and

(ii) tanks greater than 10 years old without cathodic protection must be assessed to ensure the tank is structurally sound and free of corrosion holes before adding cathodic protection; the assessment must be by internal inspection or another method determined by the department to adequately assess the tank for structural soundness and corrosion holes;

(2) to prevent spilling and overfilling associated with product transfer to the UST, all airport hydrant systems and USTs with field-constructed tanks must comply with spill and overfill prevention equipment requirements specified in 18 AAC 78.025(g) for new USTs; and

(3) to meet the requirements of this section, the owner or operator shall ensure that one of the following requirements are used:

(A) NACE International Standard RP0285-2002, *Standard Recommended Practice-Corrosion Control of Underground Storage Tank Systems by Cathodic Protection,* 2002, adopted by reference;

(B) NACE International Standard Practice SP0169-2007, *Control of External Corrosion on Underground or Submerged Metallic Piping Systems,* reaffirmed March 15, 2007, adopted by reference;

(C) National Leak Prevention Association Standard 631, Chapter C, *Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks: Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection,* 1991, adopted by reference;

(D) American Society for Testing and Materials Standard G158-98, *Standard Guide for Three Methods of Assessing Buried Steel Tanks,* 2016, adopted by reference; or

(E) another procedure, code, or standard that is no less protective of human health and safety and the environment and approved by the department.

(c) **Walkthrough inspections.** In addition to meeting the walkthrough inspection requirements in 18 AAC 78.058, the owner or operator shall inspect each of the following additional areas for airport hydrant systems at least once every 30 days if confined space entry for purposes of federal Occupational Safety and Health Administration requirements under 29 C.F.R. 1910.146 is not required, and at least annually if confined space entry is required, and shall keep documentation of the inspection in accordance with 18 AAC 78.058(b):

(1) the owner or operator shall visually check hydrant pits for any damage, remove any liquid or debris, and check for any leaks; and

(2) the owner or operator shall check hydrant piping vaults for any hydrant piping leaks.

(d) **Release detection.** The owner or operator of an airport hydrant system or a UST with field-constructed tanks must begin meeting the following release detection requirements not later than October 13, 2018:

(1) an owner or operator of a field-constructed tank with a capacity less than or equal to 50,000 gallons must meet the release detection requirements in 18 AAC 78.060 - 18 AAC 78.072; an owner or operator of a field-constructed tank with a capacity greater than 50,000 gallons must meet either the requirements in 18 AAC 78.060 - 18 AAC 78.072, except that vapor monitoring or groundwater monitoring must be combined with inventory control as stated under (E) of this paragraph, or the owner or operator must use one or a combination of the following alternative methods of release detection:

(A) the owner or operator must conduct an annual tank tightness test that can detect a 0.5 gallon per hour leak rate;

(B) the owner or operator must use an automatic tank gauging system to perform release detection at least every 30 days that can detect a leak rate less than or equal to one gallon per hour; this method must be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every three years;

(C) the owner or operator must use an automatic tank gauging system to perform release detection at least every 30 days that can detect a leak rate less than or equal to two gallons per hour; this method must be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every two years;

(D) the owner or operator must perform vapor monitoring, in accordance with 18 AAC 78.065(f) for a tracer compound placed in the tank system, capable of detecting a 0.1 gallon per hour leak rate at least every two years;

(E) the owner or operator must perform inventory control in accordance with 18 AAC 78.065(b)(1) - (8), at least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through; and

(F) the owner or operator may use another method approved by the department if the owner or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in (A) - (E) of this paragraph; in comparing methods, the department will consider the size of release that the method can detect and the frequency and reliability of detection;

(2) an owner or operator of underground piping associated with a field-constructed tank less than or equal to 50,000 gallons must meet the release detection requirements in 18 AAC 78.060 - 18 AAC 78.072; an owner or operator of underground piping associated with an airport hydrant system and a field-constructed tank greater than 50,000 gallons must follow either the requirements in 18 AAC 78.060 - 18 AAC 78.072, except that vapor monitoring or groundwater monitoring must be combined with inventory control as stated under (C) of this paragraph, or the owner or operator must use one or a combination of the following alternative methods of release detection:

(A) the owner or operator must perform a semiannual or annual line tightness test at or above the piping operating pressure in accordance with Table D of this subparagraph; however, piping segment with volumes greater than or equal to 100,000 gallons not capable of meeting the maximum 3.0 gallon per hour leak rate for the semiannual test may be tested according to the phase-in schedule in Table E of this subparagraph:

TABLE D. MAXIMUM LEAK DETECTION RATE PER TEST SECTION VOLUME

Test section volume (gallons)	**Semiannual test—leak detection rate not to exceed (gallons per hour)**	**Annual test—leak detection rate not to exceed (gallons per hour)**
<50,000	1.0	0.5
≥50,000 to <75,000	1.5	0.75
≥75,000 to <100,000	2.0	1.0
≥100,000	3.0	1.5

TABLE E. PHASE-IN FOR PIPING SEGMENTS ≥100,000 GALLONS IN VOLUME

First test	Not later than October 13, 2018, with a leak detection rate not to exceed 6.0 gallons per hour
Second test	After October 13, 2018 and not later than October 13, 2021, with a leak detection rate not to exceed 6.0 gallons per hour
Third test	After October 13, 2021 and not later than October 13, 2022, with a leak detection rate not to exceed 3.0 gallons per hour
Subsequent tests	After October 13, 2022, begin using semiannual or annual line testing according to Table D of this subparagraph (maximum leak detection rate per test section volume)

(B) the owner or operator must perform vapor monitoring in accordance with 18 AAC 78.065(f) for a tracer compound placed in the tank system, capable of detecting a 0.1 gallon per hour leak rate at least every two years;

(C) the owner or operator must perform inventory control in accordance with 18 AAC 78.065(b)(1) - (8), at least every 30 days that can detect a leak equal to or less than 0.5 percent of flow-through, and

(i) perform a line tightness test, in accordance with (A) of this paragraph using the leak rates for the semiannual test, at least every two years; or

(ii) perform vapor monitoring or groundwater monitoring, in accordance with 18 AAC 78.065(f) or (g), respectively, for the stored petroleum, at least every 30 days; or

(D) the owner or operator may use another method approved by the department if the owner or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in (A) - (C) of this paragraph; in comparing methods, the department will consider the size of release that the method can detect and the frequency and reliability of detection; and

(3) the owner or operator shall maintain release detection records in accordance with the recordkeeping requirements in 18 AAC 78.072.

(e) **Applicability of closure requirements to previously closed USTs.** When directed by the department, the owner or operator of an airport hydrant system or a UST with field-constructed tanks that was permanently closed before October 13, 2015 must assess the excavation zone and close the UST in accordance with 18 AAC 78.085 if releases from the UST may, in the determination of the department, pose a current or potential threat to human health and the environment. (Eff. 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

Article 8. Laboratory Approval.

Section

18 AAC 78.800. Approval requirements. (a) Laboratory chemical analyses of soil, water, and air required to be conducted under this chapter or under 18 AAC 75.355(e) must be performed by a laboratory approved by the department under 18 AAC 78.800 - 18 AAC 78.815. If an owner, operator, responsible person, or other party submits samples of soil, water, or air under 18 AAC 75.355(e), 18 AAC 78.090, 18 AAC 78.235, 18 AAC 78.271, 18 AAC 78.275, or 18 AAC 78.600 - 18 AAC 78.620, the manager of the laboratory that performs the chemical analysis shall include with each analysis the current state laboratory identification number. The department will assign a laboratory identification number if the department approves an application under (b) of this section. The department will not accept the submission of a soil, water, or air sample analysis without that number. In this subsection, "responsible person" has the meaning given in 18 AAC 75.990.

(b) To obtain approval of the laboratory, the laboratory manager must submit

(1) a complete application on a form supplied by the department;

(2) a valid certificate from a NELAP or DoD-ELAP accreditation body for each analytical method, analyte, and matrix for which samples under 18 AAC 75.355(e), 18 AAC 78.090, 18 AAC 78.235, 18 AAC 78.271, 18 AAC 78.275, or 18 AAC 78.600 – 18 AAC 78.620 will be processed by the laboratory; and

(3) the limit of detection and reporting limit for each analytical method, analyte, and matrix for which samples under 18 AAC 75.355(e), 18 AAC 78.090, 18 AAC 78.235, 18 AAC 78.271, 18 AAC 78.275, or 18 AAC 78.600 – 18 AAC 78.620 will be processed by the laboratory.

(c) To maintain approval of the laboratory, and not later than three working days after the change in certification occurs, the laboratory manager must report to the department any change in certification status under a NELAP or DoD-ELAP accreditation body for each analytical method, analyte, and matrix for which the department has issued approval. Laboratory approval under this section is valid only if the NELAP or DoD-ELAP certification of the method, analyte, and matrix is currently valid.

(d) To renew approval of the laboratory, the laboratory manager must reapply for approval under (b) of this section not later than 30 days before certification under a NELAP or DoD-ELAP accreditation body expires.

(e) Laboratory approval runs concurrently with certification from the NELAP or DoD-ELAP accreditation body. The expiration date of approval granted under this section for an analytical method, analyte, or matrix is the same date that the laboratory's corresponding certificate from the NELAP or DoD-ELAP accreditation body expires.

(f) The department will maintain a list of approved and provisionally approved laboratories and will distribute the list to interested persons upon request. (Eff. 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 7/1/2017, Register 222)

Authority: AS 44.46.020 AS 46.03.020 AS 46.03.365
AS 44.46.025

Editor's note: Information on NELAP is available at: http://www.nelacinstitute.org/content/NELAP/. Information on DoD-ELAP is available at http://www.denix.osd.mil/edqw/home/ Application materials are available on the department's website at: http://dec.alaska.gov/spar/csp/index.htm or can be requested from the Division of Spill Prevention and Response, Contaminated Sites Program: telephone (907) 269-7503

Application materials are available on the department's website at: http://dec.alaska.gov/spar/csp/index.htm or can be requested from the Division of Spill Prevention and Response, Contaminated Sites Program; telephone (907) 269-7503.

18 AAC 78.810. Laboratory status. Based on the department's review of the application submitted under 18 AAC 78.800(b) and any change in certification status reported by the laboratory manager under 18 AAC 78.800(c), and subject to 18 AAC 78.815, the department will place a laboratory in one of the following classifications:

(1) "provisionally approved," for a limited approval that allows a laboratory to operate as an approved laboratory while the laboratory's application is pending due to circumstances described in (A) or (B) of this paragraph, or for one year, whichever period is less; for a laboratory with provisional approval, the laboratory manager shall ensure that all requirements for full approval are completed before provisional approval expires or the department will deny approval upon reapplication; the department will grant provisional approval to a laboratory that is not currently provisionally approved and that has not previously been denied approval, if at least one of the following circumstances exist:

(A) the department cannot process applications for approval in a timely manner;

(B) the department determines that laboratory has minor deficiencies in its application;

(2) "approved," for a laboratory that meets the requirements of 18 AAC 78.800; the department will send a letter of acceptance and a certificate of approval to the laboratory manager; an approval is effective for the period described in 18 AAC 78.800(c) and (e);

(3) "disapproved," for a laboratory that does not meet the requirements of 18 AAC 78.800 and is not approved or provisionally approved.; (Eff. 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 7/1/2017, Register 222; 9/27/2018, Register 227)

Authority: AS 44.46.020 AS 46.03.020 AS 46.03.365
AS 44.46.025

18 AAC 78.815. Change in laboratory status. (a) The department will place an approved laboratory in provisionally approved status if the department finds that the laboratory manager has provided inaccurate information in the laboratory's application for approval, unless the grounds listed in (b) or (c) of this section apply. The department may place a laboratory in approved status once accurate information is supplied.

(b) Subject to 18 AAC 78.960, the department will revoke a laboratory's approved or provisionally approved status for all analytes, methods, and matrices if the laboratory manager is found to have

(1) failed to notify the department of a change in the laboratory's certification status under a NELAP or DoD-ELAP accreditation body not later than three working days after the change;

(2) deliberately misrepresented a laboratory's qualifications, capabilities, or experience;

(3) falsified data or a report;

(4) engaged in unethical or fraudulent practices in generating analytical data;

(5) failed to disclose required information in the application submitted under 18 AAC 78.800; or

(6) operated the laboratory under significant deficiencies in quality assurance as evidenced by the production of invalid analytical data or was otherwise not able to provide accurate analytical data using approved methods.

(c) Subject to 18 AAC 78.960, and in addition to the grounds under (b) of this section for revocation of approved or provisionally approved status, the department will revoke the approved or provisionally approved status of a laboratory that is principally owned, operated, or controlled by an entity that has been suspended, revoked, or otherwise restricted in its laboratory operation by a federal agency or by an agency of this state or another state, if the suspension, revocation, or restriction is based on grounds listed in (b)(2) – (6) of this section or on significant deficiencies in quality assurance.

(d) The department will conduct periodic reviews of the approved and provisionally approved laboratories on the list it maintains to verify that the information provided to the department concerning the status of each laboratory is accurate and current.

(e) If under (b) or (c) of this section the department revokes a laboratory's approved or provisionally approved status, the laboratory may not re-apply for approval for at least 12 months from the date of revocation. (Eff. 1/22/99, Register 149; am 7/1/2017, Register 222)

Authority: AS 44.46.020 AS 46.03.020 AS 46.03.365
AS 44.46.025

Article 9. General Provisions.

Section

18 AAC 78.910. Financial responsibility. The financial responsibility requirements of 40 C.F.R. 280.90 - 280.115 and 280.200 – 280.230, as amended through July 15, 2015, are adopted by reference in this section. Nothing in this chapter exempts the owner or operator of a UST from meeting any other applicable federal financial responsibility requirement. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.405

Editor's note: As of Register 179 (October 2006), and acting under AS 44.62.125(b)(6), the regulations attorney made a technical revision to the authority citation following 18 AAC 78.910. This change reflects the enactment of sec. 2, ch. 102, SLA 2006, effective August 5, 2006, which repealed AS 46.03.360

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18 AAC 78.915. Cost recovery. An owner or operator of a UST is liable for response costs that the department or the state incurs as set out in the cost recovery requirements under 18 AAC 75.910. (Eff. 3/23/2017, Register 221)

Authority:

AS 40.25.120	AS 46.03.822	AS 46.04.070
AS 46.03.020	AS 46.03.826	AS 46.08.070
AS 46.03.365	AS 46.04.010	AS 46.08.075
AS 46.03.760	AS 46.04.020	AS 46.09.020

18 AAC 78.920. Coordination with related federal, state, and local requirements. (a) Nothing in this chapter exempts the owner or operator of a UST from meeting any other applicable requirement of federal, state, or local law.

(b) For purposes of 40 C.F.R., Part 281, as amended through July 15, 2015, if a court determines that a provision of this chapter is inconsistent with its corresponding provision in federal law under 40 C.F.R. Part 280, as amended through July 15, 2015, then the corresponding

federal provision prevails. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 9/27/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365

Editor's note: As of Register 179 (October 2006), and acting under AS 44.62.125(b)(6), the regulations attorney made a technical revision to the authority citation following 18 AAC 78.920. This change reflects the enactment of sec. 2, ch. 102, SLA 2006, effective August 5, 2006, which repealed AS 46.03.360.

18 AAC 78.930. Waivers or modifications. (a) Except as provided in (b) of this section, and if the department determines that a waiver or modification will be protective of human health and safety, and of the environment, the department will waive or modify the site characterization, site assessment, investigation, corrective action, or cleanup level provisions of this chapter based on a review of release quantity and quality, soil and groundwater conditions, surface waters and topography, geology, water and land uses, construction methods and materials, and any other environmental factor important to the evaluation. A person seeking a waiver or modification of a provision of this chapter 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 and safety, and of the environment. A qualified environmental professional shall prepare and sign the report submitted under this section.

(b) For purposes of this chapter, the department will waive on a site-specific basis the requirement in 18 AAC 78.088(b)(1) that a qualified environmental professional be an impartial third party or the requirement in 18 AAC 78.088(c)(1) that a qualified sampler be an impartial third party if

(1) a person

(A) who seeks a waiver from 18 AAC 78.088(b)(1) demonstrates that work performed will be conducted or supervised by an objective individual who meets the requirements of 18 AAC 78.088(b)(2) - (5);

(B) who seeks a waiver from 18 AAC 78.088(c)(1) demonstrates that work performed will be conducted or supervised by an objective individual who meets the requirements of 18 AAC 78.088(c)(2) - (5); and

(C) submits

(i) a written request for a waiver;

(ii) the resume of the person qualified to conduct or supervise the work to be performed, showing relevant education, vocational training, related work experience, and any special training, license, certificate, or registration held by that person; and

(iii) a description of the supervisory and organizational structure related to the person identified in (ii) of this subparagraph; and

(2) 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. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 6/25/99, Register 150; am 6/17/2015, Register 214)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.940. Enforcement. The department will, in its discretion, take enforcement action in response to a violation of this chapter, using the compliance procedures at 18 AAC 95. Nothing in this section precludes the department from taking other appropriate action under AS 46.03.758, 46.03.760, 46.03.765, 46.03.790, or other applicable law. The department will, in its discretion, suspend or revoke an approval issued under this chapter as a means of enforcing the provisions of this chapter. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136)

Authority: AS 46.03.020 AS 46.03.760 AS 46.03.790
AS 46.03.365 AS 46.03.765 AS 46.03.850
AS 46.03.758

18 AAC 78.950. Dispute resolution. Deleted. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 4/16/2000, Register 154; am 1/30/2003, Register 165; deleted as of Register 179, October 2006)

Editor's note: As of Register 179 (October 2006), and acting under AS 44.62.125(b)(6), the regulations attorney deleted 18 AAC 78.950. This change reflects the enactment of sec. 2, ch. 102, SLA 2006, effective August 5, 2006, which repealed statutes establishing the Board of Storage Tank Assistance, underground storage tank revolving loan fund, and tank cleanup loan program. Section 3, ch. 102, SLA 2006 annulled regulations made obsolete by those repeals.

18 AAC 78.960. Appeals. Any person who is aggrieved by a department decision regarding issuance, denial, suspension, or revocation of an approval or certification under this chapter may request an adjudicatory hearing under 18 AAC 15.195 - 18 AAC 15.340. (Eff. 11/3/95, Register 136; am 7/11/2002, Register 163; am 11/7/2017 Register 224)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.880

18 AAC 78.995. Definitions. Unless the context indicates otherwise, in this chapter or in AS 46.03.365 - 46.03.450

(1) "aboveground release" means a release to the surface of the land or to surface water, including a release from the aboveground portion of a UST, and an aboveground release associated with overfills or transfer operations as the petroleum moves to or from a UST;

(2) "accuracy" means the degree of agreement between an analytical result and the true value;

(3) "airport hydrant fuel distribution system" or “airport hydrant system” means a UST that fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants or fill stands; the airport hydrant system begins where fuel enters one or more tanks from an external source, such as a pipeline, barge, rail car, or other motor fuel carrier;

(4) "alkane range” means a group of saturated open-chain hydrocarbons that have the general formula C_nH_{2n+2};

(5) "analytical method" means a set of written instructions that define procedures to be followed by an analyst to obtain the required result;

(6) "ancillary equipment" has the meaning given that term in the definition for "underground petroleum storage tank system" in AS 46.03.450;

(7) "applicant" means a person who has applied for certification, approval, or assistance under this chapter;

(8) “approval” means written approval by the department;

(9) "approved" means approved in writing by the department;

(10) repealed 9/27/2018;

(11) "before beginning work" means before a change, upgrade, addition, or removal of any part of a UST, including associated equipment and material surrounding the UST, or before a change-in-service;

(12) "belowground release" means a release of petroleum to the subsurface of the land or to groundwater, including a release from the belowground portion of a UST, and a belowground release associated with an overfill or transfer operation as the petroleum moves to or from a UST;

(13) "beneath the surface of the ground," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means overspread with earthen materials;

(14) “bioremediation” means a remediation method that decreases the concentration of a contaminant in soil through biological action;

(15) deleted;

(16) "BTEX" means benzene, toluene, ethylbenzene, and total xylenes;

(17) “carcinogen” means

(A) a substance that is expected to cause cancer in nonhuman life; or

(B) for human health purposes, a substance that meets the criteria of a Group A or Group B carcinogen according to EPA's *Guidelines for Carcinogen Risk Assessment*, 51 Fed. Reg. 33992, 33999 - 34000 (Sept. 24, 1986), adopted by reference;

(18) "carcinogenic" means of or relating to a carcinogen;

(19) "cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell; for example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current;

(20) "certification" means a certification of competency issued by the division under this chapter indicating that a person has met the requirements for a specified category of UST work;

(21) "certified" means having been issued a certification;

(22) "certified tank worker," or "certified worker" mean a person who has been issued certification for a specific category of UST work by the division;

(23) "change in configuration" means a change, upgrade, addition, or removal of a part of a UST and ancillary equipment;

(24) "change-in-service" means a change in the use of a UST

(A) from containing petroleum to containing a substance other than petroleum; or

(B) to a use that removes the tank from the definition of "underground storage tank" at AS 46.03.450;

(25) "chemical" has the meaning given in AS 46.03.450;

(26) "cleanup level" means the concentration of a contaminant that may be present within a specified medium and under specified exposure conditions without posing a threat to human health or safety, or to the environment;

(27) "close" has the meaning given in AS 46.03.375(g)(1);

(28) "closure" means to remove all petroleum and sludges from each UST in the UST system and either fill each UST with inert solid material or remove, dismantle, and dispose of each UST;

(29) "compatible," as used to describe two or more substances, means able to maintain respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST;

(30) "connected underground piping" means the underground piping, including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which petroleum flows; to determine how much piping is connected to a UST, the piping that joins two USTs is allocated equally between them;

(31) repealed 9/27/2018;

(32) deleted;

(33) “contaminant” means a hazardous substance;

(34) "contaminated groundwater" means groundwater with concentrations of contaminants that exceed the applicable groundwater levels referenced in 18 AAC 78.600 and 18 AAC 78.620;

(35) "contaminated soil" means soil with concentrations of contaminants that exceed the applicable soil cleanup levels referenced in 18 AAC 78.600 - 18 AAC 78.610;

(36) "contaminated surface water" means surface water with concentrations of contaminants that exceed the applicable water quality standards in 18 AAC 70;

(37) "corrective action" has the meaning given in AS 46.03.450;

(38) "corrective action plan" means a plan that describes the procedures proposed by the owner or operator under 18 AAC 78.250 to investigate, assess, correct, contain, and clean up a petroleum release, and, if financial assistance is requested, contains an interim cleanup cost estimate;

(39) "corrosion" means the deterioration of metal from the loss of positive charged metal ions from the metal surface into an electrolyte;

(40) "corrosion expert" means a person who

(A) by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired through a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks; and

(B) is accredited or certified as being qualified by the NACE International or is a registered engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks;

(41) "corrosion protection" means a measure to prevent degradation of UST components caused by electrolysis or chemical action;

(42) "corrosion protection equipment" means cathodic protection systems and dielectric coatings that prevent electrolysis or chemical action;

(43) “degradation” means a process by which a chemical is reduced to a less complex form;

(44) “demonstrate” means to prove through demonstration or other evidence to the department’s satisfaction;

(45) “demonstration” means proof through documentation or other evidence to the department’s satisfaction;

(46) "department" means the Department of Environmental Conservation;

(47) "dielectric material" means a material that does not conduct direct electrical current; dielectric coatings are used to electrically isolate a UST from surrounding soil; dielectric bushings are used to electrically isolate portions of the UST, such as the tank, from the piping;

(48) repealed 7/1/2017;

(49) "discharge" has the meaning given in AS 46.04.900;

(50) "division" means the division assigned occupational licensing functions in the Department of Commerce, Community, and Economic Development;

(51) "electrical equipment" means underground equipment that contains dielectric fluid necessary for the operation of equipment, such as transformers and buried electrical cable;

(52) "emergency power generator" means an electrical motor-generator used exclusively to provide electrical power during primary power failure;

(53) "engineering measure” means a modification to a site or facility, including a liner, cap, or slurry wall, that is designed by a registered engineer to reduce or eliminate the potential exposure to a contaminant;

(54) "EPA” means the United States Environmental Protection Agency;

(55) "excavation zone" means a space containing a UST and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST is placed when installed;

(56) "existing tank" means a UST used to contain an accumulation of petroleum and for which installation commenced on or before December 22, 1988; installation is

considered to have commenced if the owner or operator had obtained all federal, state, and local approvals or permits necessary to begin construction of the site or installation of the UST and

(A) a continuous onsite construction or installation program had begun; or

(B) the owner or operator had entered into contractual obligations for physical construction at the site or installation of the UST to be completed within a reasonable time and the contract could not have been canceled or modified without substantial loss;

(57) “exposure point value” means the concentration of a contaminant determined at the point of exposure to the contaminant;

(58) "ex-situ” means as applied to soil or groundwater moved from its original place, excavated, removed, or recovered from the ground;

(59) deleted;

(60) "farm" has the meaning given in AS 46.03.450;

(61) "farm tank," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means a UST located on a farm;

(62) "field-constructed tank"

(A) means a tank constructed in the field;

(B) includes

(i) a tank constructed of concrete that is poured in the field; or

(ii) a steel or fiberglass tank primarily fabricated in the field;

(63) deleted;

(64) "financial assistance" means a grant, loan, or reimbursement awarded under this chapter;

(65) "flow-through process tank," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means a UST that forms an integral part of a production process through which a steady, variable, recurring, or intermittent flow of petroleum exists during the operation of the process; “flow-through process tank” does not include a UST used for the storage of petroleum before its introduction into the production process or for the storage of finished products or byproducts from the production process;

(66) repealed 9/27/2018;

(67) "free product" means a concentration of petroleum that is present as a nonaqueous phase liquid; for purposes of this paragraph, a "nonaqueous phase liquid" is a liquid that is not dissolved in water;

(68) "gasoline" means a petroleum distillate that is used for motor fuel or heating oil and that consists predominantly of hydrocarbons corresponding to an alkane range from the beginning of n-hexane (C_6) to the beginning of the n-decane (C_{10});

(69) repealed 7/1/2017;

(70) "gathering lines," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means any pipeline equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations;

(71) "groundwater" has the meaning given in 18 AAC 75.990;

(72) "hazard index" means the sum of the hazard quotients attributable to non-carcinogenic contaminants with similar critical endpoints;

(73) "hazard quotient" means the ratio of the exposure point value to the reference dose for the contaminant;

(74) "hazardous substance" has the meaning given in AS 46.03.826;

(75) "heating oil" means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil, other residual fuel oils, including Navy Special Fuel Oil and Bunker C, and other fuels if used as a substitute for one of the fuels listed in this paragraph; "heating oil" includes oil typically used in the operation of heating equipment, boilers, or furnaces;

(76) "hydraulic lift tank" means a UST holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices;

(77) "hydrocarbons" means organic compounds, such as benzene and methane, that contains only carbon and hydrogen;

(78) "in-situ" means as applied to soil or groundwater in its original place, unmoved, unexcavated, or remaining in the subsurface;

(79) "install" means to perform the work involved in placing a UST or any part of a UST in the ground and preparing it to be placed in service;

(80) "institutional control" means a measure taken to limit, prohibit, or protect against an activity that could

(A) interfere with the integrity of corrective action activities or improvements designed to encapsulate or control residual contamination; or

(B) result in human or environmental exposure to a contaminant;

(81) "interim cleanup activities cost estimate" means an estimate, prepared by a qualified environmental professional, of costs necessary to implement a corrective action plan;

(82) "job site" means the physical location where a UST is to be installed or removed;

(83) "laboratory" means a mobile or fixed facility capable of providing analytical services;

(84) "laboratory manager" means the person principally responsible for overall management of laboratory operations, including compliance with applicable requirements of AS 46.03.365 – 46.03.450, this chapter, and the *UST Procedures Manual*;

(85) “landfarming” means spreading contaminated soil in a thin layer on the surface of the ground so that biological activity can be enhanced by the addition of nutrients, mechanical aeration, the addition of water, adjustment of pH, and similar activities;

(86) “landspreading” means spreading contaminated soil in a thin layer on the surface of the ground, relying mainly on aeration and unenhanced biological action to perform remediation;

(87) "liquid trap," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means a sump, well cellar, or other trap used in association with oil and gas production, gathering, and extraction operations to collect oil, water, and other liquids; “liquid trap” includes a trap to temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream or to collect and separate liquids from a gas stream; in this paragraph, “oil and gas production, gathering, and extraction operations” include a gas production plant;

(88) "maintenance" means the normal operational upkeep to prevent a UST from releasing petroleum;

(89) "method detection limit" means the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the value is greater than zero, determined from an analysis of a sample in a given matrix containing the analyte used in the analysis;

(90) "motor fuel"

(A) means a complex blend of hydrocarbons typically used in the operation of a motor engine;

(B) includes motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing on or more of these substances, such as motor gasoline blended with alcohol;

(91) "nationally recognized code of practice" means a procedure, code, or standard developed by a nationally recognized association or independent testing laboratory, or by a federal agency, including the Petroleum Equipment Institute (PEI), National Fire Protection Association (NFPA), International Fire Code Institute (IFCI), American Petroleum Institute (API), NACE International, Occupational Safety and Health Agency (OSHA), United States Environmental Protection Agency (EPA), Steel Tank Institute (STI), Fiberglass Petroleum Tank and Pipe Institute, American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), American Society for Testing Materials (ASTM), Underwriters Laboratories, and Underwriters Laboratories of Canada;

(92) "new tank" or “new UST” means a UST that will be used to contain an accumulation of petroleum, and for which installation commenced after December 22, 1988;

(93) “noncarcinogen” means a contaminant with adverse health effects on humans other than cancer;

(94) “noncarcinogenic” means of or relating to a noncarcinogen;

(95) "noncommercial purposes," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means, with respect to motor fuel, not for resale;

(96) "nongasoline fraction" means diesel or any other petroleum distillate used for motor fuel or heating oil that consists predominantly of hydrocarbons corresponding to an alkane range of n-decane (C_{10}) or greater;

(97) "on the premises where stored," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means located on the same property on which the stored heating oil is used;

(98) "operational life" means the period beginning when installation of a UST commences until the UST is permanently closed under 18 AAC 78.085;

(99) "operator" means a person who is in control of, or who has responsibility for, the daily operation of a UST used to store or dispense petroleum;

(100) "overfill" means a release that occurs when a UST is filled beyond its capacity, resulting in the discharge of petroleum into the environment;

(101) "owner" means a person who owns a UST used to store or dispense petroleum;

(102) "owner or operator" means the owner or operator of a UST that is subject to the requirements of this chapter; if owner or operator is used to impose a duty that would

result in a duplicative response or action if taken by both the owner and the operator, “owner or operator” means that the response or action shall be taken either by the owner or by the operator;

(103) repealed 7/1/2017;

(104) repealed 7/1/2017;

(105) repealed 7/1/2017;

(106) "petroleum" has the meaning given in AS 46.03.450;

(107) deleted;

(108) deleted;

(109) “physical barrier” means a concrete or asphalt surface that

(A) is impermeable to water;

(B) is designed, constructed, and placed in accordance with industry standards; and

(C) provides sufficient support thickness, layering, and life to prevent compromising the structural integrity of the material;

(110) "pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials;

(111) "pipeline facility," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means pipe, pipe rights-of-way, and associated equipment, gathering lines, facilities, or buildings;

(112) “plume” means a visible or measurable discharge or release of a contaminant from a given point of origin;

(113) “practicable” means capable of being designed, constructed, and implemented in a reliable and cost-effective manner, taking into consideration existing technology, site location, and logistics in light of overall project purposes; “practicable” does not include an alternative if the incremental cost of the alternative is substantial and disproportionate to the incremental degree of protection provided by the alternative as compared to another lower cost alternative;

(114) “practical quantitation limit” means the lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability when testing field samples under routine laboratory operating conditions using approved methods;

(115) "preliminary cleanup activities cost estimate" means an estimate of costs necessary to prepare and implement a corrective action plan;

(116) "professional services" means professional, technical, or consultant's services that are predominantly intellectual in character, result in the production of a report or the completion of a task, and include analysis, evaluation, prediction, planning, or recommendation;

(117) "property" means an area in which a UST is located and that is defined by legal title;

(118) repealed 6/17/2015;

(119) "quality assurance" means the act of establishing confidence that analytical data is of a known and documented degree of excellence; "quality assurance" covers the general areas of accuracy, completeness, representativeness, and comparability of data;

(120) "quality assurance program" means a totally integrated program for quality assurance, ensuring reliability of measurement data;

(121) repealed 7/1/2017;

(122) "reconfiguration" means the replacement or realignment of the pipes connected to a UST, or the retrofitting of a UST or any part of a UST by adding cathodic protection, lining, release detection equipment, or spill or overfill controls that are designed to improve the ability of the UST to prevent a release;

(123) "reference dose" means the concentration of a contaminant via daily exposure through a specified exposure route for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious noncarcinogenic effects over the period of exposure;

(124) "registered engineer" means a professional engineer who is registered under AS 08.48.171 - 08.48.265;

(125) "release" has the meaning given in AS 46.08.900;

(126) "release detection" means a process or method used to determine if a release of petroleum has occurred from a UST into the environment or into the interstitial space between the UST and its secondary barrier or the secondary containment around it;

(127) "residential tank," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means a UST located on property used primarily for dwelling purposes;

(128) repealed 7/1/2017;

(129) "return to service" means to dispense, replenish, or sell petroleum;

(130) deleted;

(131) "secondary containment"

(A) means a release prevention and release detection system for a tank or piping; this system has an inner and outer barrier with an interstitial space that is monitored for leaks;

(B) includes containment sumps when used for interstitial monitoring of piping;

(132) "septic tank," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means a watertight, covered receptacle designed and built to receive domestic wastewater, separate floating and settling solids from the liquid, anaerobically digest organic matter, store digested solids through a period of detention, and allow clarified liquids to discharge for final disposal;

(133) "significantly reconfigure" means to perform a reconfiguration;

(134) "site" means an area that is contaminated, including areas contaminated by the migration of a contaminant from a source area, regardless of property ownership;

(135) "site assessment" has the meaning given in AS 46.03.450;

(136) "soil" means an unconsolidated geologic material, including clay, loam, loess, silt, sand, gravel, tills, or any combination of these materials;

(137) “solidification” means the mixing of an additive into contaminated soil to immobilize the contaminants in the soil;

(138) “standard operating procedure” or “SOP” means a detailed written description of a procedure designed to systematize the performance of the procedure;

(139) "storm water or waste water collection system," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation or domestic or nondomestic wastewater to and from a retention area or an area where treatment is designated to occur; “storm water or waste water collection system” does not include treatment except if incidental to conveyance; "stormwater or wastewater collection system" includes

(A) gravity, pressure, and vacuum sewers, including associated parts such as manholes and cleanouts;

(B) pump or collection stations; and

(C) each part of a collector sewer, regardless of ownership of the land on which it is installed;

(140) "substandard UST" means a UST that is not in compliance with this chapter;

(141) "sufficient evidence" means proof that satisfies the department;

(142) "supervise," as it applies to the supervision by a qualified environmental professional, means

(A) to take direct responsibility for preparing each report or making an interpretation regarding field data;

(B) to exercise onsite control over all work that requires assessment, investigation, characterization, reporting, or interpretation, including

(i) selection of the location or depth of sample points in soil, groundwater, surface water, or stockpiles;

(ii) location, placement, or supervision of construction or completion of monitoring or corrective action wells;

(iii) description of site characteristics, soil characteristics, or geological characteristics in field notes that will be used by the assessment firm in the report submitted to the owner or operator of the project;

(iv) duties required to be performed under the *UST Procedures Manual* other than those strictly limited to the physical act of sample collection and transport; and

(v) collection of final verification samples; and

(C) to exercise onsite or offsite control over routine tasks associated with the physical act of sample collection and transportation;

(143) "surface impoundment," as used in the definition of "underground storage tank" in AS 46.03.450, means a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, although the depression, excavation, or area might be lined with man-made materials; "surface impoundment" does not include an injection well;

(144) “surface water” means waters of the state naturally open to the atmosphere including rivers, lakes, reservoirs, streams, impoundments, and seas;

(145) "taken out of service" means, with reference to a UST; a UST is considered empty if all materials are removed so that no more than 2.5 centimeters or one inch of residue, or 0.3 percent by weight of the total capacity of the UST, remains in the system; "taken out of service" is sometimes referred to as "out of use," "not in use," or "out of operation";

(146) "tank" means a stationary device that is designed to hold an accumulation of petroleum, and that is constructed of nonearthen materials such as concrete, steel, or plastic that provide structural support;

(147) "tank system" has the meaning given in AS 46.03.450;

(148) "tank tightness test" means a leak detection method capable of detecting a leak rate of at least 0.1 gallons per hour in any part of a UST that routinely contains petroleum, including associated piping, while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation, condensation, and the location of the water table;

(149) "technology" means equipment, supplies, other resources, and related practices;

(150) "test" means to perform a tank tightness test or a cathodic protection test;

(151) “total xylenes” means the sum of the ortho-xylene, meta-xylene, and para-xylene concentrations;

(152) “transmissivity” means the rate at which water is transmitted through a unit width of an aquifer or confining bed under a hydraulic gradient of one;

(153) "underground area," as that term is used in the definition of "underground storage tank" in AS 46.03.450, means an underground room such as a basement, cellar, shaft, or vault that provides enough space for physical inspection of the exterior of a UST that is located on or above the surface of the floor;

(154) "underground storage tank" has the meaning given in AS 46.03.450;

(155) "underground petroleum storage tank system" and "underground storage tank system" have the meaning given to "underground petroleum storage tank system" in AS 46.03.450;

(156) "upgrade" or "upgrading" means to add or retrofit cathodic protection systems, lining, spill and overflow controls, or similar systems to improve the ability of a UST system to prevent a release;

(157) "UST" means an underground storage tank or an underground storage tank system;

(158) "*UST Procedures Manual*" means the department's *Underground Storage Tanks Procedures Manual* adopted by reference in 18 AAC 78.007;

(159) "vadose zone" means the ground layer beneath the topsoil and overlying the water table in which water in pore spaces coexists with air or in which geological matter is unsaturated;

(160) "vault" means an enclosure that

(A) is liquid tight, vapor tight, and without backfill inside;

(B) is reinforced with concrete at least six inches thick on the sides, top, and bottom of the enclosure;

(C) has openings for inspection through the top only;

(D) has tank connections piped or closed so that neither vapors nor liquid can escape into the enclosure; and

(E) permits portable equipment to discharge to the outside vapors that may accumulate should leakage occur;

(161) "wastewater collection system" is defined within the definition of "storm water or waste water collection system" in this section;

(162) "wastewater treatment tank" means a UST designed to receive and treat an influent wastewater through physical, chemical, or biological methods; and

(163) “working day” means a day other than Saturday, Sunday, or a state holiday.

(164) “qualified environmental professional” means an individual described in 18 AAC 78.088(b);

(165) “qualified sampler” means an individual described in 18 AAC 78.088(c).

(166) “analyte” means a substance whose chemical constituents are being identified and measured;

(167) “DoD-ELAP” means Department of Defense Environmental Laboratory Accreditation Program;

(168) “matrix” means the non-analyte components of a sample;

(169) “NELAP” means the National Environmental Laboratory Accreditation Program;

(170) "cathodic protection tester" means a person who

(A) can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems; and

(B) at a minimum, has education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems;

(171) "Class A operator" means the individual who has primary responsibility to operate and maintain the UST in accordance with applicable regulatory requirements established by the department; the Class A operator typically manages resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements;

(172) "Class B operator" means the individual who has day-to-day responsibility for implementing applicable regulatory requirements established by the department; the Class B operator typically implements in-field aspects of operation, maintenance, and associated recordkeeping for the UST;

(173) "Class C operator" means the individual responsible for initially addressing emergencies presented by a spill or release from an UST; the Class C operator typically controls or monitors the dispensing or sale of petroleum;

(174) "containment sump" means a liquid-tight container that protects the environment by containing leaks and spills of petroleum from piping, dispensers, pumps and related components in the containment area; a containment sump may be

(A) single-walled or in secondary containment; and

(B) located at the top of the tank (tank top or submersible turbine pump sump), underneath the dispenser (under-dispenser containment sump), or at other points in the piping run (transition or intermediate sump);

(175) "dispenser" means equipment located aboveground that dispenses petroleum from the UST;

(176) "dispenser system" means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system;

(177) "replaced" means

(A) for a tank, to remove a tank and install another tank;

(B) for piping, to remove 50 percent or more of piping and install other piping, excluding connectors, connected to a single tank; for tanks with multiple piping runs, this subparagraph applies independently to each piping run;

(178) "under-dispenser containment" or "UDC" means containment underneath a dispenser system designed to prevent leaks from the dispenser and piping within or above the UDC from reaching soil or groundwater;

(179) "underground release" means any belowground release. (Eff. 3/25/91, Register 118; am 8/21/91, Register 119; am 1/27/94, Register 129; am 6/23/94, Register 130; am 8/4/94, Register 131; am 11/3/95, Register 136; am 1/22/99, Register 149; am 4/16/2000, Register 154; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am 6/17/2015, Register 214; am 7/1/2017, Register 222; am 9/27/2018, Register 227)

Authority: AS 44.46.020 AS 46.03.070 AS 46.03.740
AS 44.46.025 AS 46.03.365 AS 46.03.758
AS 46.03.020 AS 46.03.375 Sec. 7, ch. 96, SLA 1990
AS 46.03.050

Editor's note: A listing of sources for nationally-recognized codes of practice, as that term is defined in 18 AAC 78.995, may be found in the editor's note following 18 AAC 78.025.

As of Register 171 (October 2004), the regulations attorney made technical revisions under AS 44.62.125(b)(6) to reflect the name change of the Department of Community and Economic Development to the Department of Commerce, Community, and Economic Development made by ch. 47, SLA 2004 and the corresponding title change of the commissioner of community and economic development.

As of Register 179 (October 2006), and acting under AS 44.62.125(b)(6), the regulations attorney made technical revisions to the lead-in language of 18 AAC 78.995 and to 18 AAC 78.995(84); deleted 18 AAC 78.995(15), (32), (59), (63), (107), (108), and (130); and made technical revisions to the authority citation following 18 AAC 78.995. These changes reflect the enactment of sec. 2, ch. 102, SLA 2006, effective August 5, 2006, which repealed statutes establishing the Board of Storage Tank Assistance, underground storage tank revolving loan fund, and tank cleanup loan program. Section 3, ch. 102, SLA 2006 annulled enumerated regulations made obsolete by those repeals, including the definitions in 18 AAC 78.995(15), (32), (59), and (130). The regulations attorney additionally deleted definitions in 18 AAC 78.995(63), (107), and (108), reflecting the annulment of those regulations in which the defined terms appear or to which they relate.

With Register 180, January 2007 and under the authority of AS 44.62.125, the regulations attorney changed obsolete terminology concerning the division of occupational licensing and the division of banking and securities in conformity with ch. 14, SLA 2005 and to reflect the transfer of certain corporations functions within the Department of Commerce, Community and Economic Development.

As of Register 187 (October 2008), the regulations attorney made a technical revision under AS 44.62.125(b)(6), to the definition of "UST" in 18 AAC 78.995.