Department of Environmental Conservation
Division of Spill Prevention & Response

18 AAC Chapter 78

Underground Storage Tanks

Proposed Regulation Revisions

January 22, 2018

Bill Walker
Governor

Larry Hartig
Commissioner

Public Comment period ends
February 26, 2018, 5:00 p.m.

Please see public notice for
details about how to comment

Background and changes addressed

This packet is being proposed to amend the regulations in 18 AAC 78 to update the underground storage tank (UST) regulations to clarify and organize the language into a more usable format and to incorporate changes in federal UST regulations. Topics addressed by this proposal include: secondary containment and interstitial monitoring for tanks and piping; under-dispenser containment; testing and inspections for equipment; and the removal of deferrals for certain UST systems.

Understanding the changes

In the following text, the proposed changes follow the formatting requirements of the "Drafting Manual for Administrative Regulations," August 2015, as promulgated by the State of Alaska Department of Law. The draft changes are indicated as follows:

Lead-in text explains the changes to the text that follows.

[CAPITALIZED TEXT IN BRACKETS] indicates current regulatory text proposed to be deleted.

Bolded and underlined indicates proposed new text that amends the regulation. When an entire section or subsection is new, it is only indicated by the lead in line.

[…] indicates unchanged chunks of regulatory text.

For comparison purposes, a complete copy of the current 18 AAC 78 regulations can be found online at: http://dec.alaska.gov/commish/regulations/index.htm

18 AAC 78.005 is repealed and readopted to read:

18 AAC 78.005. Applicability. (a) The requirements of this chapter apply to all owners and operators of an underground storage tank or underground storage tank system (UST) as defined in 18 AAC 78.995 except as otherwise provided in (c) and (d) 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, must meet the requirements of 18 AAC 78.060 - 18 AAC 78.072 on or before October 13, 2018; and

(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 Section 402 or 307(b) of the Clean Water Act;

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

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

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

(d) **Partial Exclusions.** 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 paragraph (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 the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following); and

(4) any UST that is part of an emergency generator system at nuclear power generation facilities licensed by the Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to 10 C.F.R. Part 50.

(e) The following are not considered USTs and therefore do not need to meet the requirements of this chapter:

(1) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

(2) tank used for storing heating oil for consumptive use on the premises where stored;

(3) septic tank;

(4) pipeline facility, including gathering lines,

(A) regulated under 49 U.S.C. 601, et seq., (Natural Gas Pipeline Safety Act of 1968);

(B) regulated under 49 U.S.C. 2001, et seq., (Hazardous Liquid Pipeline Safety Act of 1979); or

(C) that is an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in (A) or (B) of this paragraph;

(5) surface impoundment, pit, pond, or lagoon;

(6) storm water or wastewater collection system;

(7) flow-through process tank;

(8) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations;

(9) storage tank situated in an underground area such as a basement, cellar, mineworking, drift, shaft, or tunnel, if the storage tank is situated upon or above the surface of the floor;

(10) tank with a capacity of 110 gallons or less; and

(11) tank containing hazardous wastes regulated under 42 U.S.C. 6921 - 6939b.

(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 __/__/____, Register

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405

AS 46.03.365 AS 46.03.400

NOTE: 18 AAC 78.005 Repealed text:

[18 AAC 78.005. APPLICABILITY; EXEMPTIONS. (a) EXCEPT AS PROVIDED IN (e) - (g) OF THIS SECTION, THE REQUIREMENTS OF THIS CHAPTER APPLY TO THE OWNER AND THE OPERATOR OF AN UNDERGROUND STORAGE TANK OR UNDERGROUND STORAGE TANK SYSTEM (UST) THAT CONTAINS, HAS CONTAINED, OR WILL CONTAIN, PETROLEUM. IN THIS CHAPTER, "UST" MEANS

(1) "UNDERGROUND STORAGE TANK" AS THAT TERM IS DEFINED AT AS 46.03.450(12); AND

(2) "UNDERGROUND STORAGE TANK SYSTEM" AS THAT TERM IS DEFINED AT AS 46.03.450(13).

(b) NO PERSON MAY OWN OR OPERATE A UST UNLESS

(1) IT IS REGISTERED UNDER 18 AAC 78.015;

(2) THAT PERSON MEETS ALL APPLICABLE REQUIREMENTS OF THIS CHAPTER; AND

(3) THAT PERSON HAS PROVIDED PROOF OF FINANCIAL RESPONSIBILITY UNDER 18 AAC 78.910.

(c) REPEALED 11/3/95.

(d) REPEALED 1/30/2003.

(e) THE FOLLOWING USTS ARE EXEMPT FROM THE REQUIREMENTS OF THIS CHAPTER:

(1) A UST THAT HOLDS A HAZARDOUS WASTE IDENTIFIED AT 18 AAC 62.020, OR A MIXTURE OF HAZARDOUS WASTE AND PETROLEUM; A

SYSTEM EXEMPT UNDER THIS PARAGRAPH IS SUBJECT TO THE REQUIREMENTS OF 18 AAC 62;

(2) A WASTEWATER TREATMENT TANK SYSTEM THAT IS PART OF A WASTEWATER TREATMENT FACILITY SUBJECT TO 33 U.S.C. 1317(b) OR 1342 (CLEAN WATER ACT); A SYSTEM EXCLUDED UNDER THIS PARAGRAPH IS SUBJECT TO THE REQUIREMENTS OF 18 AAC 72;

(3) EQUIPMENT OR MACHINERY, INCLUDING HYDRAULIC LIFT TANKS AND ELECTRICAL EQUIPMENT TANKS, CONTAINING PETROLEUM FOR OPERATIONAL PURPOSES;

(4) AN EMERGENCY SPILL OR OVERFLOW CONTAINMENT UST THAT IS EMPTIED WITHIN 24 HOURS AFTER USE;

(5) A TANK USED FOR STORING HEATING OIL FOR CONSUMPTIVE USE ON THE PREMISES WHERE STORED.

(f) THE MINIMUM REQUIREMENTS OF 18 AAC 78.010(b), AND IF A RELEASE IS SUSPECTED OR CONFIRMED, THE REQUIREMENTS OF 18 AAC 78.200 - 18 AAC 78.280 AND 18 AAC 78.600 - 18 AAC 78.625, APPLY TO THE FOLLOWING USTS, BUT OTHER REQUIREMENTS OF THIS CHAPTER DO NOT APPLY TO THOSE USTS:

(1) A WASTEWATER TREATMENT TANK SYSTEM NOT EXEMPT UNDER (e)(2) OF THIS SECTION;

(2) A UST THAT CONTAINS A RADIOACTIVE MATERIAL REGULATED UNDER 42 U.S.C. 2011 - 2114 (ATOMIC ENERGY ACT OF 1954);

(3) A UST THAT IS PART OF AN EMERGENCY GENERATOR SYSTEM AT A NUCLEAR POWER GENERATION FACILITY REGULATED BY THE NUCLEAR REGULATORY COMMISSION UNDER 10 C.F.R. PART 50, APPENDIX A;

(4) AN AIRPORT HYDRANT FUEL DISTRIBUTION SYSTEM; AND

(5) A UST WITH FIELD-CONSTRUCTED TANKS.

(g) A UST THAT STORES FUEL SOLELY FOR USE BY EMERGENCY POWER GENERATORS IS EXEMPT FROM THE RELEASE DETECTION REQUIREMENTS OF 18 AAC 78.060 - 18 AAC 78.070. HOWEVER, A UST THAT STORES FUEL SOLELY FOR USE BY EMERGENCY POWER GENERATORS, AND THE PIPING CONNECTED TO THAT UST, MUST MEET THE REQUIREMENTS OF 18 AAC 78.025(i) IF

(1) THE UST IS INSTALLED ON OR AFTER JULY 25, 2012, OR IF THE UST OR PIPING IS INSTALLED ON OR AFTER JULY 25, 2012 TO REPLACE A UST OR PIPING CONNECTED TO THAT UST; AND

(2) THE UST OR PIPING IS WITHIN 1,000 FEET, AS MEASURED UNDER 18 AAC 78.025(i)(1), OF A COMMUNITY WATER SYSTEM, POTABLE WATER SYSTEM, OR SOLE-SOURCE AQUIFER.]

18 AAC 78.008 is repealed:

18 AAC 78.008. Operator training. Repealed. (Eff. 7/25/2012, Register 203; repealed __/__/____, Register ___)

NOTE: 18 AAC 78.008 Repealed text:

[(a) UNLESS A UST HAS BEEN PERMANENTLY CLOSED UNDER 18 AAC 78.085, EACH OPERATOR OF THE UST SHALL SUCCESSFULLY COMPLETE TRAINING THAT IS APPROPRIATE UNDER THIS SECTION TO THE LEVEL OF RESPONSIBILITY THAT THE OPERATOR HAS.

(b) EACH FACILITY MUST HAVE A DESIGNATED CLASS A OPERATOR, CLASS B OPERATOR, AND CLASS C OPERATOR. THE CLASS A OPERATOR AND CLASS B OPERATOR MAY BE THE SAME INDIVIDUAL, IF THE INDIVIDUAL SUCCESSFULLY COMPLETES THE TRAINING FOR EACH OPERATOR CLASSIFICATION. EACH CLASS A OPERATOR AND CLASS B OPERATOR SHALL BE DESIGNATED IN WRITING TO THE DEPARTMENT. EACH CLASS C OPERATOR SHALL BE DESIGNATED BY THE CLASS A OPERATOR OR CLASS B OPERATOR IN WRITING, AND THE WRITTEN DESIGNATION SHALL BE MAINTAINED ON SITE.

(c) EXCEPT AS PROVIDED IN (i) OF THIS SECTION, AN INDIVIDUAL HAVING THE PRIMARY RESPONSIBILITY FOR ONSITE OPERATION AND MAINTENANCE OF THE UST MUST SUCCESSFULLY COMPLETE TRAINING AS A CLASS A OPERATOR. A CLASS A OPERATOR IS NOT REQUIRED TO BE ON SITE. 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. A CLASS A OPERATOR MUST SUCCESSFULLY COMPLETE TRAINING IN EACH OF THE FOLLOWING AREAS:

(1) SPILL AND OVERFILL PREVENTION;

(2) RELEASE DETECTION;

(3) CORROSION PROTECTION;

(4) EMERGENCY RESPONSE;

(5) PRODUCT COMPATIBILITY WITH SYSTEMS AND EQUIPMENT USED AT THE FACILITY;

(6) FINANCIAL RESPONSIBILITY REQUIREMENTS AND DOCUMENTATION;

(7) REPORTING AND RECORDKEEPING REQUIREMENTS;

(8) NOTIFICATION REQUIREMENTS;

(9) RELEASE AND SUSPECTED RELEASE REPORTING;

(10) TEMPORARY OUT-OF-SERVICE REQUIREMENTS AND TEMPORARY AND PERMANENT CLOSURE REQUIREMENTS;

(11) OPERATOR TRAINING REQUIREMENTS.

(d) EXCEPT AS PROVIDED IN (i) OF THIS SECTION, AN INDIVIDUAL HAVING DAILY ONSITE RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE UST MUST SUCCESSFULLY COMPLETE TRAINING AS A CLASS B OPERATOR. A CLASS B OPERATOR IS NOT REQUIRED TO BE ON SITE AT ALL TIMES. A CLASS B OPERATOR MUST BE TRAINED IN SYSTEMS AND EQUIPMENT SPECIFIC TO THE FACILITY FOR WHICH THE OPERATOR IS RESPONSIBLE. A CLASS B OPERATOR

MUST SUCCESSFULLY COMPLETE TRAINING IN EACH OF THE FOLLOWING AREAS:

(1) COMPONENTS OF THE UST SYSTEM;

(2) MATERIALS USED IN THE CONSTRUCTION OF THE UST SYSTEM;

(3) THE METHODS OF RELEASE DETECTION AND RELEASE PREVENTION USED ON THE UST SYSTEM;

(4) OPERATION, MAINTENANCE, AND INSPECTION REQUIREMENTS OF THE UST SYSTEM IN ACCORDANCE WITH THIS CHAPTER, INCLUDING

(A) SPILL AND OVERFILL PREVENTION;

(B) RELEASE DETECTION; AND

(C) CORROSION PROTECTION;

(5) EMERGENCY RESPONSE;

(6) PRODUCT COMPATIBILITY WITH SYSTEMS AND EQUIPMENT USED AT THE FACILITY;

(7) RELEASE AND SUSPECTED RELEASE REPORTING;

(8) REPORTING AND RECORDKEEPING REQUIREMENTS;

(9) OPERATOR TRAINING REQUIREMENTS.

(e) AN INDIVIDUAL HAVING ANY DAILY ONSITE RESPONSIBILITY FOR ADDRESSING AN EMERGENCY PRESENTED BY A SPILL OR RELEASE FROM THE UST MUST SUCCESSFULLY COMPLETED TRAINING AS A CLASS C OPERATOR. 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.

(f) AN INDIVIDUAL REQUIRED TO RECEIVE TRAINING AS A CLASS A OPERATOR MAY OBTAIN CLASSROOM TRAINING, OR TRAINING DELIVERED OVER THE INTERNET, IF THAT PROGRAM PROVIDES TRAINING AND EVALUATION OF OPERATOR KNOWLEDGE IN THE AREAS LISTED IN (c)(1) – (11) OF THIS SECTION, AND PROVIDES 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 AREAS LISTED IN (c)(1) – (11) OF THIS SECTION AND A CERTIFICATE OF SUCCESSFUL COMPLETION OF THE TRAINING. THE CERTIFICATE OF SUCCESSFUL COMPLETION MUST BE KEPT AT THE FACILITY FOR THE DURATION OF EMPLOYMENT PLUS FIVE YEARS AND BE AVAILABLE FOR INSPECTION. THE CLASS A OPERATOR MUST ENSURE THAT THE DEPARTMENT RECEIVES, NO LATER THAN 30 DAYS AFTER THE OPERATOR COMPLETES THE TRAINING, A COPY OF THE CERTIFICATE OF SUCCESSFUL COMPLETION.

(g) AN INDIVIDUAL REQUIRED TO RECEIVE TRAINING AS A CLASS B OPERATOR MAY OBTAIN CLASSROOM TRAINING, OR TRAINING DELIVERED OVER THE INTERNET, IF THAT PROGRAM PROVIDES TRAINING AND EVALUATION OF OPERATOR KNOWLEDGE IN THE AREAS LISTED IN (d)(1) – (9) OF THIS SECTION, AND PROVIDES 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 AREAS LISTED IN (d)(1) – (9) OF THIS SECTION AND A CERTIFICATE OF SUCCESSFUL COMPLETION OF THE TRAINING. THE CERTIFICATE OF SUCCESSFUL COMPLETION MUST BE KEPT AT THE FACILITY FOR THE DURATION OF EMPLOYMENT PLUS FIVE YEARS AND BE AVAILABLE FOR INSPECTION. THE CLASS B OPERATOR MUST ENSURE THAT THE DEPARTMENT RECEIVES, NO LATER THAN 30 DAYS AFTER THE OPERATOR COMPLETES THE TRAINING, A COPY OF THE CERTIFICATE OF SUCCESSFUL COMPLETION.

(h) AN INDIVIDUAL REQUIRED TO RECEIVE TRAINING AS A CLASS C OPERATOR MAY OBTAIN TRAINING FROM A FACILITY'S CLASS A OR CLASS B OPERATOR, OR TRAINING DELIVERED OVER THE INTERNET, IF THAT PROGRAM PROVIDES TRAINING IN THE AREAS LISTED IN (e) OF THIS SECTION. IF THE CLASS C OPERATOR RECEIVES TRAINING FROM A FACILITY'S CLASS A OR CLASS B OPERATOR, THE CLASS A OR CLASS B OPERATOR MUST KEEP AT THE FACILITY A LIST, IN CHECKLIST FORM, OF THE SUBJECTS PRESENTED AND SUCCESSFULLY COMPLETED. THE CHECKLIST MUST INCLUDE THE SIGNATURES OF THE TRAINER AND CLASS C OPERATOR, AND MUST IDENTIFY THE DATE OF TRAINING. IF THE CLASS C OPERATOR RECEIVES TRAINING DELIVERED OVER THE INTERNET, THE CLASS A OR CLASS B OPERATOR MUST KEEP AT THE FACILITY A CERTIFICATE, FROM THE TRAINING PROVIDER, OF SUCCESSFUL COMPLETION OF THE

TRAINING. RECORDS MUST BE KEPT AT THE FACILITY FOR THE DURATION OF EMPLOYMENT PLUS THREE YEARS AND BE AVAILABLE FOR INSPECTION. THE DEPARTMENT WILL MAINTAIN A LIST OF INTERNET-DELIVERED TRAINING PROGRAMS THAT PROVIDE TRAINING IN THE AREAS LISTED IN (e) OF THIS SECTION AND A CERTIFICATE OF SUCCESSFUL COMPLETION OF TRAINING.

(i) A CLASS A OR CLASS B OPERATOR MUST SUCCESSFULLY COMPLETE OPERATOR TRAINING IN ACCORDANCE WITH THIS SECTION NO LATER THAN 30 DAYS AFTER BEING ASSIGNED TO THE POSITION, EXCEPT THAT

(1) AN INDIVIDUAL ASSIGNED TO THE POSITION BEFORE JULY 25, 2012 MUST SUCCESSFULLY COMPLETE THE TRAININGS BEFORE JANUARY 1, 2013.

(2) AN INDIVIDUAL IS NOT REQUIRED TO SUCCESSFULLY COMPLETE THAT TRAINING IF THE INDIVIDUAL DEMONSTRATES, TO THE DEPARTMENT'S SATISFACTION, THAT THE INDIVIDUAL PREVIOUSLY SUCCESSFULLY COMPLETED

(A) TRAINING IN ACCORDANCE WITH THIS SECTION FOR THE OPERATOR CLASSIFICATION FOR WHICH THE INDIVIDUAL IS NOW DESIGNATED, OR AN EXAMINATION THAT EVALUATES OPERATOR KNOWLEDGE OF AREAS LISTED IN (c)(1) – (11) OF THIS SECTION OR (d)(1) – (9) OF THIS SECTION, AS APPROPRIATE FOR THE OPERATOR CLASSIFICATION FOR WHICH THE INDIVIDUAL IS NOW DESIGNATED; OR

(B) TRAINING OR AN EXAMINATION IN ANOTHER STATE, IF THE DEPARTMENT DETERMINES THAT THE TRAINING OR EXAMINATION

EVALUATES OPERATOR KNOWLEDGE OF AREAS LISTED IN (c)(1) – (11) OF THIS SECTION OR (d)(1) – (9) 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 THAT ARE SPECIFIC TO THIS STATE.

(j) A CLASS C OPERATOR MUST SUCCESSFULLY COMPLETE TRAINING BEFORE THE INDIVIDUAL IS ASSIGNED TO THE POSITION, EXCEPT THAT AN INDIVIDUAL ASSIGNED TO THE POSITION BEFORE JULY 25, 2012 MUST SUCCESSFULLY COMPLETE THE TRAINING BEFORE JANUARY 1, 2013.

(k) THE DEPARTMENT WILL REQUIRE A CLASS A OR CLASS B OPERATOR TO REPEAT TRAINING NO LATER THAN 30 DAYS AFTER THE EARLIER OF THE DATE THAT THE DEPARTMENT DETERMINES A UST FOR WHICH THE OPERATOR IS RESPONSIBLE TO BE OUT OF COMPLIANCE WITH THIS CHAPTER OR THE DATE ON WHICH THE UST FAILED A THIRD-PARTY INSPECTION UNDER 18 AAC 78.017. A CLASS C OPERATOR MUST REPEAT TRAINING ANNUALLY. 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.

(*l*) 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.]

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 __/__/____, Register ___)

NOTE: 18 AAC 78.010 Repealed text:

[(a) A PERSON WHO OWNS OR OPERATES A UST, OR WHO INTENDS TO INSTALL, HAVE INSTALLED, RETURN TO OPERATION, OR ACQUIRE OWNERSHIP OF A UST SHALL MEET THE REQUIREMENTS OF 18 AAC 78.015. IF THE UST IS CLOSED, THE OWNER OR OPERATOR SHALL NOTIFY THE DEPARTMENT AS REQUIRED BY 18 AAC 78.085(a).

(b) A PERSON MAY NOT INSTALL A UST, INCLUDING A UST DESCRIBED AT 18 AAC 78.005(f), TO STORE PETROLEUM UNLESS THE UST, WHETHER OF SINGLE-WALL OR DOUBLE-WALL CONSTRUCTION,

(1) WILL PREVENT A RELEASE CAUSED BY CORROSION OR STRUCTURAL FAILURE FOR THE OPERATIONAL LIFE OF THE SYSTEM;

(2) IS CATHODICALLY PROTECTED AGAINST CORROSION, CONSTRUCTED OF NONCORRODIBLE MATERIAL, STEEL CLAD WITH A NONCORRODIBLE MATERIAL, OR DESIGNED TO PREVENT THE RELEASE OR THREATENED RELEASE OF STORED PETROLEUM; AND

(3) IS CONSTRUCTED OR LINED WITH A MATERIAL THAT IS COMPATIBLE WITH THE STORED PETROLEUM AS PROVIDED AT 18 AAC 78.050.]

18 AAC 78 is amended by adding a new section:

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

(2) is 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) is 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 it to have a release due to corrosion during its operating life. The owner or operator shall maintain records that demonstrate compliance with the requirements of this subsection for the remaining life of the tank.

(c) The following codes of practice may be used 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. __/__/____, Register ___)

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 [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 no later than 30 days after receiving the registration; a tag will not be provided 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 by 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 **18 AAC 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 __/__/____, Register ___)

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

18 AAC 78.017 is repealed:

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

NOTE: 18 AAC 78.017 Repealed text:

[(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;

(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 TABLE 1 OF THIS SUBSECTION.

TABLE 1. INITIAL INSPECTION REQUIREMENTS		
LAST DIGIT OF ADEC FACILITY ID NUMBER	FOR UST REGISTERED ON OR BEFORE JUNE 1, 2000	FOR UST REGISTERED AFTER JUNE 1, 2000
	YEAR INSPECTION DUE	YEAR INSPECTION DUE
1	2000	THE THIRD CALENDAR YEAR AFTER REGISTRATION.
2	2000	
3	2000	
4	2000	
5	2001	
6	2001	
7	2001	
8	2002	
9	2002	
0	2002	

(c) FOR A UST FACILITY WITH MULTIPLE REGISTRATION DATES, ALL USTS SHALL BE INSPECTED NO LATER THAN THE EARLIEST APPLICABLE DATE IN TABLE 1 OF (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 IN TABLE 1 OF (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 TABLE 1 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) THE DEPARTMENT WILL PROVIDE EACH NEW UST WITH A TAG, DECAL, OR NOTICE NO LATER THAN 30 DAYS AFTER RECEIVING THE REGISTRATION. A TAG WILL NOT BE PROVIDED FOR A UST THAT IS PERMANENTLY CLOSED UNDER 18 AAC 78.085.

(g) A PERSON PERFORMING AN INSPECTION MUST BE A CERTIFIED INSPECTOR UNDER 18 AAC 78.410 AND SHALL ENSURE THAT THE INSPECTION CONFORMS TO THE REQUIREMENTS IN 18 AAC 78.455(a)(5).

(h) NO LATER THAN SEPTEMBER 30 OF THE YEAR THE INSPECTION IS DUE, 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.

(i) A TAG, DECAL, OR NOTICE EXPIRES ON OCTOBER 31 OF THE THIRD YEAR AFTER ISSUANCE.

(j) WITHIN 30 DAYS AFTER RECEIVING A FORM UNDER (i) OF THIS SECTION THAT INDICATES THE UST SYSTEM IS IN COMPLIANCE WITH THIS CHAPTER, THE DEPARTMENT WILL PROVIDE THE OWNER OR OPERATOR WITH A TAG, DECAL, OR NOTICE TO BE AFFIXED AS REQUIRED BY 18 AAC 78.015(a).

(k) IF, AFTER INSPECTION, THE INSPECTOR FINDS THAT THE UST SYSTEM IS NOT IN COMPLIANCE WITH THIS CHAPTER,

(1) THE DEPARTMENT WILL CONSIDER THE UST SYSTEM TO BE A SUBSTANDARD UST UNTIL REQUIRED ARE COMPLETED IN ACCORDANCE WITH 18 AAC 78.055;

(2) THE INSPECTOR SHALL NOTIFY THE OWNER OR OPERATOR OF NON-COMPLIANCE;

(3) NO LATER THAN 10 DAYS AFTER THE INSPECTION WAS PERFORMED, THE INSPECTOR SHALL SUBMIT THE INSPECTION REPORT TO THE DEPARTMENT;

(4) NO LATER THAN 60 DAYS AFTER THE INSPECTION WAS PERFORMED , THE OWNER OR OPERATOR SHALL RETURN THE TAG, DECAL, OR NOTICE FOR THE UST SYSTEM TO THE DEPARTMENT, UNLESS THE REQUIRED REPAIRS HAVE BEEN COMPLETED IN ACCORDANCE WITH 18 AAC 78.055 AND THE DEPARTMENT RECEIVES DOCUMENTATION OF THOSE REPAIRS DURING THE 60-DAY PERIOD; IF REPAIRS WILL TAKE LONGER THAN 60 DAYS, AND UPON RECEIPT OF A WRITTEN REQUEST ACCOMPANIED BY DETAILED REPAIR INFORMATION AND A SCHEDULE OF REPAIRS, THE DEPARTMENT MAY GRANT, UNDER 18 AAC 78.018(c), A TEMPORARY DEFERRAL OF ANY PROHIBITION ON THE ACCEPTANCE, DELIVERY, OR DEPOSIT OF PETROLEUM; AND

(5) THE UST SYSTEM MUST BE TEMPORARILY TAKEN OUT OF SERVICE NO 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 NO LATER THAN 15 MONTHS AFTER THE DATE OF INSPECTION.

(*l*) REPEALED 7/25/2012.

(m) 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 78.018(a)(1) is amended to read:

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

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 **18 AAC 78.040 - 18 AAC 78.055** [18 AAC 78.040 – 18 AAC 78.070] **, 18 AAC 78.060 - 18 AAC 78.072,** and 18 AAC 78.910.

(Eff. 7/25/2012, Register 203; am 7/19/2013, Register 207; am __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.405

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 __/__/____, Register ___)

NOTE: 18 AAC 78.020 Repealed text:

[(a) 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 18 AAC 78.085, THE OWNER OR OPERATOR SHALL RETURN, NO LATER THAN 30 DAYS AFTER THE UST IS PERMANENTLY CLOSED, ALL TAGS ISSUED TO THAT UST.

(b) 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 (1994), THAT CLOSURE NOTIFICATION FULFILLS THE REQUIREMENTS OF (a) OF THIS SECTION.]

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 __/__/____, Register ___)

NOTE: 18 AAC 78.022 Repealed text:

[NO LATER THAN DECEMBER 22, 1998, ALL USTS SHALL COMPLY WITH

(1) 18 AAC 78.025 FOR A NEW TANK;

(2) 18 AAC 78.030 TO UPGRADE A TANK OR TANK SYSTEM; OR

(3) THE PERMANENT CLOSURE REQUIREMENTS OF 18 AAC 78.085, INCLUDING THE APPLICABLE REQUIREMENTS FOR CORRECTIVE ACTION UNDER 18 AAC 78.200 - 18 AAC 78.280.]

18 AAC 78.025 is repealed and readopted to read:

18 AAC 78.025. Performance standards for new USTs. (a) 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) 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 the release is detected and the petroleum removed and prevent a release of petroleum to the environment at any time during the operational life of the UST system. For the purposes of this subsection,

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

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

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

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

(1) the tank is 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:

(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; or

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

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

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

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

(D) cathodic protection systems are 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:

(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; or

(3) the tank is constructed of steel and 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:

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

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

(4) the tank is constructed of metal without additional corrosion protection measures provided that:

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

(B) the owner or operator maintains records that demonstrate compliance with the requirements of (e)(4)(A) of this section for the remaining life of the tank; or

(5) the tank construction and corrosion protection are 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 (e)(1) - (4) of this section.

(f) **Piping.** The piping that routinely contains petroleum (all product piping, with the exception of vent lines and most tank fill pipes, meet this classification) and is underground or in contact with the ground must be properly designed, constructed, and installed in a manner that will prevent releases for its operating life due to manufacturing defects, structural failure, or corrosion, in accordance with a nationally recognized code of practice as follows:

(1) the piping is 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:

(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; or

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

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

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

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

(D) cathodic protection systems are 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:

(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; or

(3) the piping is constructed of metal without additional corrosion protection measures provided that:

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

(B) the owner or operator maintains records that demonstrate compliance with the requirements of (f)(3)(A) of this section for the remaining life of the piping; or

(4) the piping construction and corrosion protection are 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 (f)(1) - (3) of this section.

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

(1) except as provided in (g)(2) and (3) of this section, 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; or

(2) the owner or operator is not required to use the spill and overfill prevention equipment specified in (g)(1) of this section 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 (g)(1)(A) or (B) of this section; 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 (g)(1)(B) of this section 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 shall 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;

(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 those classes are defined under 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:

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

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

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

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

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

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

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

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

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

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

(1) be liquid-tight on its sides, 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. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 4/16/2000, Register 154; am 1/30/2003, Register 165; am 7/25/2012, Register 203; am __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

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

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

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

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

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

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

National Fire Protection Association, Inc. (NFPA), Publications Department, 11 Tracy Dr., Avon, MA 02322; telephone: (800) 344-3555; facsimile: (800) 593-6327; Internet address: http://www.nfpa.org/;

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

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

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

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

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

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

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

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

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

NOTE: 18 AAC 78.025 Repealed text:

[(a) TO PREVENT OR DETECT A RELEASE CAUSED BY STRUCTURAL FAILURE, CORROSION, A SPILL, OR AN OVERFILL WHILE THE UST IS USED TO STORE PETROLEUM, THE OWNER OR OPERATOR OF A NEW UST SHALL MEET THE

REQUIREMENTS OF THIS SECTION IN ADDITION TO THE REQUIREMENTS OF 18 AAC 78.040 - 18 AAC 78.070.

(b) 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.

(c) TANKS, PIPING, AND RELATED UST EQUIPMENT MUST BE PROPERLY INSTALLED, USING A NATIONALLY RECOGNIZED CODE OF PRACTICE LISTED IN (f) OF THIS SECTION, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE OWNER OR OPERATOR SHALL ENSURE THAT THE INSTALLER OF A NEW UST IS CERTIFIED UNDER THIS CHAPTER. ALL TANKS, PIPING, AND RELATED UST EQUIPMENT MUST BE COMPATIBLE WITH THE FUELS STORED. THE OWNER SHALL USE ONE OR MORE OF THE FOLLOWING METHODS TO DEMONSTRATE COMPATIBILITY:

(1) CERTIFICATION OR LISTING BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THE FUEL STORED WITHIN THE UST SYSTEM;

(2) WRITTEN APPROVAL FROM THE MANUFACTURER OF THE EQUIPMENT OR COMPONENT; THE WRITTEN APPROVAL MUST

(A) INCLUDE A POSITIVE STATEMENT OF COMPATIBILITY; AND

(B) SPECIFY THE RANGE OF ETHANOL OR BIODIESEL BLENDS WITH WHICH THE EQUIPMENT OR COMPONENT IS COMPATIBLE.

(d) 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 75 FEET OF A CLASS C PUBLIC WATER SYSTEM, AS THOSE CLASSES ARE DEFINED UNDER 18 AAC 80.1990(a).

(e) ANY PART OF THE TANK OR PIPING THAT IS UNDERGROUND OR IN CONTACT WITH THE GROUND AND THAT ROUTINELY CONTAINS PETROLEUM MUST BE PROTECTED FROM CORROSION, USING A NATIONALLY-RECOGNIZED CODE OF PRACTICE LISTED IN (f) OF THIS SECTION. TO PROTECT THE TANK AND PIPING FROM CORROSION, THE TANK AND PIPING MUST BE CONSTRUCTED OF

(1) FIBERGLASS-REINFORCED PLASTIC OR ANOTHER CORROSION-RESISTANT MATERIAL;

(2) A STEEL-FIBERGLASS-REINFORCED-PLASTIC COMPOSITE; OR

(3) STEEL, GALVANIZED STEEL, OR, FOR PIPING ONLY, COPPER; IN ADDITION, THE TANK AND PIPING MUST BE CATHODICALLY PROTECTED AS FOLLOWS:

(A) THE TANK AND PIPING MUST BE COATED WITH A SUITABLE DIELECTRIC MATERIAL; FOR PURPOSES OF THIS SUBPARAGRAPH, "SUITABLE" DOES NOT INCLUDE PAINT OR ASPHALT COATING;

(B) FIELD-INSTALLED CATHODIC PROTECTION SYSTEMS MUST BE DESIGNED BY A CORROSION EXPERT AND INSTALLED BY A WORKER CERTIFIED UNDER 18 AAC 78.400 - 18 AAC 78.495;

(C) IMPRESSED CURRENT SYSTEMS MUST BE DESIGNED TO ALLOW INSPECTION OF THEIR OPERATING STATUS AS REQUIRED BY 18 AAC 78.045(e); AND

(D) CATHODIC PROTECTION SYSTEMS MUST BE OPERATED AND MAINTAINED AS REQUIRED BY 18 AAC 78.045.

(f) UNLESS THE DEPARTMENT APPROVES ANOTHER PROCEDURE, CODE, OR STANDARD FOUND BY THE DEPARTMENT TO BE NO LESS PROTECTIVE OF HUMAN HEALTH AND SAFETY AND THE ENVIRONMENT THAN THE PROCEDURES, CODES, AND STANDARDS SET OUT IN THIS SUBSECTION, THE OWNER AND THE OPERATOR OF A UST SHALL ENSURE THAT THE FOLLOWING PROCEDURES, CODES, AND STANDARDS, THE PROVISIONS OF WHICH ARE ADOPTED BY REFERENCE, ARE USED:

(1) TO MEET THE REQUIREMENTS OF (c) OF THIS SECTION:

(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; AND

(F) NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 30A, *CODE FOR MOTOR FUEL DISPENSING FACILITIES AND REPAIR GARAGES*, 2012 EDITION;

(G) INTERNATIONAL CODE COUNCIL, *INTERNATIONAL FIRE CODE*, CHAPTER 57, (FLAMMABLE AND COMBUSTIBLE LIQUIDS), 2012; AND

(H) INTERNATIONAL CODE COUNCIL, *INTERNATIONAL FIRE CODE*, CHAPTER 50, (HAZARDOUS MATERIALS – GENERAL PROVISIONS), 2012;

(2) TO MEET THE REQUIREMENTS OF (e)(1) OF THIS SECTION FOR TANKS CONSTRUCTED OF FIBERGLASS-REINFORCED PLASTIC OR ANOTHER CORROSION-RESISTANT MATERIAL:

(A) UNDERWRITERS LABORATORIES STANDARD 1316, *GLASS-FIBER-REINFORCED PLASTIC UNDERGROUND STORAGE TANKS FOR*

PETROLEUM PRODUCTS, ALCOHOLS, AND ALCOHOL-GASOLINE MIXTURES, SECOND EDITION, 1994;

(B) REPEALED 1/30/2003;

(C) REPEALED 1/30/2003; AND

(D) STEEL TANK INSTITUTE SPECIFICATION F894, ACT-100 *SPECIFICATION FOR EXTERNAL CORROSION PROTECTION OF FRP COMPOSITE STEEL UNDERGROUND STORAGE TANKS*, DECEMBER 2010;

(3) TO MEET THE REQUIREMENTS OF (e)(2) OF THIS SECTION FOR COMPOSITE TANKS:

(A) UNDERWRITERS LABORATORIES, INC., STANDARD FOR SAFETY 1746, *EXTERNAL CORROSION PROTECTION SYSTEMS FOR STEEL UNDERGROUND STORAGE TANKS*, THIRD EDITION, JANUARY 17, 2007; AND

(B) STEEL TANK INSTITUTE SPECIFICATION F894, ACT-100 S*PECIFICATION FOR EXTERNAL CORROSION PROTECTION OF FRP COMPOSITE STEEL UNDERGROUND STORAGE TANKS*, DECEMBER 2010;

(4) TO MEET THE REQUIREMENTS OF (e)(3) OF THIS SECTION FOR STEEL TANKS:

(A) STEEL TANK INSTITUTE SPECIFICATION STI-P3, *STI-P3 SPECIFICATION AND MANUAL FOR EXTERNAL CORROSION PROTECTION OF UNDERGROUND STEEL STORAGE TANKS*, AUGUST 2011;

(B) UNDERWRITERS LABORATORIES, INC., STANDARD FOR SAFETY1746, *EXTERNAL CORROSION PROTECTION SYSTEMS FOR STEEL UNDERGROUND STORAGE TANKS*, THIRD EDITION, JANUARY 17, 2007;

(C) REPEALED 1/30/2003;

(D) NATIONAL ASSOCIATION OF CORROSION ENGINEERS STANDARD RP0285-2002, *STANDARD RECOMMENDED PRACTICE-CORROSION CONTROL OF UNDERGROUND STORAGE TANK SYSTEMS BY CATHODIC PROTECTION*, 2002;

(E) REPEALED 1/30/2003;

(F) UNDERWRITERS LABORATORIES STANDARD UL 58, *STEEL UNDERGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS*, NINTH EDITION, 1996;

(G) REPEALED 7/25/2012.

(5) TO MEET THE REQUIREMENTS OF (e)(1) OF THIS SECTION FOR PIPING CONSTRUCTED OF FIBERGLASS-REINFORCED PLASTIC OR ANOTHER CORROSION-RESISTANT MATERIAL:

(A) UNDERWRITERS LABORATORIES STANDARD 1316, *GLASS-FIBER-REINFORCED PLASTIC UNDERGROUND STORAGE TANKS FOR PETROLEUM PRODUCTS, ALCOHOLS, AND ALCOHOL-GASOLINE MIXTURES*, SECOND EDITION, 1994;

(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;

(C) REPEALED 1/30/2003;

(D) REPEALED 1/30/2003; AND

(6) TO MEET THE REQUIREMENTS OF (e)(3) OF THIS SECTION FOR METAL PIPING:

(A) NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 30, *FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE*, 2008 EDITION;

(B) AMERICAN PETROLEUM INSTITUTE RECOMMENDED PRACTICE 1615, *INSTALLATION OF UNDERGROUND PETROLEUM STORAGE SYSTEMS*, FIFTH EDITION, MARCH 1996;

(C) PETROLEUM EQUIPMENT INSTITUTE RECOMMENDED PRACTICE PEI/RP 100-11, *RECOMMENDED PRACTICES FOR INSTALLATION OF UNDERGROUND LIQUID STORAGE SYSTEMS*, 2011;

(D) AMERICAN PETROLEUM INSTITUTE RECOMMENDED PRACTICE 1632, *CATHODIC PROTECTION OF UNDERGROUND PETROLEUM STORAGE TANKS AND PIPING SYSTEMS*, THIRD EDITION, MAY 1996;

(E) NATIONAL ASSOCIATION OF CORROSION ENGINEERS STANDARD SP0169-2007, *STANDARD PRACTICE: CONTROL OF EXTERNAL CORROSION ON UNDERGROUND OR SUBMERGED METALLIC PIPING SYSTEMS*, REAFFIRMED MARCH 15, 2007; AND

(F) REPEALED 7/25/2012.

(g) 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.

(h) THE REQUIREMENTS OF (i) OF THIS SECTION APPLY TO

(1) A UST INSTALLED ON OR AFTER JULY 25, 2012;

(2) A UST INSTALLED ON OR AFTER JULY 25, 2012 TO REPLACE A UST;

(3) PIPING CONNECTED ON OR AFTER JULY 25, 2012 TO A UST DESCRIBED IN (1) OR (2) OF THIS SUBSECTION; OR

(4) PIPING REPLACED ON OR AFTER JULY 25, 2012 FOR A UST.

(i) IF A UST OR PIPING DESCRIBED IN (h) OF THIS SECTION IS 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, THE DEPARTMENT WILL REQUIRE SECONDARY CONTAINMENT AND INTERSTITIAL MONITORING FOR LEAKS. A FACILITY THAT WILL INSTALL A POTABLE DRINKING WATER WELL AS PART OF THE FACILITY SHALL MEET THE REQUIREMENTS OF THIS SUBSECTION REGARDLESS OF WHETHER THE UST OR WELL WILL BE INSTALLED FIRST. FOR PURPOSES OF THIS SUBSECTION,

(1) THE 1,000 FEET MUST BE MEASURED FROM THE CLOSEST PART OF THE UST 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;

(2) IF THE UST IS INSTALLED ON OR AFTER JULY 25, 2012, DOES NOT REPLACE A UST, AND CONSISTS OF ONE OR MORE USTS CONNECTED BY PIPING, THE REQUIREMENTS OF THIS SUBSECTION APPLY TO ALL OF THE USTS AND PIPING;

(3) IF THE UST OR PIPING REPLACES A UST OR PIPING CONNECTED TO A UST, THE REQUIREMENTS OF THIS SUBSECTION APPLY ONLY TO THE SPECIFIC UST OR PIPING BEING REPLACED.

(j) UNDER-DISPENSER CONTAINMENT IS REQUIRED FOR A PETROLEUM DISPENSER SYSTEM INSTALLED ON OR AFTER JULY 25, 2012, OR FOR A PETROLEUM DISPENSER SYSTEM INSTALLED ON OR AFTER JULY 25, 2012 TO REPLACE AN EXISTING DISPENSER, IF ANY OF THE PIPING OR EQUIPMENT BELOW THE DISPENSER IS REPLACED. UNDER-DISPENSER CONTAINMENT MUST BE LIQUID-TIGHT, MUST BE COMPATIBLE WITH THE SUBSTANCE CONVEYED BY THE PIPING, AND MUST

(1) ALLOW FOR VISUAL INSPECTION AND ACCESS TO THE COMPONENTS IN THE CONTAINMENT SYSTEM; OR

(2) BE MONITORED.

(k) A SECONDARY CONTAINMENT SYSTEM INSTALLED IN ACCORDANCE WITH (i) OF THIS SECTION MUST BE

(1) DESIGNED, CONSTRUCTED AND INSTALLED TO

(A) CONTAIN PETROLEUM RELEASED FROM ANYWHERE IN THE UST SYSTEM UNTIL THE RELEASE IS DETECTED AND THE PETROLEUM REMOVED; AND

(B) PREVENT A RELEASE OF PETROLEUM TO THE ENVIRONMENT AT ANY TIME DURING THE OPERATIONAL LIFE OF THE UST SYSTEM; AND

(2) CHECKED FOR EVIDENCE OF A RELEASE AT LEAST EVERY 30 DAYS.]

18 AAC 78.030 is repealed and readopted to read:

18 AAC 78.030. Upgrading existing USTs. (a) Not later than December 22, 1998, 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 new UST performance standards in 18 AAC 78.025 or has not been upgraded in accordance with (d) - (f) of this section. This does not apply to previously deferred USTs described in 18 AAC 78.700 - 18 AAC 78.705 and where an upgrade is determined to be appropriate by the department.

(b) **Alternatives allowed.** All existing USTs must comply with one of the following requirements:

(1) new UST performance standards under 18 AAC 78.025;

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

(3) 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) **Tank upgrading requirements.** 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) interior lining - tanks upgraded by internal lining must meet the following:

(A) the lining was 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 is internally inspected and found to be structurally sound with the lining still performing in accordance with the original design specifications; if the internal lining is no longer performing in accordance with original design specifications and cannot be repaired in accordance with a nationally recognized code of practice, then the lined tank must be permanently closed in accordance with 18 AAC 78.080 - 18 AAC 78.087;

(C) a certified copy of the internal lining or lining system specifications and installation instructions, safety precautions, and other documentation is 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; and

(2) cathodic protection - 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 is 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 has been installed for less than 10 years and is monitored monthly for releases in accordance with 18 AAC 78.065(e) - (j);

(C) the tank has been installed for less than 10 years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of 18 AAC 78.065(d); the first test must be conducted before installing the cathodic protection system; the second test must be conducted between three and six months following the first operation of the cathodic protection system; or

(D) the tank is 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 (A) - (C) of this paragraph;

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

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

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

(4) a 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,* adopted by reference in 18 AAC 78.025(e)(2)(E)(i).

(e) **Piping upgrading requirements.** 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) **Spill and overfill prevention equipment.** To prevent spilling and overfilling associated with product transfer to the UST, all existing USTs 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

NOTE: 18 AAC 78.030 Repealed text:

[(a) A PERSON WHO UPGRADES A UST SHALL MEET THE

(1) REQUIREMENTS OF THIS SECTION;

(2) SPILL AND OVERFILL CONTROL REQUIREMENTS OF 18 AAC 78.040; AND

(3) APPLICABLE REQUIREMENTS OF 18 AAC 78.060 - 18 AAC 78.070.

(b) A UST THAT REQUIRES UPGRADING MAY BE UPGRADED ONLY BY A PERSON CERTIFIED UNDER THIS CHAPTER AND MUST BE INSTALLED USING NATIONALLY RECOGNIZED CODES OF PRACTICE SPECIFIED IN 18 AAC 78.025(e). ALL PARTS OF THE UST SYSTEM MUST BE CERTIFIED, LISTED, OR APPROVED UNDER 18 AAC 78.025(c) FOR USE WITH THE FUEL STORED WITHIN THE SYSTEM.

(c) METAL PIPING THAT ROUTINELY CONTAINS PETROLEUM AND THAT IS IN CONTACT WITH THE GROUND MUST BE CATHODICALLY PROTECTED USING NATIONALLY-RECOGNIZED CODES OF PRACTICE SPECIFIED IN 18 AAC 78.025(f)(6) AND MUST MEET THE REQUIREMENTS OF 18 AAC 78.025(e)(3)(B) - (D).

(d) STEEL TANKS MUST BE UPGRADED TO MEET ONE OF THE FOLLOWING REQUIREMENTS, USING A NATIONALLY-RECOGNIZED CODE OF PRACTICE AS SPECIFIED IN 18 AAC 78.025 AND 18 AAC 78.055:

(1) A TANK MAY BE UPGRADED BY INTERNAL LINING IF

(A) THE LINING IS INSTALLED AS REQUIRED BY 18 AAC 78.055(c);

(B) THE INTERNAL LINING OR LINING SYSTEM USED IS SPECIFICALLY DESIGNED FOR THAT PURPOSE, IS COMPATIBLE WITH THE PRODUCT STORED, AND MEETS APPLICABLE NATIONAL STANDARDS SPECIFIED IN 18 AAC 78.055(c);

(C) A CERTIFIED COPY OF THE INTERNAL LINING OR LINING SYSTEM SPECIFICATIONS AND INSTALLATION INSTRUCTIONS, SAFETY PRECAUTIONS, AND OTHER DOCUMENTATION IS PROVIDED TO THE DEPARTMENT BY THE MANUFACTURER, INCLUDING

(i) APPROVALS BY INDEPENDENT TESTING LABORATORIES AND OTHER INDEPENDENT EVALUATION RESULTS THAT INDICATE 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; AND

(D) WITHIN 10 YEARS AFTER LINING, AND EVERY FIVE YEARS AFTER THAT, THE LINED TANK IS INTERNALLY INSPECTED AND FOUND TO BE STRUCTURALLY SOUND, WITH THE LINING STILL PERFORMING IN ACCORDANCE WITH THE ORIGINAL DESIGN SPECIFICATIONS;

(2) A TANK MAY BE UPGRADED BY CATHODIC PROTECTION IF THE

(A) CATHODIC PROTECTION SYSTEM COMPLIES WITH 18 AAC 78.025(e)(3)(B) - (D); AND

(B) THE INTEGRITY OF THE TANK IS ENSURED BY USING ONE OF THE FOLLOWING METHODS:

(i) THE TANK IS INTERNALLY INSPECTED AND ASSESSED TO ENSURE THAT THE TANK IS STRUCTURALLY SOUND AND FREE OF CORROSION HOLES BEFORE INSTALLING THE CATHODIC PROTECTION SYSTEM;

(ii) THE TANK HAS BEEN INSTALLED FOR LESS THAN 10 YEARS AND IS MONITORED MONTHLY FOR RELEASES USING A METHOD SPECIFIED IN 18 AAC 78.065(e)-(j);

(iii) THE TANK HAS BEEN INSTALLED FOR LESS THAN 10 YEARS AND IS ASSESSED FOR CORROSION HOLES BY CONDUCTING TWO TIGHTNESS TESTS THAT MEET THE REQUIREMENTS OF 18 AAC

78.065(d); THE FIRST TEST MUST BE CONDUCTED BEFORE INSTALLING THE CATHODIC PROTECTION SYSTEM, AND THE SECOND TEST MUST BE CONDUCTED BETWEEN THREE AND SIX MONTHS AFTER THE FIRST OPERATION OF THE CATHODIC PROTECTION SYSTEM; OR

(iv) THE TANK IS ASSESSED FOR CORROSION HOLES BY A METHOD THAT IS FOUND BY THE DEPARTMENT TO PREVENT RELEASES IN A WAY THAT IS NO LESS PROTECTIVE OF HUMAN HEALTH AND SAFETY AND THE ENVIRONMENT THAN (i) - (iii) OF THIS SUBPARAGRAPH; OR

(3) A TANK MAY BE UPGRADED BY INTERNAL LINING COMBINED WITH CATHODIC PROTECTION IF

(A) THE LINING IS INSTALLED AS REQUIRED BY 18 AAC 78.055(c); AND

(B) THE CATHODIC PROTECTION COMPLIES WITH 18 AAC 78.025(e)(3)(B)-(D);

(4) A STI-P3 STEEL TANK MAY BE UPGRADED TO CATHODIC PROTECTION IF THE

(A) 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,* ADOPTED BY REFERENCE IN 18 AAC 78.025(f); AND

(B) UPGRADE IS PERFORMED BY A PERSON CERTIFIED UNDER THIS CHAPTER IN UST INSTALLATION.

(e) 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.

(f) 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(i) – (k).]

18 AAC 78.035 is repealed and readopted to read:

18 AAC 78.035. Notification requirements. (a) After May 8, 1986, an owner must submit notice of a tank system's existence to the department in accordance with 18 AAC 78.015(a). Owners must use the registration form supplied by the department. The owner or operator of a UST that was in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, was required to notify the department in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, on a form published by EPA on November 8, 1985 unless notice was given pursuant to section 103(c) of CERCLA. An owner or operator who has not complied with the notification requirements may use the department’s registration form to meet this requirement.

(b) Any person who assumes ownership of a regulated underground storage tank system, 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) Owners required to submit notices under (a) or (b) of this section must provide notices to the department for each tank they own. Owners may provide notice for several tanks using one notification form, but owners who own 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 complies with the requirements in 18 AAC 78.025.

(f) Beginning October 24, 1988, any person who sells a tank intended to be used as an underground storage tank must notify the purchaser of such tank of the owner's notification obligations under (a) of this section. The following statement, when used on shipping tickets and invoices, may be used to comply with this requirement: “Note. A federal law (the Solid Waste Disposal Act, as amended), requires owners of certain underground storage tanks to notify the Alaska Department of Environmental Conservation (department) of the existence of their tanks.

Notifications must be made not later than 30 days after the tank is placed into use. Consult the department's regulation at 18 AAC 78.035 to determine if you are affected by this law".

(g) **Changes in configuration of system.** 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.390
AS 46.03.365

NOTE: 18 AAC 78.035(g) Repealed text:

[CHANGES IN CONFIGURATION OF SYSTEM. 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.]

18 AAC 78.040 is repealed and readopted to read:

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

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

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

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

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

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

(b) Guidance 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 transfer procedures described in the following documents may be used 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.

(d) In this section, "ullage" means the volume of the space between the product level in a tank and the top of the tank, expressed in gallons. (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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365

NOTE: 18 AAC 78.040 Repealed text:

[(a) TO PREVENT SPILLING AND OVERFILLING ASSOCIATED WITH TRANSFER OF PETROLEUM TO A UST, THE OWNER OR OPERATOR OF A UST SYSTEM SHALL, SUBJECT TO (e) OF THIS SECTION, USE THE FOLLOWING SPILL AND OVERFILL PREVENTION EQUIPMENT:

(1) 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

(2) OVERFILL PREVENTION EQUIPMENT THAT WILL

(A) AUTOMATICALLY SHUT OFF FLOW INTO THE TANK WHEN THE TANK IS NO MORE THAN 95 PERCENT FULL; OR

(B) ALERT THE TRANSFER OPERATOR WHEN THE TANK IS NO MORE THAN 90 PERCENT FULL BY RESTRICTING THE FLOW INTO THE TANK OR BY TRIGGERING A HIGH-LEVEL ALARM.

(b) THE OWNER OR OPERATOR SHALL ENSURE THAT

(1) A RELEASE DUE TO SPILLING OR OVERFILLING DOES NOT OCCUR;

(2) THE VOLUME AVAILABLE IN THE TANK IS GREATER THAN THE VOLUME OF PETROLEUM TO BE TRANSFERRED TO THE TANK BEFORE THE TRANSFER IS MADE;

(3) THE TRANSFER OPERATION IS CONSTANTLY MONITORED TO PREVENT OVERFILLING OR SPILLING;

(4) THE DISTRIBUTOR IS PROVIDED WITH THE CURRENT UST TAG, DECAL, OR NOTICE BEFORE THE TRANSFER IS MADE; AND

(5) ANY SPILL OR OVERFILL IS REPORTED AND INVESTIGATED, AND THAT APPROPRIATE CORRECTIVE ACTION IS COMPLETED.

(c) THE OWNER OR OPERATOR IS NOT REQUIRED TO USE THE SPILL AND OVERFILL PREVENTION EQUIPMENT SPECIFIED IN (a) OF THIS SECTION IF

(1) ALTERNATIVE EQUIPMENT IS USED THAT, IN THE DEPARTMENT'S JUDGMENT, IS NO LESS PROTECTIVE OF HUMAN HEALTH AND SAFETY AND THE ENVIRONMENT THAN THE EQUIPMENT SPECIFIED IN (a) OF THIS SECTION; OR

(2) THE UST IS FILLED BY TRANSFERS OF NO MORE THAN 25 GALLONS AT ONE TIME.

(d) THE OWNER OR OPERATOR SHALL REPORT, INVESTIGATE, AND COMPLETE CORRECTIVE ACTION ON A SPILL OR OVERFILL AS REQUIRED BY 18 AAC 78.200 - 18 AAC 78.276.

(e) IF A UST SYSTEM HAS ONE OR MORE OF THE FOLLOWING, THE OWNER OR OPERATOR OF THE SYSTEM SHALL NOT USE A BALL FLOAT VALVE OR A VENT RESTRICTOR SHUT-OFF DEVICE ON THAT SYSTEM:

(1) A TANK THAT RECEIVES A PUMPED DELIVERY;

(2) SUCTION PIPING WITH AIR ELIMINATORS;

(3) REMOTE FILL PIPES AND GAUGE OPENINGS;

(4) AN EMERGENCY GENERATOR OR AN OIL HEATING TANK.

(f) TO SATISFY THE RECORDKEEPING REQUIREMENTS OF 18 AAC 78.100(f), THE OWNER OR OPERATOR MAY MAINTAIN A LOG TO SHOW COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION FOR EACH TRANSFER OPERATION. THE OWNER OR OPERATOR MAY USE A LOG FORM PROVIDED BY THE DEPARTMENT OR AN EQUIVALENT FORM. THE DEPARTMENT'S LOG FORM CALLS FOR THE FOLLOWING INFORMATION:

(1) THE FACILITY NAME AND ID NUMBER;

(2) THE PRODUCT TYPE, DISTRIBUTOR NAME, AND TRANSFER PERSONNEL;

(3) THE DATE AND TIME OF THE TRANSFER;

(4) THE TANK NUMBER, TANK CONTENTS, AND TANK SIZE;

(5) AMOUNT OF FUEL IN TANK BEFORE DELIVERY;

(6) AMOUNT OF ULLAGE BEFORE DELIVERY;

(7) AMOUNT DELIVERED; AND

(8) INFORMATION RELATING TO ANY SPILL OR OVERFILL THAT MAY HAVE OCCURRED DURING THE TRANSFER.

(g) IN THIS SECTION, "ULLAGE" MEANS THE VOLUME OF THE SPACE BETWEEN THE PRODUCT LEVEL IN A TANK AND THE TOP OF THE TANK, EXPRESSED IN GALLONS.]

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 pursuant to 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. **All product piping, with the exception of vent lines and most tank fill pipe configurations, meets the classification of "routinely contains petroleum".**

18 AAC 78.045(c) is amended to read:

(c) A UST **equipped** with a cathodic protection system must be inspected for proper operation by a cathodic protection tester who is certified under 18 AAC 78.410 **in accordance with the following requirements** [. AN INSPECTION UNDER THIS SUBSECTION MUST BE CONDUCTED AS FOLLOWS]:

(1) **frequency -** a cathodic protection system must be tested 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) **inspection criteria -** the criteria used to determine if cathodic protection is adequate **as required by** [UNDER] this section must be in accordance with **one of** the **following:** [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 IN 18 AAC 78.025(f).]

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

(B) NACE International Test Method TM 0101-2012, *Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems*, March 2012;

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

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

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

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

18 AAC 78.045(d) is repealed:

(d) Repealed __/__/____. [THE DEPARTMENT WILL, IN ITS DISCRETION, APPROVE A STANDARD OTHER THAN THAT SPECIFIED IN (c)(2) OF THIS SECTION IF THE DEPARTMENT FINDS IT TO BE NO LESS PROTECTIVE OF HUMAN HEALTH, SAFETY, AND THE ENVIRONMENT THAN THE STANDARD SPECIFIED.]

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 [, INCLUDING THE RESULTS OF]**. These records must provide the following:**

(1) 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

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 prior to switching to a petroleum product containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other petroleum product identified by the department. In addition, an owner or operator with USTs storing these blends must meet one of the following:

(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 determined by the department to be no less protective of human health, safety, and the environment than the options listed in (b)(1) of this section.

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

(d) The following codes may be used to comply with the requirements of this section: 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

NOTE: 18 AAC 78.050 Repealed text:

[(a) A UST MUST BE MADE OF OR LINED WITH MATERIAL THAT IS COMPATIBLE WITH THE PETROLEUM STORED IN THE SYSTEM. AN OWNER OR OPERATOR STORING ALCOHOL BLENDS MAY USE THE FOLLOWING CODES TO COMPLY WITH THE REQUIREMENTS OF THIS SUBSECTION:

(1) 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; OR

(2) THE AMERICAN PETROLEUM INSTITUTE RECOMMENDED PRACTICE 1627, *STORAGE AND HANDLING OF GASOLINE-METHANOL/COSOLVENT BLENDS AT DISTRIBUTION TERMINALS AND SERVICE STATIONS*, AUGUST 1986, REAFFIRMED JANUARY 18, 2000, THE PROVISIONS OF WHICH ARE ADOPTED BY REFERENCE.

(b) THE DEPARTMENT WILL, IN ITS DISCRETION, APPROVE A STANDARD OR CODE OTHER THAN THOSE SPECIFIED IN (a) OF THIS SECTION IF THE DEPARTMENT FINDS IT TO BE NO LESS PROTECTIVE OF HUMAN HEALTH, SAFETY, AND THE ENVIRONMENT THAN THE STANDARDS SPECIFIED.

(c) 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.]

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 **manufacturing defects,** structural failure**,** or corrosion while the UST is used to store petroleum. Repairs must meet the following requirements:

•••

18 AAC 78.055(a)(2) is amended to read:

(2) repairs to [TANKS CONSTRUCTED OF] fiberglass-reinforced plastic **tanks** [OR ANOTHER CORROSION-RESISTANT MATERIAL] must be made by the manufacturer's authorized representative **or in accordance with a nationally recognized code of practice**;

18 AAC 78.055(a)(4) is amended to read:

(4) **non-corrodible** pipes and fittings [CONSTRUCTED OF FIBERGLASS-REINFORCED PLASTIC OR ANOTHER CORROSION-RESISTANT MATERIAL] must be repaired **in accordance with** [AS SPECIFIED BY] the **manufacturer's** [MANUFACTURER] **specifications**;

18 AAC 78.055(a)(5) is amended to read:

(5) **repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping must have the secondary containment tested for tightness according to the manufacturer's instructions, a nationally recognized code of practice, or according to requirements established by the department not later than 30 days following the date of completion of the repair and before being placed back in operation; all other repairs to** [REPAIRED] tanks and piping must be tightness tested as required by 18 AAC 78.065(d) and 18 AAC 78.070(c) **not later than** [WITHIN] 30 days after repairs are complete and before being placed back in operation, [UNLESS THE REPAIRED] **except as provided in (a)(5)(A) - (C) of this section:**

(A) **the repaired** tank is internally inspected, using a nationally-recognized code of practice; [AND]

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

(C) another test method is used that is determined by the department to be no less protective of human health and the environment than those listed in (a)(5)(A) and (B) of this section;

18 AAC 78.055(a)(6) is amended to read:

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

18 AAC 78.055(a) is amended by adding a new paragraph:

(7) not later than 30 days following 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 it is operating properly; and

18 AAC 78.055(a) is amended by adding a new paragraph:

(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:

(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, *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** [MADE UNDER THIS

SECTION FOR THE REMAINING OPERATING LIFE OF] **until** the **UST** [SYSTEM] **is permanently closed or undergoes a change-in-service in accordance with 18 AAC 78.085**.

18 AAC 78.055(c) is repealed:

(c) Repealed __/__/____. [UNLESS THE DEPARTMENT APPROVES ANOTHER PROCEDURE, CODE, OR STANDARD FOUND BY THE DEPARTMENT TO BE NO LESS PROTECTIVE OF HUMAN HEALTH AND SAFETY AND THE ENVIRONMENT THAN THE PROCEDURES, CODES, AND STANDARDS SET OUT IN THIS SUBSECTION, THE OWNER OR OPERATOR SHALL USE THE FOLLOWING PROCEDURES, CODES, AND STANDARDS, THE PROVISIONS OF WHICH ARE ADOPTED BY REFERENCE, TO MEET THE REQUIREMENTS OF (a) OF THIS SECTION:

(1) NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 30, *FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE*, 2008 EDITION;

(2) AMERICAN PETROLEUM INSTITUTE RECOMMENDED PRACTICE 2200, *REPAIRING CRUDE OIL, LIQUEFIED PETROLEUM GAS, AND PRODUCT PIPELINES*, FOURTH EDITION, SEPTEMBER 2010;

(3) AMERICAN PETROLEUM INSTITUTE STANDARD 1631, *INTERIOR LINING AND PERIODIC INSPECTION OF UNDERGROUND STORAGE TANKS*, FIFTH EDITION, JUNE 2001; AND

(4) NATIONAL LEAK PREVENTION ASSOCIATION STANDARD 631, CHAPTERS A, B, AND C, *ENTRY, CLEANING, INTERIOR INSPECTION, REPAIR AND LINING OF UNDERGROUND STORAGE TANKS, 1991*.]

(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 __/__/____, Register ___)

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 78.056. 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 pursuant to section 9005 of Subtitle I of the Solid Waste Disposal Act.

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

(1) the applicable registration information and forms required by 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, which includes certification of installation for new USTs and notification when any person assumes ownership of a UST under 18 AAC 78.025(i) and 18 AAC 78.035(b), respectively;

(3) notification before installation or a change in configuration in accordance with 18 AAC 78.025 and 18 AAC 78.035, respectively;

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

(5) if applicable, reports of all releases including

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

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

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

(D) corrective actions planned or taken, including

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) **Availability and maintenance of records.** The owner or operator shall keep the records required under this section as follows:

(1) at the UST site and immediately available for inspection by the department or at a readily available alternative site and provide the records to the department upon request; or

(2) in the case of permanent closure records required under 18 AAC 78.087, the owner or operator is also provided with the additional alternative of mailing closure records to the department if they cannot be kept at the site or an alternative site as indicated in (d)(1) of this section. (Eff. __/__/____, Register ___)

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 is amended by adding a new section to read:

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 these requirements to ensure 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:

(A) the equipment is double walled and the integrity of both walls is 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 (a)(1)(B) of this section and conduct a test not later than 30 days of discontinuing periodic monitoring of this equipment; or

(B) the spill prevention equipment and containment sumps used for interstitial monitoring of piping are tested at least once every three years to ensure the equipment is liquid tight 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) 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 (a)(1)(B)(i) and (ii) of this section;

(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 (a)(1)(B)(i) - (iii) of this section; and

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

(A) Petroleum Equipment Institute Publication RP1200, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities,* 2012; 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 these requirements 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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

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

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

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

(i) spill prevention equipment - visually check for damage; remove liquid or debris; check for and remove obstructions in the fill pipe; check the fill cap to make sure it is securely on the fill pipe; and, for double walled spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area; and

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

(B) annually:

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

(ii) hand held release detection equipment - check devices 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 comparable to (a)(1) of this section; 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; 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 comparable to (a)(1) of this section.

(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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

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 Table 1 of this subsection.

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

(c) For a UST facility with multiple registration dates, all USTs shall be inspected no later than the earliest applicable date in Table 1 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 in Table 1 of (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 Table 1 in (b) of this section for a facility in the group receiving the extension. The department will provide a temporary extension tag, decal, or notice for a UST that receives an extension under this subsection.

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

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

(g) Not later than 30 days after a satisfactory operations inspection is completed or by 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) no 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) not later than 60 days after the inspection was performed, the owner or operator shall return the tag, decal, or notice for the UST system to the department and the UST will be placed on acceptance, delivery, and deposit prohibition, unless

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

(B) the department receives a written request accompanied by detailed repair information and a schedule of repairs and grants a temporary deferral of any prohibition on the acceptance, delivery, or deposit of petroleum under 18 AAC 78.018(c); and

(5) the UST system must be temporarily taken out of service no later than 90 days after the date of inspection, unless the department has granted a temporary deferral under (h)(4) of this section and 18 AAC 78.018(c); a substandard UST must be permanently closed under 18 AAC 78.085 no later than 15 months after the date of inspection.

(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. __/__/____, Register ___)

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 <u>requirements for USTs</u> [AND REPORTING]. (a) **<u>The</u>** [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 **portion** [PART] of the tank **and** [, INCLUDING] the connected underground piping [,] that routinely contains petroleum;

(2) is installed [,] **and** calibrated [, OPERATED, AND MAINTAINED] **in accordance with** [ACCORDING TO] the manufacturer's instructions [, INCLUDING ROUTINE MAINTENANCE AND SERVICE CHECKS FOR OPERABILITY OR RUNNING CONDITION];

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

(4) is capable of detecting a leak as specified at 18 AAC 78.065(c), (d), (e), (i), [OR] (j)**,** [OR] 18 AAC 78.070(b), (c), [OR] (d)**, or 18 AAC 78.705** with a probability of detection of 95 percent and a probability of false alarm of five percent, if the method is used after December 22, 1990; this paragraph does not apply to a method permanently installed before December 22, 1990**; and** [.]

(5) is operated and maintained, and electronic and mechanical components are tested for proper operation, in accordance with one of the following: 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 two options listed in (a)(1) and (2) of this section; a test of the proper operation must be

performed at least annually and, at a minimum, as applicable to the facility, cover the following components and criteria:

(A) automatic tank gauge and other controllers - test alarm; verify system configuration; test battery backup;

(B) probes and sensors - inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; test alarm operability and communication with controller; probes must be removed from the tank to be properly inspected;

(C) automatic line leak detector - test operation to meet criteria in 18 AAC 78.070(b) by simulating a leak;

(D) vacuum pumps and pressure gauges - ensure proper communication with sensors and controller;

(E) hand-held electronic sampling equipment associated with groundwater and vapor monitoring - ensure proper operation; and

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

(i) Petroleum Equipment Institute Publication RP1200, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*, 2012; 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.

18 AAC 78.060(b) is amended to read:

(b) When a release detection method **operated in accordance with the performance standards in 18 AAC 78.065, 18 AAC 78.070, or 18 AAC 78.700 - 18 AAC 78.705** indicates a release may have occurred, the owner or operator shall notify the department as required by **18 AAC 78.200 - 18 AAC 78.280** [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 requirement applies after the effective dates described in 18 AAC 78.005(b)(2) and (3) and 18 AAC 78.700(a).**

18 AAC 78.060 is amended by adding a new subsection to read:

(e) **Tanks.** 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 the monthly inventory control requirements in 18 AAC 78.065(b) or (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 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 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).

18 AAC 78.060 is amended by adding a new subsection to read:

(f) **Piping.** 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:

(A) pressurized piping - 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) suction piping - underground piping that conveys petroleum under suction must either have a line tightness test conducted at least every 3 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); no release detection is 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 (f)(1)(B)(ii) - (iv) of this section to be readily determined;

(2) piping installed on or after July 25, 2012 and before April 11, 2016 and within 1,000 feet of 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:

(A) pressurized piping 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) suction piping must be monitored for releases at least every 30 days in accordance with 18 AAC 78.065(h); no release detection is required for suction piping that meets paragraphs (f)(1)(B)(i) - (v) of this section. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am 1/30/2003, Register 165; am __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.395

18 AAC 78.065(a) is amended to read:

18 AAC 78.065. Release detection methods [AND MONITORING] **for tanks.** (a) Each method of release detection for tanks that is used to meet the requirements of 18 AAC 78.060[AND 18 AAC 78.070] must meet the requirements of this section. [USING ONE METHOD OR A COMBINATION OF THE METHODS LISTED IN THIS SECTION, AN OWNER OR OPERATOR SHALL MONITOR EACH TANK FOR RELEASES AT LEAST ONCE EVERY 30 DAYS.]

18 AAC 78.065(b)(6) is amended to read:

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

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; 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.

18 AAC 78.065(c) is amended to read:

(c) **Manual Tank Gauging.** Manual tank gauging **must meet** [AS A RELEASE DETECTION METHOD MAY BE USED IN] the following **requirements** [CIRCUMSTANCES]:

(1) repealed __/__/____; [FOR TANKS OF 1,000 GALLONS OR LESS NOMINAL CAPACITY, ONLY IF

(A) TANK LIQUID LEVEL MEASUREMENTS ARE TAKEN AT THE BEGINNING AND END OF A TIME PERIOD SET OUT IN TABLE A OF THIS

SUBSECTION, DURING WHICH NO LIQUID IS ADDED TO OR REMOVED FROM THE TANK;

(B) LEVEL MEASUREMENTS ARE BASED ON THE AVERAGE OF TWO CONSECUTIVE STICK READINGS AT THE BEGINNING AND THE END OF THE APPROPRIATE PERIOD IN TABLE A;

(C) THE EQUIPMENT USED IS CAPABLE OF MEASURING THE LEVEL OF PRODUCT OVER THE FULL RANGE OF THE TANK'S HEIGHT TO THE NEAREST ONE-EIGHTH OF AN INCH; AND

(D) TESTING IS CONDUCTED AT LEAST ONCE EACH WEEK, AND THE FOUR WEEKLY RESULTS ARE AVERAGED TO OBTAIN A MONTHLY RESULT; IF THE VARIATION BETWEEN THE BEGINNING AND ENDING MEASUREMENTS EXCEEDS THE WEEKLY OR MONTHLY STANDARDS IN TABLE A, A LEAK IS SUSPECTED, AND THE OWNER OR OPERATOR IS SUBJECT TO 18 AAC 78.200 - 18 AAC 78.280;]

(2) repealed __/__/____; [FOR TANKS OF 1,001 - 2,000 GALLONS NOMINAL CAPACITY IN COMBINATION WITH TANK TIGHTNESS TESTING UNDER (d) OF THIS SECTION, INSTEAD OF MONTHLY INVENTORY CONTROL; AND]

(3) repealed __/__/____; [FOR TANKS OF GREATER THAN 2,000 GALLONS NOMINAL CAPACITY, NEVER.]

(4) tank liquid level measurements are 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;

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

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

(7) testing is conducted at least once each week, and the four weekly results are 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; and

(8) tanks of 550 gallons or less nominal capacity and tanks with a nominal capacity of 551 to 1,000 gallons that meet the tank diameter criteria in Table A may use this as the sole method of release detection; all other tanks with a nominal capacity of 551 to 2,000 gallons may use the method in place of inventory control in (b) of this section; tanks of greater than 2,000 gallons nominal capacity may not use this method 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 (also requires periodic tank tightness testing)	**36 hours**	**13 gallons**	**7 gallons**
1,001-2,000 gallons (also requires periodic tank tightness testing)	**36 hours**	**26 gallons**	**13 gallons**

[NOMINAL TANK CAPACITY AND DIMENSIONS | WEEKLY STANDARD (ONE TEST) | MONTHLY STANDARD (AVERAGE OF FOUR TESTS) | MINIMUM TEST DURATION

550 GALLONS OR LESS	10 GALLONS	5 GALLONS	36 HOURS
551-999 GALLONS	13 GALLONS	7 GALLONS	36 HOURS
1,000 GALLONS (64" X 73")	9 GALLONS	4 GALLONS	44 HOURS
1,000 GALLONS (48" X 128")	12 GALLONS	6 GALLONS	58 HOURS
1,001 - 2,000 GALLONS	26 GALLONS	13 GALLONS	36 HOURS]

18 AAC 78.065(d) is amended 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, [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. THE TESTS REQUIRED BY THIS SUBSECTION MUST BE PERFORMED BY A PERSON CERTIFIED UNDER THIS CHAPTER. 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 MANU-FACTURER'S TEST PROTOCOL. AN OWNER OR OPERATOR MAY USE TANK TIGHTNESS TESTING ONLY IF THE UST MEETS THE PERFORMANCE STANDARDS

SET OUT IN 18 AAC 78.025 OR 18 AAC 78.030 AND 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. IF TANK TIGHTNESS TESTING IS USED, THE TEST MUST BE CONDUCTED EVERY FIVE YEARS FOR TEN YEARS AFTER THE TANK IS INSTALLED OR UPGRADED, WHICHEVER IS LATER. THE DEPARTMENT MAY DISAPPROVE A TANK TIGHTNESS TEST OR TESTING SYSTEM UNDER THIS SUBSECTION IF THE]

(1) repealed __/__/____; [TEST OR TESTING SYSTEM FAILS TO DISCLOSE LEAKS THAT FALL WITHIN THE BOUNDARIES OF THE CRITERIA STATED IN THIS SUBSECTION; OR]

(2) repealed __/__/____; [TESTER IS NOT CERTIFIED BY THE MANUFACTURER OF THE TEST OR TESTING SYSTEM.]

(3) 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;

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

(5) 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;

(6) 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;

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

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

(9) 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 amended to read:

(e) **Automatic Tank Gauging.** Equipment for automatic tank gauging that tests for the loss of petroleum **and** [OR THAT] conducts inventory control must **meet the following requirements:** [BE CAPABLE OF DETECTING]

(1) **the automatic product level monitor test can 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) repealed __/__/____; [A RELEASE OF 150 GALLONS WITHIN A 30-DAY PERIOD, WITH A PROBABILITY OF DETECTION OF 95 PERCENT AND A PROBABILITY OF FALSE ALARM OF FIVE PERCENT.]

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

(4) 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 amended to read:

(g) **Groundwater Monitoring.** Groundwater monitoring may be used [ONLY IF THE GROUNDWATER IS NEVER MORE THAN 20 FEET FROM THE GROUND SURFACE AND ONLY] with department approval. **Testing or monitoring for liquids in the groundwater must meet the following requirements:**

(1) the petroleum stored is immiscible in water and has a specific gravity of less than one;

(2) groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil between the UST and the monitoring wells or devices is not less than 0.01 cm/sec (*e.g.*, the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(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 shall be sealed from the ground surface to the top of the filter pack;

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

(6) the continuous monitoring devices or manual methods used can 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 is assessed to ensure compliance with the requirements in (g)(1) - (5) of this section 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 are 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 STATISTICAL ANALYSIS MUST] be capable of detecting a **leak rate of** 0.2 gallon per hour **or a release of 150 gallons not later than 30 days;** [LEAK RATE FROM ANY PART OF THE TANK THAT ROUTINELY CONTAINS PETROLEUM; AND]

(2) **use a threshold that does not exceed one-half the minimum detectible leak rate; and** [THE COLLECTION OF INVENTORY DATA MUST MEET THE REQUIREMENTS OF (b) OF THIS SECTION.]

(3) **report a quantitative result with a calculated leak rate.**

(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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.070(a) is amended to read:

18 AAC 78.070. Release detection methods [AND MONITORING] **for piping**. (a) Each method of release detection for piping used to meet the requirements of 18 AAC 78.060 [AND 18 AAC 78.065] must be conducted as required by this section. [PRESSURIZED PIPING MUST MEET THE APPLICABLE REQUIREMENTS SET OUT EITHER IN (b) AND (c) OF THIS SECTION OR IN (b) AND (d) OF THIS SECTION. SUCTION PIPING MUST MEET THE APPLICABLE REQUIREMENTS SET OUT IN (c) OF THIS SECTION AND, IF APPLICABLE, (d) OF 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 amended 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. [EXCEPT AS OTHERWISE PERMITTED UNDER (d) OF THIS SECTION, IF PRESSURIZED PIPING IS USED, THE LINE TIGHTNESS TEST MUST BE CONDUCTED ANNUALLY, AND IF UNDERGROUND PIPING THAT CONVEYS PETROLEUM UNDER SUCTION IS USED, THE LINE TIGHTNESS TEST MUST BE CONDUCTED AT LEAST EVERY THREE YEARS. HOWEVER, NO RELEASE DETECTION IS REQUIRED FOR SUCTION PIPING DESIGNED AND CONSTRUCTED TO MEET THE FOLLOWING STANDARDS:]

(1) repealed __/__/____; [THE BELOW-GRADE PIPING OPERATES AT LESS THAN ATMOSPHERIC PRESSURE AND IS SLOPED SO THAT THE CONTENTS OF THE PIPE WILL DRAIN BACK INTO THE STORAGE TANK IF THE SUCTION IS RELEASED;]

(2) repealed __/__/____; [ONLY ONE CHECK VALVE IS INCLUDED IN EACH SUCTION LINE;]

(3) repealed __/__/____; [THE CHECK VALVE IS LOCATED DIRECTLY BELOW AND AS CLOSE AS PRACTICAL TO THE SUCTION PUMP; AND]

(4) repealed __/__/____; [A MEANS IS PROVIDED TO READILY DETERMINE THAT (1) – (3) OF THIS SUBSECTION ARE SATISFIED.]

18 AAC 78.070(d) is amended to read:

(d) **Applicable tank methods. Except as described in 18 AAC 78.060(e)** [NOTWITHSTANDING THE REQUIREMENTS OF (c) OF THIS SECTION], 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 __/__/____, Register ___)

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. These records must include the information in 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 leak 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 qualified environmental professional.

(c) The results of any sampling, testing, or monitoring must be maintained for at least one year, or for another reasonable period of time determined by the department, except as follows:

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

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

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

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

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.080(a) is amended to read:

18 AAC 78.080. Temporary closure. (a) If a UST is temporarily closed, an owner or operator shall notify the department on a form **supplied** [SUPPLIES] 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:

(c) Release detection **and release detection operation, maintenance testing, and 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 no 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, 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 __/__/____, Register___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.375

18 AAC 78.085(c) is amended to read:

(c) To permanently close a tank, the owner or operator shall [EMPTY AND CLEAN IT BY REMOVING ALL LIQUIDS AND ACCUMULATED SLUDGE. A UST THAT IS TO BE CLOSED MUST BE REMOVED FROM THE GROUND, ALONG WITH ALL ASSOCIATED PIPING, OR MUST BE FILLED WITH AN INERT SOLID MATERIAL. A UST ASSOCIATED WITH A KNOWN RELEASE MUST BE REMOVED FROM THE GROUND UNLESS THE DEPARTMENT ALLOWS THE TANK TO REMAIN IN PLACE BECAUSE REMOVAL OF THE TANK WOULD ENDANGER EXISTING STRUCTURES. THE RESULTING EXCAVATION MUST BE INVESTIGATED AND CORRECTIVE ACTION COMPLETED AS REQUIRED BY 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.]

(1) empty and clean it by removing all liquids 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) all tanks and associated piping taken out of service permanently must be removed from the ground, filled with an inert solid material, or closed 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 by 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, the owner or operator shall

(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)(2) is amended to read:

(2) conduct a site characterization as prescribed in 18 AAC 78.090; [AND]

18 AAC 78.085(d)(3) is amended to read:

(3) conduct either a site assessment or a release investigation as prescribed in 18 AAC 78.090 and 18 AAC 78.235**;** [.]

18 AAC 78.085(d) is amended by adding a new paragraph to read:

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

18 AAC 78.085(d) is amended by adding a new paragraph to read:

(5) not later than 30 days after change-in-service, the owner or operator shall 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 __/__/____; [WITH THE NOTICE REQUIRED UNDER (a) OF THIS SECTION, THE OWNER OR OPERATOR SHALL DESCRIBE THE INTENDED METHOD FOR DISPOSAL OF THE LIQUID AND ACCUMULATED SLUDGE REMOVED UNDER (c) OR (d) OF THIS SECTION.]

18 AAC 78.085(f) is repealed:

(f) repealed __/__/____; [WITHIN 30 DAYS AFTER CLOSURE OR CHANGE-IN-SERVICE, THE OWNER OR OPERATOR SHALL SUBMIT A COMPLETED POST-CLOSURE NOTICE AND COMPLY WITH 18 AAC 78.090 AND 18 AAC 78.210, IF APPLICABLE.]

18 AAC 78.085 is amended by adding a new subsection 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, no later than 30 days after the UST is permanently closed, all tags issued to that UST.

18 AAC 78.085 is amended by adding a new subsection to read:

(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 amended 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 __/__/____; Register ___)

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

18 AAC 78 is amended by adding a new section 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 by 18 AAC 78.090 and to close the UST as required by 18 AAC 78.085. (Eff. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

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 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. __/__/____, Register ___)

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 __/__/____; Register ___)

NOTE: 18 AAC 78.095 Repealed text:

[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 BY 18 AAC 78.090 AND TO CLOSE THE UST AS REQUIRED BY 18 AAC 78.085.]

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 __/__/____; Register ___)

NOTE: 18 AAC 78.100 Repealed text:

[(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 REQUIRED UNDER 42 U.S.C. 6991d, AS AMENDED THROUGH SEPTEMBER 22, 1995.

(b) THE OWNER OR OPERATOR OF A UST SHALL SUBMIT TO THE DEPARTMENT

(1) THE APPLICABLE REGISTRATION INFORMATION AND FORMS REQUIRED BY AS 46.03.380(b), 46.03.385(d), 46.03.400, AND 18 AAC 78.015;

(2) IF APPLICABLE, REPORTS OF

(A) THE SITE ASSESSMENT AS REQUIRED BY 18 AAC 78.090(d)(5), INCLUDING A SITE ASSESSMENT SUMMARY, ON A FORM PROVIDED BY THE DEPARTMENT OR A SIMILAR FORMAT THAT PROVIDES THE SAME INFORMATION;

(B) THE RELEASE INVESTIGATION AS REQUIRED BY 18 AAC 78.235, INCLUDING A RELEASE INVESTIGATION SUMMARY, ON A FORM PROVIDED BY THE DEPARTMENT OR A SIMILAR FORMAT THAT PROVIDES THE SAME INFORMATION;

(C) A SUSPECTED RELEASE AS REQUIRED BY 18 AAC 78.200;

(D) A SPILL OR OVERFILL AS REQUIRED BY 18 AAC 78.040;

(E) A CONFIRMED RELEASE AS REQUIRED BY 18 AAC 78.220;

(F) CORRECTIVE ACTIONS PLANNED OR TAKEN, INCLUDING

(i) INITIAL ABATEMENT, AS REQUIRED BY 18 AAC 78.230 AND 18 AAC 78.235;

(ii) FREE PRODUCT REMOVAL, AS REQUIRED BY 18 AAC 78.240;

(iii) SOIL AND GROUNDWATER CLEANUP LEVELS MET, AS REQUIRED BY 18 AAC 78.600 - 18 AAC 78.625; AND

(iv) A COPY OF THE CORRECTIVE ACTION PLAN DESCRIBED IN 18 AAC 78.250; AND

(G) AN INSPECTION AS REQUIRED BY 18 AAC 78.017.

(c) WITHIN 30 DAYS AFTER CLOSURE, THE OWNER OR OPERATOR SHALL NOTIFY THE DEPARTMENT AS TO WHETHER ALL APPLICABLE LOCAL, STATE, AND FEDERAL CLOSURE REQUIREMENTS WERE MET.

(d) WITHIN 30 DAYS AFTER CLOSURE OR CHANGE-IN-SERVICE, THE OWNER OR OPERATOR SHALL PROVIDE TO THE DEPARTMENT A POST-CLOSURE NOTICE AS REQUIRED BY 18 AAC 78.085.

(e) WITHIN 60 DAYS AFTER CLOSURE OR CHANGE-IN-SERVICE, THE OWNER OR OPERATOR SHALL PROVIDE TO THE DEPARTMENT A SITE ASSESSMENT REPORT IF REQUIRED BY, AND AS PRESCRIBED IN, 18 AAC 78.090.

(f) THE OWNER OR OPERATOR SHALL KEEP THE FOLLOWING RECORDS FOR AS LONG AS THE UST IS USED TO STORE PETROLEUM:

(1) RECORDS THAT SHOW COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THIS CHAPTER, INCLUDING

(A) DOCUMENTATION OF OPERATION OF CORROSION PROTECTION EQUIPMENT AS REQUIRED BY 18 AAC 78.045(f);

(B) DOCUMENTATION OF UST UPGRADES UNDER 18 AAC 78.030 AND REPAIRS UNDER 18 AAC 78.055;

(C) PROOF OF COMPLIANCE WITH APPLICABLE RELEASE DETECTION REQUIREMENTS OF 18 AAC 78.060 - 18 AAC 78.070;

(D) RESULTS OF ALL OPERATIONS INSPECTION REPORTS AS REQUIRED UNDER 18 AAC 78.017, UNTIL THE UST IS PERMANENTLY CLOSED; AND

(2) INFORMATION ABOUT ANY SUSPECTED OR CONFIRMED RELEASE AND CORRECTIVE ACTIONS.

(g) THE RESULTS OF ANY SITE CHARACTERIZATION OR SITE ASSESSMENT PERFORMED UNDER 18 AAC 78.090 SHALL BE RETAINED FOR AT LEAST THREE YEARS AFTER CLOSURE OR CHANGE-IN-SERVICE BY EITHER THE

(1) OWNER OR OPERATOR WHO CLOSED THE UST OR CHANGED ITS SERVICE; OR

(2) CURRENT OWNER OR OPERATOR OF THE UST SITE.

(h) IN ADDITION TO THE REQUIREMENTS OF (f) AND (g) OF THIS SECTION, THE OWNER OR OPERATOR SHALL KEEP THE FOLLOWING RECORDS FOR THE PERIOD INDICATED:

(1) LEAK DETECTION MANUALS AND WRITTEN PERFORMANCE CLAIMS CONCERNING ANY RELEASE DETECTION SYSTEM USED, AND THE MANNER IN WHICH THE CLAIMS HAVE BEEN JUSTIFIED OR TESTED BY THE EQUIPMENT MANUFACTURER OR INSTALLER SHALL BE KEPT FOR FIVE YEARS AFTER THE DATE OF INSTALLATION OR AS LONG AS THE LEAK DETECTION SYSTEM IS IN SERVICE, WHICHEVER PERIOD IS LONGER;

(2) THE RESULTS OF ANY SAMPLING, TESTING, OR MONITORING MUST BE KEPT FOR AT LEAST ONE YEAR, EXCEPT THAT THE RESULTS OF TANK

TIGHTNESS TESTING CONDUCTED UNDER 18 AAC 78.065(d) MUST BE KEPT UNTIL THE NEXT TEST IS CONDUCTED;

(3) WRITTEN DOCUMENTATION OF CALIBRATION, MAINTENANCE, AND REPAIR OF RELEASE DETECTION EQUIPMENT PERMANENTLY LOCATED ONSITE MUST BE KEPT FOR AT LEAST ONE YEAR AFTER THE WORK IS COMPLETED;

(4) SCHEDULES OF REQUIRED CALIBRATION AND MAINTENANCE PROVIDED BY THE RELEASE DETECTION EQUIPMENT MANUFACTURER MUST BE KEPT FOR AT LEAST FIVE YEARS; AND

(5) FOR A UST INSTALLED BETWEEN DECEMBER 22, 1988 AND MARCH 25, 1991, THE CERTIFICATE OF INSTALLATION REQUIRED BY 40 C.F.R. 280.20(e) AT THE TIME OF REGISTRATION MUST BE KEPT FOR THE OPERATIONAL LIFE OF THE UST.

(i) THE OWNER OR OPERATOR SHALL KEEP THE RECORDS REQUIRED UNDER THIS SECTION AT THE UST SITE, OR AT A READILY AVAILABLE ALTERNATIVE SITE, AND SHALL PROVIDE THE RECORDS FOR DEPARTMENT INSPECTION UPON REQUEST.]

18 AAC 78.200(a) is amended to read:

18 AAC 78.200. Investigating <u>and reporting</u> 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 by 18 AAC 78.210 [,] and [SHALL] report **<u>to the department within the</u>**

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) **not later than 24 hours after** the discovery by the owner, operator, or another person 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;

(2) **not later than seven days after** unusual operating conditions **are** 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** [; 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]

(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 not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed; and

(3) **not later than seven days after** [RELEASE DETECTION] monitoring results**, including investigation of an alarm, from a release detection method required** under **18 AAC 78.060** [18 AAC 78.060 – 18 AAC 78.070] indicate a release **may** [MIGHT] have occurred **unless:** [, 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 **described in 18 AAC 78.065(b)**, a second month of data does not confirm the initial result **or the investigation determines 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 not used as part of the interstitial monitoring method (for example, brine filled) is immediately 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 (for example, from a power surge or caused by 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.210(a) is amended to read:

18 AAC 78.210. Release investigation and confirmation steps [INVESTIGATION METHODS]**.** (a) Unless corrective action is taken under 18 AAC 78.220 - 18 AAC 78.270, [WITHIN SEVEN DAYS AFTER LEARNING OF A SUSPECTED RELEASE OF PETROLEUM THAT REQUIRES REPORTING UNDER 18 AAC 78.220,] the owner or operator of a UST shall **immediately** [BEGIN TO] investigate **and** [TO] confirm the **suspected** release **of petroleum requiring reporting under 18 AAC 78.200 within seven days, or another reasonable time period specified by the department,** by conducting either a site assessment under 18 AAC 78.090 or a system test as described in this section. The department will, in its discretion, require both a site assessment and a system test.

18 AAC 78.210(b) is amended to read:

(b) **System Test.** The owner or operator shall conduct a test **according to the requirements for tightness testing** [AS DESCRIBED] 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)(4). The following shall apply to the systems test:** [TO DETERMINE IF A RELEASE HAS OCCURRED IN THAT PART OF A TANK THAT ROUTINELY CONTAINS PETROLEUM, OR THE ATTACHED DELIVERY PIPING, OR BOTH. IF THE

UST SYSTEM FAILS THE SYSTEM TEST UNDER THIS SUBSECTION, THE RELEASE IS CONSIDERED CONFIRMED, AND THE OWNER OR OPERATOR SHALL REMOVE, REPAIR, OR REPLACE THE UST, CONDUCT A RELEASE INVESTIGATION UNDER 18 AAC 78.235, AND BEGIN CORRECTIVE ACTION AS PRESCRIBED IN 18 AAC 78.220 - 18 AAC 78.270. REPLACEMENT TANKS, PIPING, AND PARTS MUST MEET THE REQUIREMENTS FOR NEW TANKS UNDER 18 AAC 78.025. IF THE SYSTEM TEST RESULTS FOR THE UST, INCLUDING THE DELIVERY PIPING, DO NOT INDICATE THAT A RELEASE HAS OCCURRED, BUT ENVIRONMENTAL CONTAMINATION IS THE BASIS FOR SUSPECTING A RELEASE, A SITE ASSESSMENT MUST BE PERFORMED AS PRESCRIBED IN 18 AAC 78.090. THE DEPARTMENT WILL, IN ITS DISCRETION, EXTEND THE SEVEN-DAY LIMIT SET IN (a) OF THIS SECTION IF WEATHER CONDITIONS PRECLUDE TESTING. THE TESTS CONDUCTED UNDER 18 AAC 78.065(d) AND 18 AAC 78.070(c) MUST BE PERFORMED BY A PERSON CERTIFIED UNDER THIS CHAPTER. A SYSTEM TEST PERFORMED AS PART OF A REPAIR MUST BE DONE IN ACCORDANCE WITH 18 AAC 78.055.]

(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 UST 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 __/__/____, Register ___)

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 water contamination by direct observation, through site characterization or assessment under 18 AAC 78.090, or through any other means of

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

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

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

(3) not later than seven days of discovering a release of less than 10 gallons to land, or a release of less than one-half pint to water. (Eff. __/__/____, Register ___)

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

(2) 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 by 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365 AS 46.03.755

NOTE: 18 AAC 78.220 Repealed text:

[(a) THE OWNER OR OPERATOR OF A UST SHALL MEET THE REQUIREMENTS OF THIS SECTION

(1) IN RESPONSE TO

(A) A CONFIRMED RELEASE OF PETROLEUM FROM THE UST; OR

(B) A SUSPECTED RELEASE UNDER 18 AAC 78.200; OR

(2) WHEN THE OWNER OR OPERATOR FIRST HAS KNOWLEDGE OF A CONFIRMED RELEASE OF PETROLEUM FROM THE UST.

(b) THE OWNER OR OPERATOR SHALL NOTIFY THE DEPARTMENT'S ANCHORAGE, FAIRBANKS, JUNEAU, OR SOLDOTNA OFFICE OF ANY RELEASE THAT IS KNOWN OR SUSPECTED TO BE 55 GALLONS OR MORE, IMMEDIATELY UPON KNOWLEDGE OF THE RELEASE.

(c) IF A LEAK, OVERFILL, OR OTHER PETROLEUM RELEASE FROM A UST IS IDENTIFIED, AND SOIL OR WATER CONTAMINATION IS DISCOVERED BY DIRECT OBSERVATION, THROUGH SITE CHARACTERIZATION OR ASSESSMENT UNDER 18 AAC 78.090, OR THROUGH ANY OTHER MEANS, THE OWNER OR OPERATOR SHALL PERFORM THE FOLLOWING INITIAL RESPONSE ACTIONS WITHIN 24 HOURS AFTER THE OWNER OR OPERATOR FIRST DISCOVERS THAT A RELEASE HAS OCCURRED:

(1) NOTIFY THE DEPARTMENT'S ANCHORAGE, FAIRBANKS, JUNEAU, OR SOLDOTNA OFFICE OF

(A) A BELOWGROUND RELEASE FROM THE UST IN ANY AMOUNT;

(B) AN ABOVEGROUND RELEASE TO LAND FROM THE UST IF THE RELEASE EXCEEDS 10 GALLONS; OR

(C) AN ABOVEGROUND RELEASE TO WATER OF THE STATE IF THE RELEASE CAUSES A SHEEN OR DISCOLORATION OF THE WATER SURFACE;

(2) TAKE IMMEDIATE ACTION TO PREVENT ANY FURTHER RELEASE OF THE PETROLEUM INTO THE ENVIRONMENT, INCLUDING REMOVAL OF THE PETROLEUM FROM THE UST IF THAT IS NECESSARY TO MEET THE REQUIREMENTS OF THIS PARAGRAPH; AND

(3) IDENTIFY AND MITIGATE ANY FIRE, EXPLOSION, OR VAPOR HAZARD.

(d) THE OWNER OR OPERATOR SHALL REPORT TO THE DEPARTMENT'S ANCHORAGE, FAIRBANKS, JUNEAU, OR SOLDOTNA OFFICE

(1) A RELEASE OF LESS THAN 10 GALLONS TO LAND, OR A RELEASE OF LESS THAN ONE-HALF PINT TO WATER, WITHIN SEVEN DAYS AFTER DISCOVERING THE RELEASE;

(2) ANY OBSERVATION OR UNUSUAL OPERATING CONDITIONS DESCRIBED IN 18 AAC 78.200(a)(2) WITHIN SEVEN DAYS AFTER THE OBSERVATION OCCURS; AND

(3) ANY RELEASE DETECTION MONITORING RESULTS THAT INDICATE A RELEASE MIGHT HAVE OCCURRED AS DESCRIBED IN 18 AAC 78.200(a)(3) WITHIN SEVEN DAYS AFTER RECEIVING THE RESULTS.

(e) AFTER COMPLYING WITH THE REQUIREMENTS OF THIS SECTION, THE OWNER OR OPERATOR, UNLESS DIRECTED TO DO OTHERWISE BY THE DEPARTMENT, SHALL CONDUCT INITIAL ABATEMENT, RELEASE INVESTIGATION, AND CORRECTIVE ACTION AS REQUIRED BY 18 AAC 78.230 - 18 AAC 78.270.]

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 shall perform the following abatement and containment measures **after meeting the requirements of 18 AAC 78.220**:

(1) 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 release of petroleum to the environment; the UST may not be refilled until the system is repaired, replaced, or upgraded so that a further release cannot occur;

•••

(3) 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) 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) 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 by 18 AAC 78.210(c) or the closure site characterization or assessment of 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) 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 __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.355. General requirements for all USTs. (a) Not later than January 1, 2013, 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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.360. Designation of Class A, B, and C operators. (a) The owner or operator of a UST shall designate:

(1) at least one Class A operator for each UST or group of USTs at a facility; a Class A operator is not required to be on site; and

(2) at least one Class B operator for each UST or group of USTs at a facility; a Class B operator is not required to be on site at all times.

(b) Each Class C operator shall be designated by the Class A operator or Class B operator in writing. (Eff. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.365. Requirements for operator training. (a) The owner or operator of a UST shall ensure 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 (b)(1) and (2) of this section, pass a comparable examination in accordance with (f) of this section, or have received comparable training from another state in accordance with (g) of this section. A Class A operator must have a general knowledge of the UST system requirements so as to ensure compliance with operation, maintenance, and recordkeeping requirements of this chapter. A Class A operator who is responsible for more than one facility must receive training on each UST system present at each facility for which the operator is responsible. At a minimum the training program must

(1) teach the Class A operators, as applicable, about the purpose, methods, and function of:

(A) spill and overfill prevention;

(B) release detection;

(C) corrosion protection;

(D) emergency response;

(E) product compatibility with systems and equipment used at the facility;

(F) financial responsibility requirements and documentation;

(G) reporting, recordkeeping, testing, and inspection requirements;

(H) notification and registration requirements;

(I) release and suspected release reporting;

(J) temporary out-of-service requirements and temporary and permanent closure requirements; and

(K) operator training requirements; and

(2) evaluate Class A operators to determine these individuals have the knowledge and skills to make informed decisions regarding compliance and determine whether appropriate individuals are fulfilling the operation, maintenance, and recordkeeping requirements for USTs in accordance with (b)(1) of this section.

(c) **Class B operators.** Each designated Class B operator must be trained in accordance with (c)(1) and (2) of this section, 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 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 an UST facility in accordance with (c)(1) of this section.

(d) **Class C operators.** Each designated Class C operator must be trained by a Class A or Class B operator in accordance with (d)(1) and (2) of this section, complete a training program in accordance with (d)(1) and (2) of this section, 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 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.** Any training program must meet the minimum requirements of this section and include an evaluation through testing, a practical demonstration, or another approach acceptable to the department and 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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

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, except that an individual assigned to the position before July 25, 2012 must successfully complete the trainings before January 1, 2013.

(c) Class C operators must successfully complete training before the individual is assigned to the position, except that an individual assigned to the position before July 25, 2012 must successfully complete the training before January 1, 2013. (Eff. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.375. Retraining. (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 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, the department, or a recognized authority. At a minimum, the training must cover the area determined to be out of compliance. The UST owner or operator shall ensure Class A and Class B operators are retrained under this section no later than 30 days from the date the department determines 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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.380. Documentation. (a) **Recordkeeping.** 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 and retraining, as applicable, have been completed, in accordance with 18 AAC 78.375 as follows:

(1) the list must:

(A) identify all Class A, Class B, and Class C operators currently designated for the facility; and

(B) include names, class of operator trained, date assumed duties, date each completed initial training, and any retraining; and

(2) records verifying completion of training or retraining must be a paper or electronic record for Class A, Class B, and Class C operators; the records, at a minimum, must identify name of trainee, date trained, operator training class completed, and list the name of the

trainer or examiner and the 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) records from classroom or field training programs (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) records from computer based training must, at a minimum, indicate the name of the training program and web address, if Internet based;

(C) records of retraining must include those areas on which the Class A or Class B operator has been retrained; 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 shall be kept at the facility and must include the signatures of the trainer and Class C operator and the date of training.

(b) **Reporting.** 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) operators 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. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

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 any program that provides information to and evaluates the knowledge of a Class A, Class B, or Class C operator through testing, practical demonstration, or another approach acceptable to the department regarding requirements for USTs that meet the requirements of 18 AAC 78.355 - 18 AAC 78.380. (Eff. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

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

18 AAC 78.700. General requirements. (a) **Implementation of requirements.** The owner or operator shall comply with the requirements of this chapter for USTs with field-constructed tanks and airport hydrant systems as follows:

(1) for USTs installed on or before October 13, 2015 the requirements are effective according to the following schedule:

(A) October 13, 2018 for upgrading USTs; general operating requirements; and operator training;

(B) October 13, 2018 for release detection; and

(C) October 13, 2015 for release reporting, response, and investigation; closure; financial responsibility; and registration notification (except as provided in paragraph (b) of this section); 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 must submit a notice of tank system 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 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) In addition to the codes of practice listed in 18 AAC 78.025, an owner or operator may use military construction criteria, such as Unified Facilities Criteria (UFC) 3-460-01, Petroleum Fuel Facilities, when designing, constructing, and installing airport hydrant systems and USTs with field-constructed tanks. (Eff. __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.380 AS 46.03.405
AS 46.03.365

Editor's note: The publication adopted by reference in 18 AAC 78.700(d) may be reviewed at the department's office in Anchorage or may be obtained directly from the Whole Building Design Guide website: http://dod.wbdg.org/.

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

18 AAC 78.705. Additions, exceptions, and alternatives for USTs with field-constructed tanks and airport hydrant systems. (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 not part of an airport hydrant system must meet the secondary containment requirement 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 pursuant to 18 AAC 78.085:

(1) corrosion protection - UST components in contact with the ground that routinely contain petroleum must meet one of the following:

(A) except as provided in (a) of this section, the new UST performance standards for tanks at 18 AAC 78.025(e) and for piping at 18 AAC 78.025(f); or

(B) be constructed of metal and cathodically protected according to a nationally recognized code of practice and meets the following:

(i) cathodic protection must meet the requirements of 18 AAC 78.025(e)(2)(B), (C), and (D) for tanks, and 18 AAC 78.025(f)(2)(B), (C), and (D) for piping; and

(ii) tanks greater than 10 years old without cathodic protection must be assessed to ensure the tank is structurally sound and free of corrosion holes prior to 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; and

(2) spill and overfill prevention equipment - to prevent spilling and overfilling associated with product transfer to the UST, all USTs with field-constructed tanks and airport hydrant systems must comply with new UST spill and overfill prevention equipment requirements specified in 18 AAC 78.025(g); and

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

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

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

(C) National Leak Prevention Association Standard 631, Chapter C, *Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection,* 1991;

(D) American Society for Testing and Materials Standard G158-98, *Standard Guide for Three Methods of Assessing Buried Steel Tanks,* 2016; 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 the walkthrough inspection requirements in 18 AAC 78.058, the owner or operator shall inspect the following additional areas for airport hydrant systems at least once every 30 days if confined space entry according to the

Occupational Safety and Health Administration under 29 CFR part 1910, is not required or at least annually if confined space entry is required and keep documentation of the inspection according to 18 AAC 78.058(b):

(1) hydrant pits - visually check for any damage; remove any liquid or debris; and check for any leaks, and

(2) hydrant piping vaults - check for any hydrant piping leaks.

(d) **Release detection.** The owner or operator of a UST with field-constructed tanks and airport hydrant systems must begin meeting the following release detection requirements not later than October 13, 2018:

(1) methods of release detection for field-constructed tanks - 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, inventory control, as stated under (d)(1)(E) of this section, must be combined with tank tightness testing, vapor monitoring, or groundwater monitoring, or one or a combination of the following alternative methods of release detection must be used:

(A) conduct an annual tank tightness test that can detect a 0.5 gallon per hour leak rate;

(B) 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) 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) 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) 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 tank tightness test that can detect a 0.5 gallon per hour leak rate 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

(F) 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 (d)(1)(A) - (E) of this section; in comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of detection;

(2) methods of release detection for piping - an owner or operator of underground piping associated with a field-constructed tank less than or equal to 50,000 gallons must meet the release detection requirements in 18 AAC 78.060 - 18 AAC 78.072; an owner or operator of underground piping associated with an airport hydrant system and a field-constructed tank greater than 50,000 gallons must follow either the requirements in 18 AAC 78.060 – 18 AAC 78.072, except, inventory control, as stated under (d)(2)(C) of this section must be combined with line tightness testing, vapor monitoring, or groundwater monitoring, or one or a combination of the following alternative methods of release detection must be used:

(A) perform a semiannual or annual line tightness test at or above the piping operating pressure in accordance with Table D; 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 at a leak rate up to 6.0 gallons per hour according to the schedule in Table E:

TABLE D. MAXIMUM LEAK DETECTION RATE PER TEST SECTION VOLUME

Test section volume (gallons)	**Semiannual test—leak detection rate not to exceed (gallons per hour)**	**Annual test—leak detection rate not to exceed (gallons per hour)**
<50,000	1.0	0.5
≥50,000 to <75,000	1.5	0.75

≥75,000 to <100,000	2.0	1.0
≥100,000	3.0	1.5

TABLE E. PHASE IN FOR PIPING SEGMENTS ≥100,000 GALLONS IN VOLUME

First test	Not later than October 13, 2018 (may use up to 6.0 gph leak rate).
Second test	Between October 13, 2018 and October 13, 2021 (may use up to 6.0 gph leak rate).
Third test	Between October 13, 2021 and October 13, 2022 (must use 3.0 gph for leak rate).
Subsequent tests	After October 13, 2022, begin using semiannual or annual line testing according to the Maximum Leak Detection Rate Per Test Section Volume table above.

(B) 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) 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 (d)(2)(A) of this section 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) 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 (d)(2)(A) - (C) of this section; in comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of detection; and

(3) recordkeeping for release detection - the owner or operator shall maintain release detection records according to 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 a UST with field-constructed tanks or airport hydrant system 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 judgment of the department, pose a current or potential threat to human health and the environment. (Eff. __/__/____, Register ___)

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** [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 __/__/____, Register ___)

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 **July 15, 2015** [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 **July 15, 2015** [SEPTEMBER 22, 1995], then the corresponding federal provision prevails. (Eff. 3/25/91, Register 118; am 11/3/95, Register 136; am __/__/____, Register ___)

Authority: AS 46.03.020 AS 46.03.365

18 AAC 78.995(3) is amended to read:

(1) "airport hydrant fuel distribution system" **or "airport hydrant system"** means **a UST which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (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 ABOVE-GROUND 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 __/__/____; [“AROMATIC” MEANS OF, RELATED TO, OR CONTAINING ONE OR MORE SIX-CARBON RINGS CHARACTERISTIC OF THE BENZENE SERIES AND RELATED ORGANIC GROUPS]

18 AAC 78.995(31) is repealed:

(31) repealed __/__/____; [“CONSTRUCTION SEASON” MEANS APRIL 1 THROUGH SEPTEMBER 30]

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" means a **tank** [50,000 GALLON OR LARGER UST] constructed **in the field; for example, a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field is considered field-constructed** [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 __/__/____; [“FORCE ACCOUNT” MEANS WORK PERFORMED BY THE OWNER OR OPERATOR OF A UST, OR AN EMPLOYEE OF THE OWNER OR OPERATOR]

18 AAC 78.995(90) is amended to read:

(90) “motor fuel” means **a complex blend of hydrocarbons typically used in the operation of a motor engine, such as** [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 (for example, 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" 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; this term 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(139) is amended to read:

(139) “storm water or **wastewater** [WASTE WATER] collection system,” as that term is used in the definition of “underground storage tank” in AS 46.03.450, means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation or domestic or nondomestic wastewater to and from a retention area or an area where treatment is designated to occur; “storm water or **wastewater** [WASTE WATER] collection system” does not include treatment except if incidental to conveyance; “**storm water** [STORMWATER] or wastewater collection system” includes

(A) gravity, pressure, and vacuum sewers, including associated parts such as manholes and cleanouts;

(B) pump or collection stations; and

(C) each part of a collector sewer, regardless of owner-ship of the land on which it is installed;

18 AAC 78.995(140) is amended to read:

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

18 AAC 78.995 is amended by adding new definitions:

(166) "cathodic protection tester" means a person who 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; at a minimum, such persons must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems;

(167) "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended;

(168) "Class A operator" means the individual who has primary responsibility to operate and maintain the UST in accordance with applicable 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;

(169) "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;

(170) "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;

(171) "consumptive use" with respect to heating oil means consumed on the premises;

(172) "containment sump" means a liquid-tight container that protects the environment by containing leaks and spills of petroleum from piping, dispensers, pumps and related components in the containment area; containment sumps may be single walled or in secondary containment and located at the top of 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);

(173) "dispenser" means equipment located aboveground that dispenses petroleum from the UST;

(174) "dispenser system" means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system;

(175) "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 definition applies independently to each piping run;

(176) "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; and

(177) "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 __/__/____, Register ___)

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