



Jeanie Shifflett
Sr. Environmental Coordinator
ConocoPhillips Alaska, Inc.
HSE - Environment & Permitting
Planning & Response
P.O. Box 100360
Anchorage, AK 99510-0360
Phone: (907) 265-6488
Email: Jeanie.M.Shifflett@conocophillips.com

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submitted by electronic mail at
dec.cpr@alaska.gov

Mr. Seth Robinson
Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, AK 99709

Subject: Comments on Proposed Regulation Changes at 18 AAC 75.065 and 18 AAC 75.066

Dear Mr. Robinson,

ConocoPhillips Alaska, Inc. (CPAI) appreciates the opportunity to comment in response to the Alaska Department of Environmental Conservation's (ADEC) proposed changes to regulations for regulated aboveground oil storage tanks. CPAI recognizes the continued effort by ADEC to update, clarify, and improve sections of the regulations while maintaining robust pollution prevention requirements. CPAI has long-standing practical experience with operation of aboveground oil storage tanks in compliance with the subject regulations and is uniquely qualified to provide constructive comment on the proposed changes. The following issues are addressed in detail within this letter:

- State regulations should not duplicate federal requirements.
- State regulations should not adopt industry standards that are already outdated.
- State regulations should expressly allow for alternative tank design and construction/installation standards on a case-by-case basis.
- Addition of new requirements for cathodic protection for "shop-fabricated" tanks and regulatory categorization of tanks solely based on capacity creates unnecessary confusion.

I. GENERAL COMMENTS

1. State regulations should adopt only the most recent version of industry standards and should not adopt standards that are already covered by federal requirements:

It is important that regulations are clear and understandable. During the last significant change to the subject regulations in 2006, ADEC continued the practice of adopting by reference specific industry standards for regulated aboveground oil storage tank design and construction/installation. The regulations were expanded to add requirements to follow specific, current-at-the-time editions or versions of industry standards based on the date a tank was placed in service (e.g., 18 AAC 75.065(j)). With the new proposed changes discussed herein, ADEC is again expanding the

regulations to require use of specific industry standards based on the date a tank is placed in service. CPAI understands the rationale for expanding the regulations to accommodate more current standards, but this practice is problematic for several reasons:

- Some proposed editions or versions of industry standards for tank design and construction/installation are already outdated and have already been superseded by the current editions or versions (e.g., API 653, API 12R1, API 650, API 12F, API RP 652). If ADEC is to continue to prescribe industry standards, they should adopt the most current edition or version on “the effective date of regulation.” The department regulations should not adopt by reference, outdated industry standards. Operators should not be put in a position where industry standards and good engineering practices are not aligned with the governing regulations.
- The department has not updated these regulations for 15 years. Failure to update the regulations to adopt new editions or versions of industry standards conflicts with federal environmental requirements (e.g., 40 CFR § 112) requiring use of good engineering practice to engineer and/or update new and old installations to prevent oil discharges, and federal safety requirements (e.g., 29 CFR § 1910.119) requiring application of “recognized and generally accepted good engineering practices” (RAGAGEP)¹. Inconsistency among requirements for use of good engineering practices creates potential for confusion and compliance uncertainty if operators are mandated by state regulations to follow specific but outdated editions or versions of those industry standards.
- The department should refrain from adopting regulations that duplicate or overlap with federal requirements. Federal environmental protection and occupational health and safety laws (e.g., 40 CFR §112 and 29 CFR § 1910.119) require use of good engineering practices, which is understood to include widely adopted consensus standards, including the standards that the proposed state regulations would adopt by reference. Operators and facilities that are subject to the pollution prevention requirements of state regulations are also subject to federal pollution prevention requirements; thus, prescribing specific industry standards within the regulations does not provide additional environmental protections. There are little to no additional environmental or health and safety protections afforded by the state prescribing industry standards because their use is already required under federal law. A proposed regulation that serves no clear purpose should not be adopted.

2. State regulations should expressly allow for alternative tank design and construction/installation standards for newly installed tanks on a case-by-case basis:

The proposed changes do not include a provision to allow for use of alternative tank design and construction/installation standards for tanks placed in service after the “effective date of regulations,” which previously was authorized under the existing requirements (e.g., 18 AAC 75.065(i)(1)(B), .065(j)(1)(C), .066(b)(2)).

¹ See “Memorandum for Regional Administrators: RAGAGEP in Process Safety Management Enforcement” <https://www.osha.gov/laws-regs/standardinterpretations/2016-05-11>

- CPAI has exercised the right to use alternative standards on several occasions and considers that authority critical to environmental compliance assurance for our operations. As allowed by current regulation, alternative tank design and construction/installation approvals were received for a variety of portable tanks used for drilling and well work and, in one case, for aviation fuel storage tanks built to existing industry standard API 620 *“Design and Construction of Large, Welded, Low-pressure Storage Tanks.”* CPAI’s operations and regulated facilities would be unnecessarily burdened by a restriction on type of tank we can build and operate. If ADEC continues to prescribe specific industry standards, which are updated more often than ADEC’s regulations, then for the sake of clear and understandable compliance with the regulations and so as not to place undue restrictions on regulated facilities and operations, ADEC must also continue to allow use of alternative tank design and construction/installation standards.
- CPAI requests ADEC include a provision to allow alternative tank design and construction/installation standards and that the regulation allows use of tanks engineered using RAGAGEP without the requirement for department approval. A requirement to request approval for alternative tank design and construction/installation standards that are based on good engineering practices is unnecessary because such standards should always be approved.

3. Proposed changes complicate compliance among 18 AAC 75.065 and 18 AAC 75.066:

The proposed changes to 18 AAC 75.066 that add cathodic protection requirements for “non-elevated” tanks and that designate tanks as “field-constructed” or “shop-fabricated” based on their capacity complicates the regulation for tanks that are actually shop-built tanks but that must be deemed “field-constructed” based on capacity. Confusion is caused by the fact that the requirements are nearly identical for the two different categories of tanks, which calls into question the need for the categories in the first place. CPAI believes categorizing tanks of a specific capacity as “field-constructed” when they were actually built in a shop is not reasonable and loses the intent of the regulations to differentiate non-elevated, stationary tanks versus elevated stationary or portable tanks.

- CPAI believes the intent of ADEC’s 2006 promulgation of two separate tank requirements in 18 AAC 75.065 and 18 AAC .066 was to provide some differentiation between stationary, vertical tanks installed on-grade (e.g., non-elevated), in contact with soil at the tank bottom, and stationary or portable, vertical or horizontal, aboveground oil storage tanks that are either elevated or otherwise not in contact with soil at the tank bottom. This was evident in some of the original regulation changes ADEC informally proposed in 2005, where provisions for “portable tanks” were introduced to 18 AAC 75.065. The changes now being proposed undo some of that distinction, which results in general misunderstanding as to the purpose of two separate sections to regulate tanks.
- CPAI does not follow the rationale of ADEC’s desire to categorize “field-constructed” or “shop-fabricated” based on capacity. Except for extremely large capacity oil production divert tanks, most tanks operated by CPAI are “shop-fabricated,” regardless of capacity. This reflects the nature of tank installation in Alaska, which is affected by remote location and extreme weather conditions. Manufacture and construction of aboveground oil

storage tanks in the “shop” is typically preferred (whenever possible) over construction in the “field”, to ensure proper integrity of the build. Tanks CPAI considers “shop-fabricated” are constructed off-site and are typically either installed in an elevated, stationary capacity or are portable and equipped with skids or other structures that elevate the tank above the soil interface. In other words, the “shop-fabricated” tanks are typically not in contact with soil and therefore requirements for cathodic protection at the tank bottom to prevent external corrosion are not applicable.

- Addition of cathodic protection requirements for “non-elevated” shop fabricated tanks appears to defeat the purpose of having two separate tank regulation sections (e.g., 18 AAC 75.065 and .066). Regarding cathodic protection requirements, classification of tanks as “field-constructed” or “shop-fabricated” based on their designed/constructed capacity does not determine applicability of cathodic protection requirements; rather, it is the physical installation of the tank as “non-elevated” or “elevated” that does. The department should strongly consider eliminating the classifications of “field-constructed” and “shop-fabricated” and simplifying the regulations by making clarifications within 18 AAC 75.065 and 18 AAC 75.066 to apply to “non-elevated” or “elevated” aboveground oil storage tanks.

II. SECTION-SPECIFIC COMMENTS

CPAI offers the following comments on the proposed changes, organized by each specific section of the regulations.

1. 18 AAC 75.065(a)(1) - proposed change to update the referenced standard:

The edition and date of the referenced industry standard, API 653, is outdated. The department should use the most recent editions or versions of prescribed industry standards. The department should reference the current version of API 653, which is the Fifth Edition, November 2014, Addendum 1, April 2018 and Addendum 2, May 2020.

2. 18 AAC 75.065(a)(2) - proposed change to update the referenced standard:

The title, edition, and date of the referenced industry standard, API 12R1 is outdated and is no longer a “recommended practice”, but a “standard.” The department should use the most recent editions or versions of prescribed industry standards. The department should reference the current title and version of API 12R1, which is *Installation, Operation, Maintenance, Inspection, and Repair of Tanks in Production Service*, API 12R1, Sixth Edition, March 2020.

3. 18 AAC 75.065(b)(2) including subparts (A), (B), and (C) - proposed change to indicate when an initial internal inspection interval may be modified:

CPAI does not support this proposed change. Prior to the changes made in 2006, this section simply required tank owner/operators to “inspect oil storage tanks for structural integrity at least every ten years unless a shorter or longer inspection interval is prescribed by API Standard 653...” The original language gave owner/operators the freedom and technical authority to manage tanks in accordance with the practices of API 653. If owner/operators are required to maintain and inspect tanks “consistent with the requirements, as appropriate of”² API 653, then they should not be

² See 18 AAC 75.065(a).

required to seek separate department approval to establish inspection intervals determined under regular application of API 653. The proposed changes and addition of subparts (A), (B), and (C) generally reiterate procedures of API 653, which requires implementation by engineering experts knowledgeable in tank management. The department neither manages tanks nor authorizes tank engineering and inspection programs for tank owner/operators. Rather, ADEC should oversee tanks through performance-based compliance requirements or stipulations imposed as a consequence of compliance findings or violations. The requirement to submit requests to ADEC for extended initial internal inspection intervals that are established by the owner/operator using good engineering practices in the first place and therefore should always result in approval, is unduly burdensome and provides no additional environmental protection.

CPAI requests ADEC reject the proposed changes and recommends repealing existing 18 AAC 75.065(b)(2) and (3) in their entirety because the existing regulatory requirements do not align with current accepted tank management practices and tank owner/operators should have the freedom to inspect and maintain tanks in accordance with practices allowed under API 653 without requiring authorization from ADEC.

4. 18 AAC 75.065(b)(3) - Repealed; amended to merge information as proposed changes to 18 AAC 75.065(b)(2):

CPAI supports the proposed repeal of 18 AAC 75.065(b)(3). However, if ADEC does not also repeal 18 AAC 75.065(b)(2) as we recommend above, then 18 AAC 75.065(b)(3) should be revised to read as follows:

18 AAC 75.065(b)(3). After {effective date of regulations}, an assessment or risk-based inspection to support an initial internal inspection interval established under (b)(2) of this section must include 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.

5. 18 AAC 75.065(d)(1) - amended to clarify records retention:

The word "paragraphs" should be "paragraph."

6. 18 AAC 75.065(d)(3) - a new paragraph is proposed to specify information required to be submitted for extended internal inspection intervals:

The proposed language applies to requirements presented in 18 AAC 75.065(b)(2). If ADEC accepts our recommendation to repeal (b)(2), then this proposed new paragraph (d)(3) would be unnecessary and should not be adopted. However, If ADEC adopts the proposed changes in 18 AAC 75.065(b)(2) and repeals (b)(3), then, to avoid confusion and inefficiency moving back and forth within the regulations, new paragraph (d)(3) should be rejected and existing paragraph (b)(3) should be revised to adopt this new proposed language, as follows:

18 AAC 75.065(b)(3). After {effective date of regulations}, an assessment or risk-based inspection to support an initial internal inspection interval established under (b)(2) of this section must include 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.

7. 18 AAC 75.065(g)(3) – proposed change to add standards for newly installed or constructed tanks:

The edition and date of the referenced industry standard, API RP 652, is outdated. The department should use the most recent editions or versions of prescribed industry standards. The department should reference the current version of API RP 652, which is the Fifth Edition, May 2020.

8. 18 AAC 75.065(j)(3) – proposed change to add an industry standard for a corrosion expert to follow and to update the referenced standard and applicability:

Section (j) in this part of the regulations is applicable to tanks “placed in service after December 30, 2008 and before {effective date of regulations}, while requirements for tanks “placed in service on or after {effective date of regulations}” are addressed in proposed new section (q)(3). The proposed changes in (j)(3) are not necessary as this section should only discuss tanks placed in service after December 30, 2008 and before the effective date of the proposed regulations. Discussion of cathodic protection systems for tanks placed in service on or after the effective date of the proposed regulations is already included within proposed new section (q)(3). Retaining the current language in (j)(3) as-is and keeping similar requirements for new tanks in proposed new section (q)(3) would reduce confusion as to what “generation” of tank installation the requirement applies.

The requirements in this section for cathodic protection at the tank bottom to prevent external corrosion are applicable to on-grade installations in contact with soil or other corrosion-inducing materials. Neither the requirements nor the referenced industry standards apply to elevated tanks. The department should revise this section to specify applicability to “non-elevated” tank installations, to avoid compliance uncertainty.

CPAI recommends rejecting the proposed changes to 18 AAC 75.065(j)(3) and keeping similar requirements for new, non-elevated tank installations in new proposed 18 AAC 75.065(q)(3). Furthermore, ADEC should revise this section to specify applicability to “non-elevated” tank installations.

9. 18 AAC 75.065(m), (m)(1), and (m)(2) – proposed changes to amend the effective date of the standard and to add standards for newly installed or constructed tanks:

CPAI does not support this proposed change. This entire section (m) should be repealed. The requirements presented in this section are already appropriately addressed in (j)(3) and new proposed (q)(3). This section (m) is redundant and creates unnecessary, confusing “circular” references to other parts of the regulations.

10. 18 AAC 75.065(q)(1) – proposed changes to add a new paragraph to provide standards for tanks placed in service after the effective date of the regulations:

The edition and date of the referenced industry standard, API 650 is outdated. The department should use the most recent editions or versions of prescribed industry standards. The current version of API 650 is the 13th Edition, March 2020, Errata 1, January 2021.

This section of the regulations should also include a provision to allow tanks designed and constructed/installed to alternative standards, similar to requirements for older “generations” of tanks included in 18 AAC 75.065(i)(1)(B) and 065(j)(1)(C). CPAI believes ADEC should allow owners/operators to use RAGAGEP for design and construction/installation of tanks and not restrict the requirement to specific industry standards or mandate ADEC approve specific standards.

CPAI recommends adding a paragraph (e.g., 18 AAC 75.065(q)(1)(C)) to allow design and construction/installation of tanks using good engineering practices consistent with any other nationally recognized industry standard and/or best practice that provides appropriate protection to prevent spills to the environment.

11. 18 AAC 75.065(q)(3) – proposed changes to add a new paragraph to provide standards for tanks placed in service after the effective date of the regulations:

The requirements in this section for cathodic protection at the tank bottom to prevent external corrosion is applicable to on-grade installations in contact with soil or other corrosion-inducing materials. Neither the requirements nor the referenced industry standards apply to elevated tanks. The department should revise this section to specify applicability to “non-elevated” tank installations, to avoid compliance uncertainty.

CPAI recommends ADEC revise this section to specify applicability to “non-elevated” tank installations.

12. 18 AAC 75.066(a)(1), (2), and (3) – proposed changes to amend the effective date:

These sections of the regulations do not specify which tanks must meet provisions of the proposed new section (k). CPAI cautions against applying requirements of proposed new section (k) retroactively to tanks already in operation. If ADEC intends to adopt the proposed new section (k), only proposed new section (3) should reference a requirement to meet provisions of proposed new section (k).

Public comment on ADEC’s “housekeeping” changes to the regulations in 2018 resulted in ADEC applying regulatory compliance (i.e., per 18 AAC 75.065 or per 18 AAC 75.066) according to classification based on tank capacity to tanks placed in service “after the effective date” of those regulations, which was October 27, 2018. Consistent with that approach, ADEC should not retroactively apply new requirements for tanks previously placed in service under a different set of requirements. If ADEC must specify regulatory compliance based on tank capacity, section (3) should continue to address this “classification” and include proposed new paragraph 18 AAC 75.066(k), since ADEC is changing the “classification” capacity limits from 50,000 gallons to 75,000 gallons.

CPAI recommends wording new proposed section (3) as follows:

18 AAC 75.066(a)(3). After *effective date of regulations* shall meet the requirements of (c) - (k) of this section.

13. 18 AAC 75.066(f)(2) – proposed change to update the referenced standard:

The edition and date of the referenced industry standard, API 653, is outdated. The department should use the most recent editions or versions of prescribed industry standards. The department should reference the current version of API 653, which is the Fifth Edition, November 2014, Addendum 1, April 2018 and Addendum 2, May 2020.

14. 18 AAC 75.066(i) – proposed change to clarify requirements for elevated *[sic]* tanks:

The department’s brief description of the proposed changes identified this new proposed section as clarifying requirement for “elevated” tanks; however, the section describes requirements for “non-

elevated” tanks. CPAI believes “non-elevated” tanks are those that are installed on-grade, in contact with soil or other corrosion-inducing materials.

Introduction of this proposed new section, although potentially applicable to some “shop-fabricated” aboveground storage tanks that are installed on-grade, in contact with soil, over complicates the regulation and defeats the original purpose of the 2006 regulation changes in which CPAI believes ADEC intended to differentiate between stationary, vertical, on-grade aboveground oil storage tanks and elevated or portable, above-grade aboveground oil storage tanks. The requirements of this new proposed section strays from that original intent, by imposing requirements for “non-elevated” tanks, that mirror requirements in 18 AAC 75.065. The department should strongly consider eliminating the classifications of “field-constructed” and “shop-fabricated” and simplify the regulations by making clarifications within 18 AAC 75.065 and 18 AAC 75.066 to apply to “non-elevated” or “elevated” installations.

In subparagraph (iii) under proposed new paragraph 18 AAC 75.066(i)(2)(A), ADEC incorrectly refers to “(h) of this section.” It appears this language was copied from similar requirements in 18 AAC 75.065 to reference the NACE SP0193-2016 standard. CPAI recommends ADEC reject the proposed phrase “(h) of this section” as it does not make sense within regulation section 18 AAC 75.066.

15. 18 AAC 75.066(j) – proposed changes to add standards for newly installed or constructed tanks:

The edition and date of the referenced industry standard, API 650 is outdated. The department should use the most recent editions or versions of prescribed industry standards. The current version of API 650 is the 13th Edition, March 2020, Errata 1, January 2021

The edition and date of the referenced industry standard, API 12F is outdated. The department should use the most recent editions or versions of prescribed industry standards. The current version of API 12F is the 13th Edition, January 2019.

With this new proposed section, ADEC prescribes only three tank design and construction/installation industry standards. Other similar requirements for older “generations” of “shop-fabricated” tanks (e.g., 18 AAC 75.066(b)(1)) provided five prescribed industry standards, plus authority for an alternative design and construction/installation standard approved by ADEC. CPAI believes ADEC should allow owners/operators to use RAGAGEP for design and construction/installation of tanks and not restrict the requirement to specific industry standards or mandate ADEC approve specific standards.

CPAI recommends adding a paragraph (e.g., 18 AAC 75.066(j)(4)) to allow design and construction/installation of tanks using good engineering practices consistent with any other nationally recognized industry standard and/or best practice that provides appropriate protection to prevent spills to the environment.

16. 18 AAC 75.066(k) – proposed changes to clarify requirements for tanks based on their storage capacity:

CPAI opposes this proposed change. The change would require shop-fabricated tanks of a specified capacity to be regulated as field-constructed tanks. CPAI does not see merit in regulating tanks based on their storage capacity when the requirements for managing corrosion protection, leak detection, and spill prevention are geared toward the type of design and construction/installation.

CPAI operates aboveground oil storage tanks with capacity 75,000 gallons or greater that are “shop-fabricated,” which leaves this proposed new requirement confusing and unreasonable. CPAI recommends ADEC seek to better clarify the applicability of requirements of 18 AAC 75.065 and 18 AAC 75.066 by focusing on type of installation as “non-elevated” or “elevated,” instead of tank capacity. The department should move away from categorizing tanks as “field-constructed” or “shop-fabricated” and simply refer to “non-elevated” or “elevated.” In that case, requirements for cathodic protection on the tank bottom would make sense as applicable to “non-elevated” tanks, whether they are “field-constructed” or “shop-fabricated.”

CPAI recommends ADEC not adopt this proposed new paragraph. CPAI further recommends that ADEC repeal language referring to “field-constructed” and “shop-fabricated” and instead introduce proposed changes to make 18 AAC 75.065 applicable to “non-elevated” aboveground oil storage tanks and 18 AAC 75.066 applicable to “elevated” aboveground oil storage tanks. CPAI recommends repealing the definitions of “field-constructed” and “shop-fabricated” aboveground oil storage tanks in parts 18 AAC 75.990(172) and (181), respectively, as well as references to “field-constructed” in 18 AAC 75.990(178)(A) and “shop-fabricated” in 18 AAC 75.075(h) and 18 AAC 75.990(170), (180), and (182).

17. 18 AAC 75.990(178)(A) - proposed change to update the referenced standard:

The edition and date of the referenced industry standard, API 653, is outdated. The department should use the most recent editions or versions of prescribed industry standards. The department should reference the current version of API 653, which is the Fifth Edition, November 2014, Addendum 1, April 2018 and Addendum 2, May 2020.

CPAI appreciates ADEC’s consideration of these comments on proposed changes to regulations governing pollution prevention requirements for regulated aboveground oil storage tanks. If you have any questions or require additional information, please contact me at (907) 265-6488.

Sincerely,



Jeanie Shifflett
Sr. Environmental Coordinator