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**OFFICE OF THE LIEUTENANT GOVERNOR
ALASKA**

M E M O R A N D U M

TO: Gary Mendivil
Department of Environmental Conservation

FROM: April Simpson *AS*
Office of the Lieutenant Governor
465.4081

DATE: October 19, 2021

RE: Filed Permanent Regulations: Department of Environmental Conservation

Department of Environmental Conservation regulations re: adoption by reference of current versions of industry standards for field-constructed and shop-fabricated aboveground oil storage tanks (18 AAC 75.065; 18 AAC 75.066; 18 AAC 75.990(178)(A))

Attorney General File:	2019200275
Regulation Filed:	10/19/2021
Effective Date:	11/18/2021
Print:	240, January 2022

cc with enclosures: Joseph Felkl, Department of Law
Judy Herndon, LexisNexis

ORDER ADOPTING CHANGES TO
REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The attached 15 pages of regulations, dealing with aboveground storage tank standards under 18 AAC 75 (Oil and Other Hazardous Substances Pollution Control), are adopted and certified to be a correct copy of the regulation changes that the Department of Environmental Conservation adopts under the authority of AS 46.03 and AS 46.04 after compliance with the Administrative Procedure Act (AS 44.62), specifically including notice under AS 44.62.190 and 44.62.200 and opportunity for public comment under AS 44.62.210.

This action is not expected to require an increased appropriation.

In considering public comments, the Department of Environmental Conservation paid special attention to the cost to private persons of the regulatory action being taken. In addition, the Department of Environmental Conservation also gave special attention to alternate practical methods in this regulatory action, as required by AS 46.03.024.

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

DATE: October 7, 2021

Jason W.
Brune

Digitally signed by Jason
W. Brune
Date: 2021.10.07 14:36:47
-08'00'

Jason W. Brune, Commissioner
Department of Environmental Conservation

April Gimpson for

FILING CERTIFICATION

I, Kevin Meyer, Lieutenant Governor for the State of Alaska, certify that on October 19, 2021, at 1:31 p.m., I filed the attached regulations according to the provisions of AS 44.62.040 – 44.62.120.

April Gimpson
for Kevin Meyer, Lieutenant Governor

Effective: November 18, 2021.

Register: 240, January 2021.

FOR DELEGATION OF THE LIEUTENANT GOVERNOR'S AUTHORITY

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

**Josh Applebee, Chief of Staff
Kady Levale, Notary Administrator
April Simpson, Regulations and Initiatives Specialist**

IN TESTIMONY WHEREOF, I have signed and affixed the Seal of the State of Alaska, in Juneau, on December 11th, 2018.



A handwritten signature in blue ink, appearing to read "K. Meyer", followed by a dotted line.

**KEVIN MEYER
LIEUTENANT GOVERNOR**

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

(1) *Tank Inspection, Repair, Alteration, and Reconstruction*, **Fifth Edition, November 2014, Addendum 1, April 2018, and Addendum 2, May 2020** [THIRD EDITION, DECEMBER 2001, AND ADDENDUM 1, SEPTEMBER 2003] (API 653), adopted by reference; or

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

(2) **Installation, Operation, Maintenance, Inspection, and Repair of Tanks in Production Service, Sixth Edition, March 2020** [RECOMMENDED PRACTICE FOR SETTING, MAINTENANCE, INSPECTION, OPERATION, AND REPAIR OF TANKS IN PRODUCTION SERVICE, FIFTH EDITION, AUGUST 1997] (API RP **12R1** [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 Table 6.1 of *Tank Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a) of this section;

18 AAC 75.065(b)(3) is repealed and readopted to read:

(3) may be based upon risk-based inspection, as specified in Section 6.4.2.2.2 of *Tank Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a)

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of this section; the assessment must be signed by a registered engineer, and the inspection schedule interval may not exceed 30 years.

18 AAC 75.065(d) is amended to read:

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

(1) **inspections** [REQUIRED BY THIS SECTION 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) **routine in-service** inspections required **by** [AS SPECIFIED IN] Section 6.3.1 of *Tank Inspection, Repair, Alteration, and Reconstruction* (API 653), adopted by reference in (a) of this section, **and tests and inspections required by (f) of this section,** [SHALL BE MAINTAINED BY THE OWNER OR OPERATOR] for five years; and

(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 (g)(1) of this section, to support an initial internal inspection interval established under (b)(2) of this section for the service life of the tank** [SHALL BE PROVIDED TO THE DEPARTMENT FOR INSPECTION AND COPYING UPON REQUEST].

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 3.22 [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** [FIELD CONSTRUCTED] aboveground oil storage tank resumes service following major repair or major alteration, as defined in Section 3.22 [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 the American Petroleum Institute's (API)

(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]

(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 ^{May 17, 2022} ~~{180 days after the effective date of regulations}~~; or

(3) *Linings of Aboveground Petroleum Storage Tank Bottoms*, Fifth Edition, May 2020 (API RP 652), adopted by reference, for an internal lining system installed on or after ^{May 17, 2022} ~~{180 days after the effective date of regulations}~~.

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

(2) operate and maintain, after December 30, 2007 and before ^{November 18, 2021} ~~{effective date of~~
~~regulations}~~, the cathodic protection system on each field-constructed aboveground oil storage tank consistent with Section 11 of *Standard Recommended Practice: External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms* (NACE RP0193-2001), 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; **and** [.]

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

(3) on or after ^{November 18, 2021} ~~{effective date of regulations}~~, operate and maintain the cathodic protection system of each field-constructed aboveground oil storage tank consistent with Section 11 of 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; a corrosion expert or qualified cathodic protection tester shall perform a cathodic protection survey specified under that standard.

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

(2) repealed 11 / 18 / 2021;

18 AAC 75.065(i)(3) is repealed and readopted to read:

(3) a cathodic protection or another approved corrosion control system must be installed, as follows, to protect the bottom of each field-constructed aboveground oil storage tank

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from external corrosion where local soil conditions warrant:

(A) on or after December 30, 2007 and before ~~{effective date of the regulations}~~ November 18, 2021, operation and maintenance of the cathodic protection system must be consistent with Section 11 of *External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms* (NACE RP0193-2001), 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; and

(B) on or after ~~{effective date of the regulations}~~ November 18, 2021, operation and maintenance of the cathodic protection system must be consistent with Section 11 of *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.

The introductory language of 18 AAC 75.065(j) is amended to read:

(j) An owner or operator of an installation placed in service after December 30, 2008 November 18, 2021 ~~and before {effective date of regulations}~~ shall meet each of the following requirements, except as provided in (3)(D) of this subsection:

• • •

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

(2) repealed 11 / 18 / 2021;

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

(B) installed under the supervision of a corrosion expert **in accordance with NACE International's *Standard Recommended Practice: External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms* (NACE RP0193-2001), adopted by reference;** [AND]

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

(C) installed [,OPERATED, AND MAINTAINED] in accordance with [NACE INTERNATIONAL'S] *Standard Recommended Practice: External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms* [2001 EDITION] (NACE RP0193-2001), adopted by reference **in (B) of this paragraph** [; A CORROSION EXPERT OR QUALIFIED CATHODIC PROTECTION TESTER SHALL PERFORM A CATHODIC PROTECTION SURVEY SPECIFIED UNDER THAT STANDARD]; and

18 AAC 75.065(j)(3) is amended by adding a new subparagraph to read:

(D) operated and maintained on or after {^{November 18, 2021}~~effective date of regulations~~} in accordance with *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; and

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

(5) the requirements of (3) of this subsection do not apply to elevated tanks.

18 AAC 75.065(m) is amended to read:

(m) An owner or operator who installs a cathodic protection system

(1) after December 30, 2008 and before {~~180 days after effective date of the~~ ^{May 17, 2022} regulations} on a field-constructed aboveground oil storage tank shall meet the applicable requirements of (j)(3) of this section; and

(2) on or after {~~180 days after effective date of the regulations~~ ^{May 17, 2022} on a field-constructed aboveground oil storage tank shall meet the applicable requirements of (q)(3)(A) of this section.

18 AAC 75.065 is amended by adding new subsections to read:

(p) A field-constructed aboveground oil storage tank placed in service on or after May 14, 1992 may not be of riveted or bolted construction.

(q) An owner or operator of an installation placed in service on or after ^{May 17, 2022} ~~{180 days after the 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*, 13th Edition, March 2020, Errata 1, January 2021 (API 650), adopted by reference;

(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; or

(C) another equivalent standard approved by the department;

(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 determined 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; with the exception that these requirements do not apply to elevated tanks, a cathodic protection system must be

(i) designed by a corrosion expert;

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

(iii) installed, operated, and maintained in accordance with

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

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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 determined 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 11 / 18 / 2021, Register 240)

Authority: AS 46.03.020 AS 46.04.030 AS 46.04.070

Editor's note: The publications adopted by reference in 18 AAC 75.065 may be reviewed at the department's [OFFICES IN] Anchorage **office**, [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; telephone (202) 682-8000; fax (303) 397-2740; website: <https://www.api.org>; NACE International

Headquarters, 15835 Park Ten Place [1440 SOUTH CREEK DRIVE], Houston, Texas **77084** [77084-4906]; telephone: **(281) 228-6200** [(800) 797-6223]; fax (281) 228-6300; website: <https://www.nace.org>.

As of Register 209 (April 2014), and acting under AS 44.62.125(b)(6), the regulations attorney made technical revisions to 18 AAC 75.065(d) and (i).

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

(2) after December 30, 2008 and before ~~{180 days after the effective date of~~ regulations} ^{May 17, 2022} shall meet the requirements of (b) - (h) of this section; or [.]

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

(3) on or after ^{May 17, 2022} ~~{180 days after the effective date of regulations}~~ shall meet the requirements of (c) - (j) of this section [OCTOBER 27, 2018 WITH A STORAGE CAPACITY GREATER THAN 50,000 GALLONS SHALL MEET THE REQUIREMENTS OF 18 AAC 75.065].

The introductory language of 18 AAC 75.066(b) 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 meet each of the following requirements: [ENSURE THAT]

...

The introductory language of 18 AAC 75.066(b)(1) is amended to read:

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

...

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*, **Sixth Edition, January 2018** [THIRD EDITION, JULY 2005] (STI **SP001** [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*, **Fifth Edition, November 2014** [THIRD EDITION, DECEMBER 2001], [AND] Addendum 1, **April 2018, and Addendum 2, May 2020** [SEPTEMBER 2003] (API 653), adopted by reference; **or**

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 Annex 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, installed to protect the bottom of each shop-fabricated aboveground oil storage tank from external corrosion:

(A) a cathodic protection system, unless determined 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

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 18 AAC 75.065(h); 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 determined not necessary by an evaluation conducted by a corrosion expert consistent with Chapter 5 of *Cathodic Protection of Aboveground Petroleum Storage Tanks* (API RP 651), adopted by reference in (A) of this paragraph.

(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*, 10th Edition, dated May 17, 2019 (UL 142), adopted by reference;

(2) *Welded Tanks for Oil Storage*, (API 650) adopted by reference in 18 AAC 75.065(q);

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(3) the American Petroleum Institute's (API) *Specification for Shop-welded Tanks for Storage of Production Liquids*, 13th Edition, January 2019 (API Spec. 12F), adopted by reference; or

(4) another equivalent standard approved by the department.

(k) Shop-fabricated aboveground oil storage tanks with a storage capacity of less than 75,000 gallons must meet the requirements under this section. Shop-fabricated aboveground oil storage tanks placed in service on or after November 18, 2021 ~~{effective date of regulations}~~ with a storage capacity of 75,000 gallons or greater must meet the requirements under 18 AAC 75.065. (Eff. 12/30/2006, Register 180; am 10/27/2018, Register 228; am 11 / 18 / 2021, Register 240)

Authority: AS 46.03.020 AS 46.04.030 AS 46.04.070

Editor's note: The publications adopted by reference in 18 AAC 75.066 may be reviewed at the department's [OFFICES IN] Anchorage **office** [, 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>; NACE International Headquarters, 15835 Park Ten Place, Houston, Texas 77084, telephone: (281) 228-6200; fax: (281) 228-6300;

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website: <https://www.nace.org> [HTTP://GLOBAL.IHS.COM/?RID=API1].

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 the American Petroleum Institute's (API) *Tank Inspection, Repair, Alteration, and Reconstruction*, **Fifth Edition, November 2014** [THIRD EDITION, DECEMBER 2001], [AND] Addendum 1, **April 2018, and Addendum 2, May 2020** [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); or

(Eff. 5/14/92, Register 122; am 9/25/93, Register 127; am 4/4/97, Register 142; am 4/11/97, Register 142; am 1/22/99, Register 149; am 8/27/2000, Register 155; am 10/28/2000, Register 156; am 11/27/2002, Register 164; am 12/14/2002, Register 164; am 1/30/2003, Register 165; am 8/8/2003, Register 167; am 5/26/2004, Register 170; am 12/30/2006, Register 180; am 10/9/2008, Register 188; am 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; am 3/23/2017, Register 221; am 7/1/2017, Register 222; am 9/29/2018, Register 227; am 11/7/2020, Register 236; am 11/18/2021, Register 240)

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

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AS 46.03.745

AS 46.04.035

AS 46.09.020

Editor's note: The publications adopted by reference in 18 AAC 75.990 may be reviewed at the department's [OFFICES IN] Anchorage office [, 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/].