### **Department of Environmental Conservation**

**Division of Spill Prevention & Response** 



18 AAC Chapter 75 – Oil and Other Hazardous Substances Pollution Control Proposed Regulation Revisions January 26, 2021

Mike Dunleavey Governor

Jason W. Brune Commissioner Public Comment period ends February 25, 2021, 11:59 p.m. Please see public notice for details about how to comment

#### Background and changes addressed

This packet is being proposed to make changes to selected regulations under 18 AAC 75 Article 1, Oil Pollution Prevention Requirements for field-constructed and shop-fabricated aboveground oil storage tanks.

#### Understanding the changes

Reading and understanding state regulations can be confusing. To assist you in understanding this draft, please note that state regulations are laid out in the following manner:



#### Figure 1. Alaska Regulatory Numbering System

In the following text, the proposed changes follow the formatting requirements of the "Drafting Manual for Administrative Regulations," 20<sup>th</sup> Edition, August 2018, 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 75 regulations can be found online at: <u>http://dec.alaska.gov/commish/regulations/index.htm</u>

18 AAC 75.065(a)(1) and (2) are amended to read:

(1) Tank Inspection, Repair, Alteration, and Reconstruction, Fifth Edition,

November 2014, and Addendum 1, April 2018 [THIRD EDITION, DECEMBER 2001, AND ADDENDUM 1, SEPTEMBER 2003] (API 653), adopted by reference; or

 (2) Recommended Practice for Setting, Maintenance, Inspection, Operation and Repair of Tanks in Production Service, Fifth Edition, August 1997, <u>Reaffirmed: April 2008</u>, and Addendum 1, December 2017 (API RP 12R1), adopted by reference.

18 AAC 75.065(b)(2) is repealed and readopted to read:

(2) may be extended if a request to extend an initial internal tank inspection interval beyond 10 years is submitted to the department for review and is approved. The request must document that it is based on

(A) Table 6.1 of *Tank Inspection, Repair, Alteration, and Reconstruction*(API 653), adopted by reference in (a) of this section;

(B) a similar service assessment specified in Section 6.4.2 of *Tank Inspection, Repair, Alteration and Reconstruction* (API 653), adopted by reference in (a) of this section; or

(C) risk-based inspection, signed by a registered engineer, as specified inSection 6.4.2 of *Tank Inspection, Repair, Alteration and Reconstruction* (API 653),adopted by reference in (a) of this section.

[(2) MAY NOT BE BASED UPON SIMILAR SERVICE AS SPECIFIED IN SECTION 6.4.2 OF *TANK INSPECTION, REPAIR, ALTERATION, AND RECONSTRUCTION* (API 653), ADOPTED BY REFERENCE IN (A) OF THIS SECTION; AND]

18 AAC 75.065(b)(3) is repealed:

(3) repealed \_\_/\_\_\_; [MAY BE BASED UPON RISK-BASED INSPECTION AS SPECIFIED IN SECTION 6.4.3 OF *TANK INSPECTION, REPAIR, ALTERATION, AND RECONSTRUCTION* (API 653), ADOPTED BY REFERENCE IN (A) OF THIS SECTION, IF THE RISK-BASED INSPECTION ASSESSMENT IS SUBMITTED TO THE DEPARTMENT FOR APPROVAL; THE ASSESSMENT MUST INCLUDE

(A) A QUANTITATIVE RISK ASSESSMENT, SIGNED BY A
REGISTERED ENGINEER CONDUCTED IN ACCORDANCE WITH THE
AMERICAN PETROLEUM INSTITUTE'S RISK BASED INSPECTION, FIRST
EDITION, MAY 2002 (API RP 580), ADOPTED BY REFERENCE; AND
(B) AN INSPECTION SCHEDULE WITH INSPECTION INTERVALS
NOT TO EXCEED 30 YEARS.]

18 AAC 75.065(d) is amended to read:

(d) <u>The owner or operator of an aboveground oil storage tank shall maintain</u> <u>records</u> [RECORDS] and documentation <u>of</u>

(1) <u>inspections, except as provided in paragraphs (2) of this subsection, for</u>
 <u>the service life of the tank;</u> [SHALL BE MAINTAINED BY THE OWNER OR OPERATOR,
 EXCEPT AS PROVIDED IN (2) OF THIS SUBSECTION, FOR THE SERVICE LIFE OF THE

# TANK; AND SHALL BE PROVIDED TO THE DEPARTMENT FOR INSPECTION AND COPYING UPON REQUEST;]

(2) <u>routine in-service</u> inspections required [AS SPECIFIED IN] in Section 6.3.1 of *Tank Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a) of this section, <u>and of tests and inspections required by 18 AAC 75.065(*l*), [SHALL BE MAINTAINED BY THE OWNER OR OPERATOR] for five years [AND SHALL BE PROVIDED TO THE DEPARTMENT FOR INSPECTION AND COPYING UPON REQUEST.]; and</u>

18 AAC 75.065(d) is amended by adding a new paragraph to read:

(3) a completed Annex L API 650 Storage Tank Data Sheet of the American Petroleum Institute's (API) *Welded Tanks for Oil Storage* (API 650), adopted by reference in (q) of this section, to support an initial internal inspection interval established under (b)(2) of this section.

18 AAC 75.065(e) is amended to read:

(e) The owner or operator shall notify the department

(1) as soon as practical before a field-constructed aboveground oil storage tank undergoes major repair or major alteration, as defined in Section <u>3.21</u> [12.3.1.2] of *Tank Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a) of this section; and

(2) before a field constructed aboveground oil storage tank resumes service following major repair or major alteration, as defined in Section <u>3.21</u> [12.3.1.2] of *Tank* 

*Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a) of this section.

18 AAC 75.065(g) is amended to read:

(g) An internal lining system installed and used to control corrosion or to meet the requirements of (h) of this section, must be installed in accordance with American Petroleum Institute's API [.]

18 AAC 75.065(g)(1) is amended to read:

(1) Lining of Aboveground Petroleum Storage Tank Bottoms, First Edition, 1991
 (API RP 652), adopted by reference, for an internal lining system installed before
 December 30, 2008; [OR]

18 AAC 75.065(g)(2) is amended to read:

(2) Linings of Aboveground Petroleum Storage Tank Bottoms, Third Edition,
 October 2005 (API RP 652), adopted by reference, for an internal lining system installed on or after December 30, 2008[.], and before {effective date of regulations}; or

18 AAC 75.065(g) is amended by adding a new paragraph to read:

(3) *Linings of Aboveground Petroleum Storage Tank Bottoms*, Fourth Edition, September 2014, Errata 1, August 2016 (API RP 652), adopted by reference, for an internal lining system installed on or after {*effective date of regulations*}.

18 AAC 75.065(h)(2) is amended to read:

(2) operate and maintain, after {*effective date of regulations*}[DECEMBER 30, 2007], the cathodic protection system on each field-constructed aboveground oil storage tank consistent with Section 11 of <u>Standard Practice: Application of Cathodic Protection to Control</u> <u>External Corrosion of Carbon Steel On-Grade Storage Tank Bottoms (NACE SP0193-2016)</u> [STANDARD RECOMMENDED PRACTICE: EXTERNAL CATHODIC PROTECTION OF ON-GRADE CARBON STEEL STORAGE TANK BOTTOMS (NACE RP 0193-2001)], adopted by reference [IN (j) OF THIS SECTION]; a corrosion expert or qualified cathodic protection tester shall perform a cathodic protection survey specified under that standard.

18 AAC 75.065(i)(1)(A) is amended to read:

(iii) Specifications for Shop Welded Tanks for Storage of Production Liquids, 10<sup>th</sup> Edition, 1989 (API Spec 12F), adopted by reference;
 [AND] or

18 AAC 75.065(i)(2) is repealed:

(2) repealed \_/\_/\_\_; [A FIELD-CONSTRUCTED ABOVEGROUND OIL
STORAGE TANK MAY NOT BE OF RIVETED OR BOLTED CONSTRUCTION;]
18 AAC 75.065(i)(3) is amended to read:

(3) cathodic protection or another approved corrosion control system must be installed, to protect the bottom of each field-constructed aboveground oil storage tank from external corrosion where local soil conditions warrant; after December 30, 2007, operation and maintenance of the cathodic protection system must be consistent with Section 11 of <u>Standard</u>

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*Practice: Application of Cathodic Protection to Control External Corrosion of Carbon Steel On-Grade Storage Tank Bottoms* (NACE SP0193-2016) [STANDARD RECOMMENDED *PRACTICE: EXTERNAL CATHODIC PROTECTION OF ON-GRADE CARBON STEEL STORAGE TANK BOTTOMS* (NACE RP 0193-2001)], adopted by reference in (h) [(j)] of this section; a corrosion expert or qualified cathodic protection tester shall perform a cathodic protection survey specified under that standard; and

18 AAC 75.065(j) is amended to read:

(j) An owner or operator of an installation placed in service after December 30, 2008and before {*effective date of regulations*} shall meet each of the following requirements:

18 AAC 75.065(j)(2) is repealed:

(2) repealed \_\_/\_\_; [A FIELD-CONSTRUCTED ABOVEGROUND OIL STORAGE TANK MAY NOT BE OF RIVETED OR BOLTED CONSTRUCTION;]

18 AAC 75.065(j)(3)(B) is amended to read:

(B) for a system installed before {effective date of regulations}, installed under the supervision of a corrosion expert in accordance with NACE International's <u>Standard Recommended Practice: External Cathodic Protection of On-Grade Carbon</u> <u>Steel Storage Tank Bottoms (NACE RP 0193-2001), adopted by reference</u>; and 18 AAC 75.065(j)(3)(C) is amended to read:

(C) for a system installed on or after {*effective date of regulations*}, installed, operated, and maintained in accordance with <u>NACE International's Standard</u> *Practice: Application of Cathodic Protection to Control External Corrosion of Carbon Steel On-Grade Storage Tank Bottoms* (NACE SP0193-2016) [NACE INTERNATIONAL'S *STANDARD RECOMMENDED PRACTICE: EXTERNAL CATHODIC PROTECTION OF ON-GRADE CARBON STEEL STORAGE TANK BOTTOMS* (NACE RP 0193-2001);], adopted by reference <u>in (h) of this section</u>; a corrosion expert or qualified cathodic protection tester shall perform a cathodic protection survey specified under that standard; and

18 AAC 75.065(m) is amended to read:

(m) An owner or operator who installs a cathodic protection system on a fieldconstructed aboveground oil storage tank [AFTER DECEMBER 30, 2008 ON A FIELD-CONSTRUCTED ABOVEGROUND OIL STORAGE TANK SHALL MEET THE APPLICABLE REQUIREMENTS OF (J)(3) OF THIS SECTION.]

## (1) after December 30, 2008 and before {*effective date of regulations*} shall meet the applicable requirements of (j)(3) of this section;

18 AAC 75.065(m) is amended by adding a new paragraph to read:

(2) on or after {*effective date of regulations*}, shall meet the applicable requirements of (q)(2) of this section.

18 AAC 75.065 is amended by adding a new subsection to read:

(p) A field-constructed aboveground oil storage tank placed in service on or after May14, 1992 may not be of riveted or bolted construction.

18 AAC 75.065 is amended by adding a new subsection to read:

(q) An owner or operator of an installation placed in service on or after {*effective date of regulations*} shall meet the following requirements:

(1) each field-constructed aboveground oil storage tank must be constructed and installed in compliance with

(A) the American Petroleum Institute's (API) Welded Tanks for Oil
Storage, 12th Edition, March 2013, Addendum 1, September 2014, Addendum 2, January
2016, Errata 1, July 2013, and Errata 2, December 2014 (API 650), adopted by reference;

or

(B) the American Petroleum Institute's (API) Specifications for Field
 Welded Tanks for Storage of Production Liquids, 12th Edition, June 2017 (API Spec
 12D), adopted by reference; and

(2) each field-constructed aboveground oil storage tank must be equipped with a leak detection system that is designed and installed in accordance with Annex I of *Welded Tanks for Oil Storage* (API 650), adopted by reference in (1)(A) of this subsection; and

(3) one of the following systems must be installed to protect the bottom of each field-constructed aboveground oil storage tank from external corrosion:

(A) a cathodic protection system unless deemed not necessary by an evaluation conducted by a corrosion expert consistent with Chapter 5 of the American Petroleum Institute's (API) *Cathodic Protection of Aboveground Petroleum Storage Tanks, Fourth Edition*, September 2014 (API RP 651), adopted by reference. A cathodic protection system must be

(i) designed by a corrosion expert;

(ii) installed under the supervision of a corrosion expert; and

(iii) installed, operated, and maintained in accordance with NACE
International's *Standard Practice: Application of Cathodic Protection to Control External Corrosion of Carbon Steel On-Grade Storage Tank Bottoms* (NACE
SP0193-2016), adopted by reference in (h) of this section; a corrosion expert or
qualified cathodic protection tester shall perform a cathodic protection survey
specified under that standard; or

(B) a corrosion control system approved by the department as an alternate to the cathodic protection system described in (A) of this paragraph, unless deemed not necessary by an evaluation conducted by a corrosion expert consistent with Chapter 5 of the American Petroleum Institute's (API) *Cathodic Protection of Aboveground Petroleum Storage Tanks, Fourth Edition*, September 2014 (API RP 651), adopted by reference.

(Eff. 5/14/92, Register 122; am 5/26/2004, Register 170; am 12/30/2006, Register 180; am

3/23/2017, Register 221; am \_\_/\_/\_\_\_, Register \_\_\_)

Authority: AS 46.03.020 AS 46.04.030 AS 46.04.070

The Editor's note for 18 AAC 75.065 is amended to read:

Editor's note: The publications adopted by reference in 18 AAC 75.065 may be reviewed at the department's [OFFICES IN] Anchorage <u>office</u> [, FAIRBANKS, OR JUNEAU,] 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), 1220 L Street NW, Washington, DC 20005-4070; phone (202) 682-8000; fax (303) 397-2740; website: <u>https://www.api.org;</u> [HTTP://WWW.API-EC.API.ORG;] <u>NACE International Headquarters,</u> [NACE INTERNATIONAL,] <u>15835 Park Ten Place,</u> <u>Houston, Texas 77084, telephone: (281) 228-6200; fax: (281) 228-6300;</u>[1440 SOUTH CREEK DRIVE, HOUSTON, TEXAS 77084-4906; PHONE (800) 797-6223; FAX (281) 228-6300;] website: http://www.nace.org.

18 AAC 75.066(a)(2) is amended to read:

(2) after December 30, 2008 and on or before {effective date of regulations}shall meet the requirements of (b) - (h) of this section[.]; or

18 AAC 75.066(a)(3) is amended to read:

(3) [AFTER October 27, 2018 WITH A STORAGE CAPACITY GREATER THAN 50,000 GALLONS SHALL MEET THE REQUIREMENTS OF 18 AAC 75.065.] <u>after</u> {*effective date of regulations* } <u>shall meet the requirements of (c) - (j) of this section.</u> 18 AAC 75.066(b) and (b)(1) is amended to read:

(b) Unless the owner or operator must comply with a more stringent requirement set out in this section, the owner or operator shall <u>meet each of the following requirements:</u> [ENSURE THAT]

(1) [ONE OF THE FOLLOWING STANDARDS IS USED FOR THE DESIGN AND CONSTRUCTION OF] each shop-fabricated aboveground oil storage tank <u>must be</u> <u>constructed and installed in compliance with</u>:

18 AAC 75.066(f)(1) is amended to read:

(1) the Steel Tank Institute's (STI) *Standard for the Inspection of Aboveground Storage Tanks*, <u>6<sup>th</sup> Edition, January 2018</u> [3<sup>RD</sup> EDITION, JULY 2005], (STI SP001), adopted by reference;

18 AAC 75.066(f)(2) is amended to read:

(2) the American Petroleum Institute's (API) *Tank Inspection, Repair, Alteration, and Reconstruction*, <u>Fifth Edition, November 2014</u> [THIRD EDITION, DECEMBER 2001], and Addendum 1, April 2018 [SEPTEMBER 2003] (API 653), adopted by reference;

18 AAC 75.066 is amended by adding new subsections to read:

(i) A shop-fabricated aboveground oil storage tank that is not elevated must be equipped with

(1) a leak detection system designed and installed, in accordance with Appendix I

of the American Petroleum Institute's (API) *Welded Tanks for Oil Storage* (API 650), adopted by reference in (j) of this section; and

(2) one of the following systems must be installed to protect the bottom of each shop-fabricated aboveground oil storage tank from external corrosion:

(A) a cathodic protection system unless deemed not necessary by an evaluation conducted by a corrosion expert consistent with Chapter 5 of the American Petroleum Institute's (API) *Cathodic Protection of Aboveground Petroleum Storage Tanks, Fourth Edition*, September 2014 (API RP 651), adopted by reference. A cathodic protection system must be

(i) designed by a corrosion expert;

(ii) installed under the supervision of a corrosion expert; and

(iii) installed, operated, and maintained in accordance with NACE
International's *Standard Practice: Application of Cathodic Protection to Control External Corrosion of Carbon Steel On-Grade Storage Tank Bottoms* (NACE
SP0193-2016), adopted by reference in (h) of this section; a corrosion expert or
qualified cathodic protection tester shall perform a cathodic protection survey
specified under that standard; or

(B) a corrosion control system approved by the department as an alternate to the cathodic protection system described in (A) of this paragraph, unless deemed not necessary by an evaluation conducted by a corrosion expert consistent with Chapter 5 of the American Petroleum Institute's (API) *Cathodic Protection of Aboveground Petroleum Storage Tanks, Fourth Edition*, September 2014 (API RP 651), adopted by reference. (j) Unless the owner or operator must comply with a more stringent requirement set out in this section, each shop-fabricated aboveground oil storage tank must be constructed and installed in compliance with one of the following standards:

(1) Underwriters Laboratories (UL) *Steel Aboveground Tanks for Flammable and Combustible Liquids*, Tenth Edition, dated May 17, 2019 (UL 142), adopted by reference;

(2) the American Petroleum Institute's (API) *Welded Tanks for Oil Storage*,
Twelfth Edition, March 2013, Addendum 1, September 2014, Addendum 2, January 2016, Errata
1, July 2013, and Errata 2, December 2014, (API 650) adopted by reference; or

(3) the American Petroleum Institute's (API) *Specification for Shop Welded Tanks for Storage of Production Liquids*, Twelfth Edition, December 2008 (API Spec 12F), adopted by reference.

(k) <u>Shop-fabricated aboveground oil storage tanks with a storage capacity of less</u> <u>than 75,000 gallons must meet the requirements under 18 AAC 75.066.</u> <u>Shop-fabricated</u> <u>aboveground oil storage tanks with a storage capacity of 75,000 gallons or greater must</u> <u>meet the requirements under 18 AAC 75.065.</u>

(Eff. 12/30/2006, Register 180; am 10/27/2018, Register 228; am \_/\_/\_\_\_, Register \_\_\_) Authority: AS 46.03.020 AS AS 46.04.030 AS AS 46.04.070

The Editor's note for 18 AAC 75.066 is amended to read:

Editor's note: The publications adopted by reference in 18 AAC 75.066 may be reviewed at the department's [OFFICES IN] Anchorage <u>office</u>, [FAIRBANKS, OR JUNEAU,] 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:

Underwriters Laboratories, Inc. (UL), Standards Department, 333 Pfingsten Road, Northbrook, Illinois 60062; telephone (708) 272-8800; fax (708) 272-8129; website: http://www.ul.com; Steel Tank Institute (STI), 570 Oakwood Road, Lake Zurich, Illinois 60062; telephone (708) 438-8265, extension 4331; fax (708) 438-8766; website: http://www.steeltank.com/; American Petroleum Institute (API), 1220 L Street NW, Washington, DC 20005-4070; telephone (202) 682-8000; fax (303) 397-2740; website: https://www.api.org/ [HTTPS//GLOBAL.IHS.COM/?RID=API1]. <u>NACE International Headquarters, 15835 Park</u>

## <u>Ten Place, Houston, Texas 77084, telephone: (281) 228-6200; fax: (281) 228-6300; website:</u> <u>https://www.nace.org</u>

18 AAC 75.990(178)(A) is amended to read:

(A) for field-constructed aboveground oil storage tanks, after the date of return to service after reconstruction as defined by American Petroleum Institute's (API) *Tank Inspection, Repair, Alteration, and Reconstruction*, Fifth Edition, November 2014, and Addendum 1, April 2018, [3RD EDITION, DECEMBER 2001, AND ADDENDUM 1, SEPTEMBER 2003, ](API 653) adopted by reference, or after the date of return to service after being removed from service in accordance with 18 AAC 75.065(o);
(Eff. 5/14/92, Register 122; am 9/25/93, Register 127; am 4/4/97, Register 142; am 4/11/97, Register 142; am 1/22/99, Register 149; am 8/27/2000, Register 155; am 10/28/2000, Register 155; am 11/27/2002, Register 164; am 12/14/2002, Register 164; am 1/30/2003, Register 165; am 8/8/2003, Register 167; am 5/26/2004, Register 170; am 12/30/2006, Register 180; am 10/9/2008, Register 188; am 4/8/2012, Register 202; am 9/4/2014, Register 211; am 6/17/2015,

Register 214; am 4/16/2016, Register 218; am 11/6/2016, Register 220; 3/23/2017, Register 221; am 7/1/2017, Register 222; am 9/29/2018, Register 227; am \_/\_/\_\_\_, Register \_\_)

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

The Editor's note for 18 AAC 75.990 is amended to read:

Authority:

Editor's note: The publications adopted by reference in 18 AAC 75.990 may be reviewed at the department's [OFFICES IN] Anchorage <u>office</u> [, FAIRBANKS, OR JUNEAU,] or may be obtained directly from the American Petroleum Institute (API), 1220 L Street NW, Washington, DC 20005-4070; telephone (202) 682-8000; fax (303) 397-2740; website: https://www.api.org/[http://www.api.org/Publications/].