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OFFICE OF THE LIEUTENANT GOVERNOR ALASKA

MEMORANDUM

TO: Gary Mendivil

Department of Environmental Conservation

FROM: April Simpson, Office of the Lieutenant Governor

465.4081

DATE: August 29, 2018

RE: Filed Permanent Regulations: Department of Environmental Conservation

Department of Environmental Conservation regulations re: underground storage tanks

(18 AAC 78)

Attorney General File: JU2016200071

Regulation Filed: 8/28/2018

Effective Date: 9/27/2018

Print: 227, October 2018

cc with enclosures: Linda Miller, Department of Law

Judy Herndon, LexisNexis

ORDER ADOPTING CHANGES TO REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The attached 100 pages of regulations, dealing with underground storage tanks under 18 AAC 78 (Underground Storage Tanks), are adopted and certified to be a correct copy of the regulation changes that the Department of Environmental Conservation adopts under the authority of AS 46.03 and AS 46.04 after compliance with the Administrative Procedure Act (AS 44.62), specifically including notice under AS 44.62.190 and 44.62.200 and opportunity for public comment under AS 44.62.210.

This action is not expected to require an increased appropriation.

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

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

DATE: August 24, 2018

Larry Hartig, Commissioner

Department of Environmental Conservation

Clarke Richardson for FILING CERTIFICATION

I, Byron Mallott, Lieutenant Governor for the State of Alaska, certify that on High 5 2018, at High man, I filed the attached regulations according to the provisions of AS 44.62.040

44.62.120

Byron Mallott, Lieutenant Governor

Effective:

September 27 2018

Register:

227, October 2013

FOR DELEGATION OF THE LIEUTENANT GOVERNOR'S AUTHORITY

I, BYRON MALLOTT, LIEUTENANT GOVERNOR OF THE STATE OF ALASKA, designate the following state employee to perform the Administrative Procedures Act filing functions of the Office of the Lieutenant Governor:

Claire Richardson, Special Assistant

IN TESTIMONY WHEREOF, I have signed and affixed the Seal of the State of Alaska, in Juneau, on January 7th 2015.

OF THE

BYRON MALLOTT LIEUTENANT GOVERNOR Register <u>227</u>, <u>Olbow</u>2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.005 is repealed and readopted to read:

- 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

Register 221, Other 2018 ENVIRONMENTAL CONSERVATION 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 223)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405

AS 46.03.365 AS 46.03.400 <u>AS 46.03.450</u>

Register 227, Other 2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.008 is repealed:

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

18 AAC 78.010 is repealed:

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 is amended by adding a new section to read:

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

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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 /27/208, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.015(a)(3) is amended to read:

- (3) obtain a current tag, decal, or notice for a UST, as follows, [UNDER 18 AAC 78.017] 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;

18 AAC 78.015(a)(5)(B)(ii) is amended to read:

(ii) the return of the tag, decal, or notice is required under <u>18 AAC</u> 78.059 [18 AAC 78.017 OR 18 AAC 78.020].

(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 /2016, Register 227)

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

18 AAC 78.017 is repealed:

18 AAC 78.017. Operations inspection. Repealed. (Eff. 8/15/99, Register 151; am

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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 /24 / 2016, Register 227

18 AAC 78.018(a)(1) is amended to read:

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

18 AAC 78.018(a)(3) is amended to read:

(3) the department has determined the UST to be a substandard UST under 18 AAC 78.059(h) [18 AAC 78.017(k)], the owner or operator has not made repairs as required under 18 AAC 78.059(h) [18 AAC 78.017(k)], and a temporary deferral of the prohibition on the acceptance, delivery, or deposit of petroleum has not been granted under 18 AAC 78.059

[18 AAC 78.017] and (c) of this section or has expired; or

18 AAC 78.018(d)(2) is amended to read:

(2) the UST now meets the requirements of <u>18 AAC 78.040 - 18 AAC 78.055</u>, <u>18 AAC 78.060 - 18 AAC 78.072</u>, [18 AAC 78.040 - 18 AAC 78.070] and 18 AAC 78.910. (Eff. 7/25/2012, Register 203; am 7/19/2013, Register 207; am <u>9 /27 /2018</u>, Register <u>277</u>) Authority: AS 46.03.020 AS 46.03.365 AS 46.03.405 Register 221, October 2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.020 is repealed:

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 / 2015, Register 227)

18 AAC 78.022 is repealed:

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 is repealed and readopted to read:

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

Register 221, 10000 2018 ENVIRONMENTAL CONSERVATION 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

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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);

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- (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

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- (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

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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);

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- (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

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- (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;

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- (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

Register 271, 0200 2018 ENVIRONMENTAL CONSERVATION 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;

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- (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 1/3/95, 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,

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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=APII;

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:

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(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 is repealed and readopted to read:

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

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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

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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

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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

Register 221, Octob 2018 ENVIRONMENTAL CONSERVATION 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 is repealed and readopted to read:

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

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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

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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 is repealed and readopted to read:

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

Register 221, October 2018 ENVIRONMENTAL CONSERVATION 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 9/27/2016, Register 227)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405

AS 46.03.365

[EDITOR'S NOTE: TO ASSIST IN MEETING THE REQUIREMENTS OF 18 AAC 78.040, THE TRANSFER PROCEDURES IN THE NATIONAL FIRE PROTECTION ASSOCIATION PUBLICATION 385 MAY BE USED AS GUIDANCE. FURTHER GUIDANCE ON SPILL AND OVERFILL PREVENTION APPEARS IN AMERICAN PETROLEUM INSTITUTE PUBLICATION 1621, RECOMMENDED PRACTICE FOR

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BULK LIQUID STOCK CONTROL AT RETAIL OUTLETS, AND NATIONAL FIRE

PROTECTION ASSOCIATION STANDARD 30, FLAMMABLE AND COMBUSTIBLE

LIQUIDS CODE. A COPY OF EACH DOCUMENT IS AVAILABLE FOR REVIEW AT THE

DEPARTMENT'S ANCHORAGE, FAIRBANKS, JUNEAU, OR SOLDOTNA OFFICES, OR

MAY BE OBTAINED FROM THE APPROPRIATE PUBLISHER AT THE ADDRESS

LISTED IN THE EDITOR'S NOTE AT 18 AAC 78.025.]

18 AAC 78.045(a) is amended to read:

(a) The owner or operator of a steel UST with corrosion protection shall **comply with**[MEET] the requirements of this section to ensure that a release caused by corrosion is prevented **until** [WHILE] the **UST** [SYSTEM] is **permanently closed or undergoes a change-in-service under 18 AAC 78.085** [USED TO STORE PETROLEUM].

18 AAC 78.045(b) is amended to read:

(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.

Register 227, Othber 2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.045(c) is amended to read:

- (c) A UST <u>equipped</u> with a cathodic protection system must be inspected for proper operation by a cathodic protection tester who is certified under 18 AAC 78.410 <u>in accordance</u> <u>with the following requirements</u> [. AN INSPECTION UNDER THIS SUBSECTION MUST BE CONDUCTED AS FOLLOWS]:
- (1) a cathodic protection system must be tested <u>not later than</u> [WITHIN] 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 <u>as required</u> under this section must be in accordance with <u>one of</u> the <u>following requirements:</u>

(A) NACE International [NATIONAL ASSOCIATION OF CORROSION ENGINEERS] 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

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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 [IN 18 AAC 78.025(f)].

18 AAC 78.045(d) is repealed:

(d) Repealed 9 /27 /2018.

18 AAC 78.045(f) is amended to read:

- (f) For [AS REQUIRED BY 18 AAC 78.100(f), THE OWNER OR OPERATOR OF] a UST with cathodic protection, [SHALL KEEP] records of the operation of the cathodic protection system must be maintained in accordance with 18 AAC 78.056 [WHICH ARE SUFFICIENT] to demonstrate compliance with the performance standards [SET OUT] in this section. These records must provide the following:
- (1) [, INCLUDING] the results of the last three inspections required in (e) of this section; and [OR]
- (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 9/27/2019, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Register 224, october 2018 ENVIRONMENTAL CONSERVATION
18 AAC 78.050 is repealed and readopted to read:

- 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

Register 221, October 2018 ENVIRONMENTAL CONSERVATION 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

18 AAC 78.055(a) is amended to read:

- (a) The owner or operator of a UST shall ensure that any repairs to the UST will prevent a release caused by <u>manufacturing defects</u>, 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 <u>nationally recognized</u> [NATIONALLY-RECOGNIZED] code of practice, and must be conducted by a person certified under this chapter;
- (2) repairs to [TANKS CONSTRUCTED OF] fiberglass-reinforced plastic <u>tanks</u>
 [OR ANOTHER CORROSION-RESISTANT MATERIAL] must be made by the manufacturer's authorized representative <u>or in accordance with a nationally recognized code of practice</u>;
 - (3) metal pipe sections and fittings that have released petroleum as a result of

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- (4) <u>non-corrodible</u> pipes and fittings [CONSTRUCTED OF FIBERGLASS-REINFORCED PLASTIC OR ANOTHER CORROSION-RESISTANT MATERIAL] must be repaired <u>in accordance with</u> [AS SPECIFIED BY] the <u>manufacturer's specifications</u>
 [MANUFACTURER];
- 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 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 [REPAIRED] tanks and piping must be [TIGHTNESS] tested for tightness as required under [BY] 18 AAC 78.065(d) and 18 AAC 78.070(c) not later than [WITHIN] 30 days after the date of completion of the repairs [ARE COMPLETE] and before the UST is [BEING] placed back in operation, except if one of the following test methods is used: [UNLESS THE REPAIRED]
 - (A) <u>the repaired</u> tank is internally inspected, using a <u>nationally</u>

 <u>recognized</u> [NATIONALLY-RECOGNIZED] code of practice; [AND]
 - (B) <u>the repaired</u> portion of the UST is monitored monthly for releases, using a method specified in <u>18 AAC 78.065(e) (j)</u> [18 AAC 78.065(e)-(j)]; <u>or</u>
 - (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; [AND]

- (6) within six months after the repair of a cathodically protected UST, the cathodic protection system must be tested as required <u>under</u> [BY] 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.

18 AAC 78.055(b) is amended to read:

(b) The [AS REQUIRED BY 18 AAC 78.100, THE] owner or operator shall maintain [KEEP] records of each repair in accordance with 18 AAC 78.056 until [MADE UNDER THIS SECTION FOR THE REMAINING OPERATING LIFE OF] the UST is permanently closed or undergoes a change-in-service in accordance with 18 AAC 78.085 [SYSTEM].

18 AAC 78.055(c) is repealed:

(c) Repealed 9 /27 /2018.

(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

Register 221, October 2018 ENVIRONMENTAL CONSERVATION
18 AAC 78 is amended by adding new sections to read:

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 with18 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

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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

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Register 227, Otolog 2018 ENVIRONMENTAL CONSERVATION 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	For UST registered on	For UST registered		
Facility ID Number	or before June 1, 2000	after June 1, 2000		
	Year Inspection due	Year Inspection Due		
1	2000			
2	2000	The third calendar		
3	2000	year after registration.		
4	2000			
5	2001			
6	2001			

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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 AAC78.410 and shall ensure that the inspection conforms to the requirements in 18 AAC78.455(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 AAC78.055 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. 9/27/2019, Register 227)

 Authority:
 AS 46.03.020
 AS 46.03.380
 AS 46.03.400

 AS 46.03.365
 AS 46.03.385
 AS 46.03.405

 AS 46.03.375
 AS 46.03.395

18 AAC 78.060(a) is amended to read:

- 18 AAC 78.060. Release detection requirements for USTs [AND REPORTING]. (a)

 The [EXCEPT FOR A UST USED SOLELY TO FUEL AN EMERGENCY POWER

 GENERATOR, THE] owner or operator of a [NEW OR EXISTING] UST shall provide a

 method, or combination of methods, of release detection [DESCRIBED AT 18 AAC 78.065

 AND 18 AAC 78.070] that
- (1) can detect a release from any <u>portion</u> [PART] of the tank <u>and</u> [,

 INCLUDING] the connected underground piping [,] that routinely contains petroleum;
- (2) is installed <u>and</u> [,] calibrated <u>in accordance with</u> [, OPERATED, AND MAINTAINED ACCORDING TO] the manufacturer's instructions [, INCLUDING ROUTINE MAINTENANCE AND SERVICE CHECKS FOR OPERABILITY OR RUNNING

Register 221, October 2018 ENVIRONMENTAL CONSERVATION CONDITION];

- (3) meets the performance requirements in 18 AAC 78.065₂ [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; [AND]
- (4) is capable of detecting a leak as specified <u>in</u> [AT] 18 AAC 78.065(c), (d), (e), (i), or (j), [OR] 18 AAC 78.070(b), (c), or (d), <u>or 18 AAC 78.705</u> 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 [, IF THE METHOD IS USED AFTER DECEMBER 22, 1990;
 THIS PARAGRAPH DOES NOT APPLY TO A METHOD PERMANENTLY
 INSTALLED BEFORE DECEMBER 22, 1990].

18 AAC 78.060(b) is amended to read:

(b) When a release detection method <u>operated in accordance with the performance</u>

<u>standards in 18 AAC 78.065, 18 AAC 78.070, or 18 AAC 78.700 - 18 AAC 78.705</u> indicates a

Register 221, 02000 2018 ENVIRONMENTAL CONSERVATION release may have occurred, the owner or operator shall notify the department as required under 18 AAC 78.200 - 18 AAC 78.280 [BY 18 AAC 78.200(a)].

18 AAC 78.060(d) is amended to read:

- (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).

18 AAC 78.060 is amended by adding new subsections to read:

- (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(a) is repealed and readopted to read:

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.

18 AAC 78.065(b)(7) is amended to read:

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

18 AAC 78.065(b) is amended by adding a new paragraph to read:

- (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.

Register 227, October 2018 ENVIRONMENTAL CONSERVATION
18 AAC 78.065(c) is repealed and readopted to read:

- (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

18 AAC 78.065(d) is repealed and readopted to read:

(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.

18 AAC 78.065(e) is repealed and readopted to read:

- (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.

18 AAC 78.065(g) is repealed and readopted to read:

- (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.

18 AAC 78.065(i) is amended to read:

- (i) Statistical inventory reconciliation. Third-party reviewed and certified

 [STATISTICAL INVENTORY RECONCILIATION METHODS THAT ANALYZE

 INVENTORY RECORDS FOR THE LOSS OF PETROLEUM AND THAT ARE INTENDED

 AS A] release detection methods based on the application of statistical principles to

 inventory data similar to those described in (b) of this section [METHOD] must meet the

 following requirements:
- (1) the <u>release detection methods</u> [STATISTICAL ANALYSIS] must be capable of detecting a <u>leak rate of 0.2 gallons</u> [GALLON] per hour <u>or a release of 150 gallons</u> <u>not later than 30 days;</u> [LEAK RATE FROM ANY PART OF THE TANK THAT ROUTINELY CONTAINS PETROLEUM; AND]
- (2) the release detection methods must use a threshold that does not exceed one-half the minimum detectible leak rate; and
- (3) the release detection methods must report a quantitative result with a calculated leak rate [THE COLLECTION OF INVENTORY DATA MUST MEET THE

Register 221, Ottow 2018 ENVIRONMENTAL CONSERVATION REQUIREMENTS OF (b) OF THIS SECTION].

(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 277)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

Editor's note: 1. <u>The [PRACTICES DESCRIBED IN THE] American Petroleum</u>

Institute Recommended Practice 1621, *Bulk Liquid Stock Control at Retail Outlets*, Fifth Edition,
May 1993, <u>adopted by reference in 18 AAC 78.065(b)</u>, <u>may be reviewed at the Department</u>

of Environmental Conservation's office in Anchorage [, MAY BE USED, IF APPLICABLE,
AS GUIDANCE IN MEETING THE REQUIREMENTS OF (B)(6) OF THIS SECTION].

- 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 Evaluations' *List of Leak Detection Evaluations for Storage Tank 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 documents referred to in Notes 1 and 2 [ARE ON FILE IN THE OFFICE OF THE LIEUTENANT GOVERNOR AND] may be reviewed at the Department of Environmental Conservation's office in Anchorage or may be obtained from the publisher at the

Register 277, 2002 2018 ENVIRONMENTAL CONSERVATION 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/oust;

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(a) is repealed and readopted to read:

18 AAC 78.070. Release detection methods 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.

18 AAC 78.070(b) is amended to read:

(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) [THE MANUFACTURER'S REQUIREMENTS]. A stand-alone sump sensor is not sufficient to meet this requirement.

18 AAC 78.070(c) is repealed and readopted to read:

(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.

18 AAC 78.070(d) is repealed and readopted to read:

(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 1/24/2018, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78 is amended by adding a new section to read:

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

Register 221, October 2018 ENVIRONMENTAL CONSERVATION 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 AAC78.065(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 78.080(a) is amended to read:

(a) If a UST is temporarily closed, an owner or operator shall notify the department on a form supplied by the department [,] and [IF REQUIRED TO INSTALL CORROSION PROTECTION AND RELEASE DETECTION EQUIPMENT UNDER THIS CHAPTER] 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 [THAT EQUIPMENT DURING TEMPORARY CLOSURE].

18 AAC 78.080(c) is amended to read:

inspections are [IS] 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.

18 AAC 78.080(e)(1) is amended to read:

(1) the UST meets the performance standards in 18 AAC 78.025 for a new UST,

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or the upgrading requirements of 18 AAC 78.030, except that the spill and overfill equipment requirements of 18 AAC 78.030(f) [18 AAC 78.030(a)] need not be met; and

(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 9/27/2000, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

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18 AAC 78.085(c) is repealed and readopted to read:

- (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.

18 AAC 78.085(d) is amended to read:

(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 [CONSIDERED] a change-in-service. The [BEFORE A CHANGE-IN-SERVICE,] the owner or operator shall,

(1) before a change in service,

- (A) [(1)] empty and clean the tank by removing all liquid and accumulated sludge;
- (B) [(2)] conduct a site characterization as prescribed in 18 AAC 78.090;
 [AND]
- (C) [(3)] 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.

18 AAC 78.085(e) is repealed:

(e) Repealed 9 / 27/2018.

18 AAC 78.085(f) is repealed:

Authority:

(f) Repealed 9 /27/2018.

18 AAC 78.085 is amended by adding new subsections to read:

(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 [0 / 28 / 2018, Register 227)

AS 46.03.395

AS 46.03.020

AS 46.03.365 Sec. 5, ch. 96, SLA 1990 Sec. 7, ch. 96, SLA 1990

18 AAC 78 is amended by adding new sections to read:

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 / 2016, 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 / 2016, Register 227)

Authority:

AS 46.03.020

AS 46.03.365

AS 46.03.395

18 AAC 78.095 is repealed:

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

Register 277, Objec 2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.100 is repealed:

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 / 27/20/8, Register 227)

18 AAC 78.200(a) is amended to read:

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 [BY] 18 AAC 78.210 [,] and [SHALL] report to the department within the period specified for any of the following conditions [TO THE DEPARTMENT IN THE MANNER AND AT THE TIMES DESCRIBED IN 18 AAC 78.220(b) - (e)]:

- (1) <u>not later than 24 hours after</u> [THE DISCOVERY BY] the owner, operator, or another person <u>discovers</u> [OF] 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;
- observes unusual operating conditions [OBSERVED BY THE OWNER, OPERATOR, OR ANOTHER PERSON], including the erratic behavior of dispensing equipment, the sudden loss of petroleum from the UST, [OR] 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 [; IF SYSTEM EQUIPMENT IS FOUND TO BE DEFECTIVE BUT NOT LEAKING, AND IS IMMEDIATELY REPAIRED OR REPLACED AND RETESTED, A REPORT TO THE DEPARTMENT IS NOT REQUIRED]; and
- (3) <u>not later than seven days after</u> [RELEASE DETECTION] monitoring results, <u>including investigation of an alarm, from a release detection method required</u> under <u>18 AAC 78.060</u> [18 AAC 78.060 18 AAC 78.070] indicate a release <u>may</u> [MIGHT] have occurred <u>unless</u> [, INCLUDING TWO CONSECUTIVE MONTHS OF INVALID OR INCONCLUSIVE RESULTS; A REPORT TO THE DEPARTMENT IS NOT REQUIRED UNDER THIS PARAGRAPH IF]
 - (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; [OR]
 - (B) in the case of inventory control <u>described in 18 AAC 78.065(b)</u>, a second month of data does not confirm the initial result <u>or the investigation determines</u>

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.

(Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am 9 / 27 / 20/8, Register 227)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.210(a) is repealed and readopted to read:

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

Register 221, October 2018 ENVIRONMENTAL CONSERVATION written request for an extension of the seven-day time period.

18 AAC 78.210(b) is repealed and readopted to read:

- (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.

(Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/22/99, Register 149; am 9 / 27 / 2013, Register 227)

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Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78 is amended by adding a new section to read:

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 watercontamination, by direct observation, through site characterization or assessment under 18 AAC78.090, 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 / 2013, Register 227)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.755

18 AAC 78.220 is repealed and readopted to read:

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

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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 9/21/2016, Register 227)

 Authority: AS 46.03.020 AS 46.03.365 AS 46.03.755

18 AAC 78.230 is amended to read:

- 18 AAC 78.230. Initial abatement measures and site assessment. Unless directed in writing by the department to do otherwise, [AFTER MEETING THE REQUIREMENTS OF 18 AAC 78.220,] the owner or operator of a UST with a [CONFIRMED] 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 [, IF NOT ALREADY PERFORMED UNDER 18 AAC 78.220(c)(2), WITHIN SEVEN DAYS] remove the petroleum from the UST not later than seven days after the release to prevent further

Register 227, October 2018 ENVIRONMENTAL CONSERVATION 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; [AND]
- (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 [IN RESPONSE TO A] 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 /208, Register 227.)

Authority: AS 46.03.020 AS 46.03.365

The article heading for 18 AAC 78, Article 3, is changed to read:

Article 3. UST Operators and Operator Training [CLEANUP STANDARDS].

18 AAC 78 is amended by adding new sections to Article 3 to read:

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

Register 221, avour 2018 ENVIRONMENTAL CONSERVATION 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 /2013, 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;
 - (1) 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

Register 227, Octoper 2018 ENVIRONMENTAL CONSERVATION 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. 4 /27 /2016, Register 277)

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

Register 221, 000 2018 ENVIRONMENTAL CONSERVATION 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 /2016, 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

18 AAC 78 is amended by adding new sections to read:

Article 7. Airport Hydrant Fuel Distribution Systems and USTs with Field-Constructed

Tanks.

Section

- 700. General requirements
- 705. Additions, exceptions, and alternatives for airport hydrant systems and USTs with field-constructed tanks
- 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 AAC78.200 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/.

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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

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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-

Register 227, bother 2018 ENVIRONMENTAL CONSERVATION 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

	Semiannual test—leak	Annual test—leak detection rate not to
Test section volume	detection rate not to exceed	exceed
(gallons)	(gallons per hour)	(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	After October 13, 2022, begin using semiannual or annual line testing according to
tests	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 /2013, Register 227)

Authority:

AS 46.03.020

AS 46.03.365

18 AAC 78.910 is amended to read:

18 AAC 78.910. Financial responsibility. The financial responsibility requirements of 40 C.F.R. 280.90 - 280.115 and 280.200 - 280.230 [40 C.F.R. 280.90 - 280.115 AND 281.37], as amended through July 15, 2015 [SEPTEMBER 22, 1995], 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 $\frac{9}{127}$ /2018, Register 227

Authority:

AS 46.03.020

AS 46.03.365

AS 46.03.405

18 AAC 78.920(b) is amended to read:

(b) For purposes of 40 C.F.R. Part 281, as amended through <u>July 15, 2015</u> [SEPTEMBER 22, 1995], 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 <u>July 15, 2015</u> [SEPTEMBER 22, 1995], then the corresponding federal provision prevails. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 9 /27 /2016, Register 227)

Authority:

AS 46.03.020

AS 46,03.365

Register 227, October 2018 ENVIRONMENTAL CONSERVATION 18 AAC 78.995(3) is amended to read:

- (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 [AN UNDERGROUND OR
 ABOVEGROUND FUEL PIPING SYSTEM CONNECTED TO A FUEL STORAGE TANK IF
 THE SYSTEM INCLUDES
 - (A) A BULK RESERVOIR OF AT LEAST 100,000 GALLONS;
 - (B) A FUEL DISPENSING STATION LOCATED 200 FEET OR MORE FROM THE STORAGE TANK;
 - (C) MULTIPLE HYDRANTS;
 - (D) PIPE DIAMETER OF AT LEAST SIX INCHES;
 - (E) SYSTEM OPERATING PRESSURE CAPABLE OF AT LEAST 75
 PSI; AND
 - (F) A MINIMUM MONTHLY FLOW-THROUGH OF 1,000,000 GALLONS];

18 AAC 78.995(10) is repealed:

(10) repealed 9 /27 /2018;

18 AAC 78.995(31) is repealed:

(31) repealed 4 /27 /2018;

18 AAC 78.995(40) is amended to read:

- (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 NACE International [THE NATIONAL ASSOCIATION OF CORROSION ENGINEERS] or is a registered engineer who has certification or licensing that includes [WITH] education and experience in corrosion control of buried or submerged metal piping systems and metal tanks;

18 AAC 78.995(62) is amended to read:

- (62) "field-constructed tank"
- (A) means a tank [50,000 GALLON OR LARGER UST] 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

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[ONSITE FROM READILY AVAILABLE MATERIALS, BUT DOES NOT INCLUDE A UST ASSEMBLED FROM COMMERCIALLY AVAILABLE, FACTORY CONSTRUCTED MODULAR COMPONENTS];

18 AAC 78.995(66) is repealed:

(66) repealed 9/27/2018;

18 AAC 78.995(90) is amended to read:

(90) "motor fuel"

(A) means a complex blend of hydrocarbons typically used in the operation of a motor engine;

(B) includes [PETROLEUM OR A PETROLEUM-BASED

SUBSTANCE THAT IS] motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing one or more of these substances, such as motor gasoline

blended with alcohol [A GRADE OF GASOHOL; "MOTOR FUEL" INCLUDES

FUEL THAT IS TYPICALLY USED IN THE OPERATION OF A MOTOR ENGINE];

18 AAC 78.995(91) is amended to read:

(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 [NATIONAL ASSOCIATION OF CORROSION ENGINEERS (NACE)], 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;

18 AAC 78.995(131) is amended to read:

(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 [FEATURES OF A UST THAT ARE DESIGNED TO (A) CONTAIN ALL LEAKS AND SPILLS FROM TANKS AND ASSOCIATED UNDERGROUND EQUIPMENT; AND (B) PREVENT THE ESCAPE OF A LEAK OR SPILL INTO THE SURROUNDING SOIL, SURFACE WATER, OR GROUNDWATER];

18 AAC 78.995(140) is amended to read:

(140) "substandard UST" means a UST that <u>is not in compliance with this</u>
<u>chapter</u> [DOES NOT HAVE CORROSION PROTECTION OR SPILL AND OVERFILL
CONTROL];

18 AAC 78.995 is amended by adding new paragraphs to read:

- (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

Register 227, 00000 2018 ENVIRONMENTAL CONSERVATION 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 9/21/2018, Register 221

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