

NOTICE OF FINAL RULEMAKING
TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 12. DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND STORAGE TANKS

PREAMBLE

| 1. <u>Article, Part or Section Affected (as applicable)</u> | <u>Rulemaking Action</u> |
|--|---------------------------------|
| R18-12-101 | Amend |
| R18-12-102 | Amend |
| R18-12-103 | New Section |
| R18-12-210 | Amend |
| R18-12-211 | Amend |
| R18-12-219 | New Section |
| R18-12-220 | Amend |
| R18-12-221 | Amend |
| R18-12-222 | Amend |
| R18-12-230 | Amend |
| R18-12-231 | Amend |
| R18-12-232 | Amend |
| R18-12-233 | Amend |
| R18-12-234 | Amend |
| R18-12-235 | New Section |
| R18-12-236 | New Section |
| R18-12-237 | New Section |
| R18-12-240 | Amend |
| R18-12-241 | Amend |
| R18-12-242 | Amend |
| R18-12-243 | Amend |
| R18-12-244 | Amend |
| R18-12-245 | Amend |

| | |
|---------------|-------------|
| R18-12-250 | Amend |
| R18-12-251 | Amend |
| R18-12-252 | New Section |
| R18-12-260 | Amend |
| R18-12-261 | Amend |
| R18-12-261.01 | Amend |
| R18-12-261.02 | Amend |
| R18-12-262 | Amend |
| R18-12-263 | Amend |
| R18-12-263.02 | Amend |
| R18-12-263.03 | Amend |
| R18-12-263.04 | Amend |
| R18-12-264 | Amend |
| R18-12-264.01 | Amend |
| R18-12-270 | Amend |
| R18-12-271 | Amend |
| R18-12-272 | Amend |
| R18-12-274 | Amend |
| R18-12-280 | Amend |
| R18-12-281 | Amend |
| R18-12-300 | Amend |
| R18-12-301 | Amend |
| R18-12-305 | Amend |
| R18-12-306 | Amend |
| R18-12-307 | Amend |
| R18-12-308 | Amend |
| R18-12-309 | Amend |
| R18-12-310 | Amend |
| R18-12-311 | Repealed |
| R18-12-312 | Amend |

| | |
|------------|-------------|
| R18-12-313 | Amend |
| R18-12-314 | Amend |
| R18-12-315 | Amend |
| R18-12-316 | Amend |
| R18-12-317 | Amend |
| R18-12-318 | Amend |
| R18-12-319 | Amend |
| R18-12-320 | Amend |
| R18-12-322 | Amend |
| R18-12-324 | Amend |
| R18-12-325 | Amend |
| R18-12-404 | Amend |
| R18-12-405 | Amend |
| R18-12-408 | Amend |
| R18-12-409 | Amend |
| R18-12-410 | Amend |
| R18-12-501 | Amend |
| R18-12-801 | Amend |
| R18-12-804 | Amend |
| R18-12-805 | Amend |
| R18-12-806 | Amend |
| R18-12-808 | Amend |
| R18-12-809 | Amend |
| Article 9 | Amend |
| R18-12-951 | New Section |
| R18-12-952 | New Section |

2. Citations to the agency’s statutory rulemaking authority to include the authorizing statutes (general) and the implementing statutes (specific):

Authorizing Statutes: A.R.S. §§ 41-1003, 49-104(A)(16) and (B)(4), 49-1003(C), 49-1004(D), 49-1005(E) and (F), 49-1006(B), 49-1008, 49-1009, 49-1014(A), 49-1020, 49-1021, 49-1031(H) and 49-1082(C)

Implementing Statute: A.R.S. § 49-1014(A)

3. The effective date of the rule:

January 1, 2020

a. If the agency selected a date earlier than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the earlier date and state the reason or reasons the agency selected the earlier effective date as provided in A.R.S. § 41-1032(A)(1) through (5):

Not applicable

b. If the agency selected a date later than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the later date and state the reason or reasons the agency selected the later effective date as provided in A.R.S. § 41-1032(B):

January 1, 2020. Sixty days after the date filed with the Secretary of State would have been approximately December 2, 2019. The later date gives the regulated community a little more time to adapt to the new rules and allows ADEQ to put a clear and fixed date in the rule in a number of places.

4. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:

Notice of Rulemaking Docket Opening: 24 A.A.R. 3379, December 7, 2018

Notice of Proposed Rulemaking: 25 A.A.R. 1485, June 21, 2019

5. The agency's contact person who can answer questions about the rulemaking:

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6. The agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

Summary. The Arizona Department of Environmental Quality (ADEQ) has amended the state's underground storage tank (UST) rules. The amendments incorporate new federal regulations and implement a UST plan review process for inspection and approval of newly installed, modified, and permanently closed tanks previously conducted by the State Fire Marshal. This final rule adopts changes to federal regulations that were in effect as of October 13, 2015. Technical corrections were also made to existing Articles 3, 4, 5, and 8.

Background. Congress passed the Resource Conservation and Recovery Act (RCRA) in 1984 and required EPA to develop regulations for USTs. In 1988, EPA promulgated the UST regulation (40 CFR part 280), which, among other things, set minimum standards for new UST systems and required owners and operators of existing UST systems to upgrade, replace, or close them. As states were to be the primary implementers of the UST program, the EPA also promulgated a regulation for state program approval. (40 CFR part 281) In the late 80's and 90's, the Arizona legislature enacted various statutes implementing a UST program for Arizona, while ADEQ promulgated rules. Arizona statutes were also updated in 2008 to conform to the Energy Policy Act of 2005. ADEQ's last UST rulemaking was in 2007. The EPA's final 2015 regulation, at 80 FR 41566 and proposed in 2011, was the first revision to federal UST regulations since 1988. This rulemaking implements changes to be consistent with and equivalent to EPA's 2105 regulation, establishes a plan review process for installation, modification, and closure of tanks, and makes technical changes throughout most of the remaining UST Articles.

ADEQ's current rulemaking model emphasizes stakeholder input and dialogue before the formal proposed rule to reduce impacts and unintended consequences and to provide more

opportunities for stakeholder comment. ADEQ held three stakeholder meetings in 2018 before completing a draft rule. In February and April 2019, ADEQ held two more stakeholder meetings to discuss draft rule text. The meetings were well attended and extremely helpful in answering many early questions stakeholders had.

Does ADEQ intend to seek authorization to administer the UST regulations in AZ in lieu of EPA? ADEQ is currently authorized to administer its UST regulations in Arizona in lieu of EPA administering the federal program. This authority is not through State Program Approval (SPA), but rather through a Memorandum of Agreement (MOA) as provided for in 40 CFR 280. See the definition of “implementing agency” in 40 CFR 280.12. ADEQ seeks to continue this authorization through this rulemaking.

ADEQ also anticipates that this rulemaking will eliminate any obstacles to SPA that are related to its rules. Issues with Arizona’s UST statutes are still viewed as preventing SPA.

Description of Significant Changes from Existing Rules

R18-12-101. Definitions. Most of the new definitions or added language in the Definitions section are due to new EPA definitions. Many of the deletions are related to Article 6, State Assurance Fund, or Article 9, Regulated Substances Fund, being intentionally expired in 2017. The definition for “monitored natural attenuation” was deleted because the term is no longer used in the Chapter or UST statutes. The term’s usage in Corrective Action Plans that are still active would be governed by the definition in effect when the Plan was created.

R18-12-219; R18-12-221-Installation of New UST Systems; Upgrading of Existing UST Systems. These sections implement the plan review process. The rules now implement the basics of what ADEQ has been doing since it took over the State Fire Marshal’s UST activities in February of 2017. The plan approval process for new installations is focused around two steps. In step one, the plan review form is sent to ADEQ, usually 30 days before the planned installation or modification and ADEQ reviews it. After approval, construction takes place according to the applicant and contractor schedules. Availability of contractors or equipment often limits how quickly this can be done. The second step is the “final” inspection which verifies that the modification or new system meets requirements and was built according to the approved plan. This is scheduled with ADEQ at the convenience of the

owner, but instructions currently in place request that they be scheduled 30 days in advance of the desired begin date.

During workshops, stakeholders requested that the rule language reflect that certain modification notifications cannot be sent to ADEQ 30 days ahead of time. R18-12-221(D) removes that notice for emergency and minor repairs, as well as a repair made in response to a confirmed or suspected release when the tank will be removed from operation for the repair.

R18-12-220. Performance Standards for New UST Systems. The standards for new UST systems are contained in this Section and it follows 40 CFR 280.20. In Arizona, a non-SPA state, certain federal rule requirements, such as those related to flow restrictors (see R18-12-220(D)(4)) were effective as federal law on October 13, 2015. Since 2016, ADEQ has been addressing observed violations of this and other already effective federal regulations under its MOA with EPA by noting on the inspection report that “a condition was noted that may be a violation of federal law.” For purposes of enforcement under Arizona law, these requirements are effective on January 1, 2020. (See explanation of effective dates, below).

In R18-12-220(A) of this rule, ADEQ has resolved a conflict between an Arizona statute and the federal regulation by direct reference to the Arizona statute. The final rule acknowledges that the specific statutory requirement to replace the entire piping run when 25% of the piping run is being replaced [A.R.S. § 49-1009(C)] takes precedence over the more general requirement in A.R.S. § 49-1009 (F) to be consistent with and not more stringent than federal tank standards. The federal definition of “replacement” requires replacement of the entire piping run when 50% of piping is being replaced. There is a possibility that the Arizona statute will be changed to match the less stringent federal percentage in a future legislative session. If so, by direct reference to the percentage in the Arizona statute, the rule will remain consistent with Arizona statute.

In R18-12-220(G), ADEQ was presented with similar conflict between a specific Arizona statute and the federal regulation. In A.R.S. § 49-1009(D), the legislature in 2008 required under-dispenser containment (UDC) when a “dispenser” is installed or replaced. The federal regulation, in 40 CFR 280.20(f), requires UDC when the “dispenser system” is installed or replaced, and defines dispenser system separately as the dispenser and miscellaneous

connecting equipment. ADEQ found no evidence in the 2008 legislative history that the Arizona legislature meant the term “dispenser” in the 2008 law to mean “dispenser system”, as defined in EPA’s 2015 rule. Since 2009, ADEQ has been requiring UDC for dispenser only replacement. ADEQ encourages UDC as an essential system component for preventing releases to the environment. ADEQ requested information regarding the economic impact on owners and operators of requiring UDC when only a dispenser and not the dispenser system is replaced but did not receive any. As in R18-12-220(A), contingent language was inserted in subsections (G) and (H) so that this rule will remain consistent with Arizona statute if the statute is changed to be consistent with the EPA regulation.

R18-12-234. Reporting and Recordkeeping. Making records available to ADEQ during inspections drew lots of interest in the public meetings ADEQ held before this rule was proposed. ADEQ heard considerable discussion from those owners or operators who choose to store records offsite and want to be afforded a reasonable time to provide those records for inspection. Due to differences in logistics that depend on various factors such as the site’s location in the state, ADEQ clarified the previous rule’s “upon request” with the additional phrase “within one business day.” Additionally, in subsection (C), ADEQ recognizes the possibility that other arrangements may be made. ADEQ conducted a pilot program which gave owners and operators notice that an inspection would be occurring within the next month, and provided the opportunity for the records to be submitted in advance.

ADEQ also added a general statement at the end of R18-12-234, allowing owners and operators the flexibility to maintain either paper or electronic records to demonstrate compliance with the Chapter 12. This is consistent with EPA’s position. See 80 FR at 41568.

R18-12-235. Periodic Testing of Spill Prevention Equipment and Containment Sumps Used for Interstitial Monitoring of Piping and Periodic Inspection of Overfill Prevention Equipment (*new Section*)

This section matches EPA’s regulation at 40 CFR 280.35 except for the addition of a set of procedures ADEQ developed with stakeholders as allowed under 40 CFR 280.35(a)(1)(ii)(C). The procedures were developed over several meetings with contractors and consultants who were concerned that an EPA recommended practice was costly and inefficient. For existing UST systems, 40 CFR 280.35 requires an initial containment sump

test not later than October 13, 2018 and thereafter every three years. Different dates are inserted for purposes of the Arizona rule.

R18-12-236. Periodic Operation and Maintenance Walkthrough Inspections This is a new Arizona section covering annual and monthly walkthrough inspections. It follows EPA's new regulation at 40 CFR 280.36 nearly word for word. Arizona is not a SPA state, so the requirements in 280.36 were effective as federal law on October 15, 2018. ADEQ has been addressing potential violations of the federal regulation under its MOA as appropriate with a note on the inspection report that a condition was noted that may be a violation of federal law.

R18-12-237. Operator Training. This is a new Arizona section that is partially derived from EPA's new six-section subpart J at 40 CFR 280.240-280.245. Operator training was a main feature of the Energy Policy Act of 2005 and one purpose of EPA's 2015 rule was to reinforce this in its regulation. In 2008, Arizona added A.R.S. § 49-1083 to implement the federal statute and related EPA Grant guidance. ADEQ's new section is based on both A.R.S. § 49-1083 and EPA's new subpart J. The Department considers this section critical to its leak prevention efforts and for maintenance of an infrastructure adequate to meet the state's transportation needs.

At the request of stakeholders, the Arizona rule repeats the requirements in Arizona statute for Class A, B and C operator training as well as listing further descriptions contained in the federal regulation so that all the requirements are listed in one place.

The final rule lists acceptable sources of instruction in subsection (E). The workshops and online training provided through ADEQ are run by a contractor and are free to all owners and operators. As provided for in the EPA regulation, a training program or comparable examination from an independent organization or recognized authority is also included if acceptable to the Department.

However, A.R.S. § 49-1083(F) requires training to be Arizona specific. Although in general Arizona's UST rules cannot be more stringent than EPA's, it is allowed if an Arizona statute requires it. For example, EPA's operator training regulation does not have a retraining frequency requirement whereas this rule provides that retraining must occur at least every

three years. Three years is the maximum interval allowed, as provided in A.R.S. § 49-1083(E). There are other statutes, such as those involving insurance retroactive dates, stop use tags, and piping and dispenser replacement, where the statutes are more stringent than the EPA regulation.

At the request of stakeholders, ADEQ allows training programs (but not examinations) developed and administered in-house. ADEQ believes “in-house” programs are not administered by independent organizations as allowed in the previous subsection. ADEQ believes that EPA’s intent with the term “independent organization” is that the organization that could be viewed as impartial and unbiased. However, ADEQ agrees with commenter’s observation that in-house on-site classes have advantages over classroom training, in part because “no trainer will know our facilities like we do.”

ADEQ received a comment that it should not require preapproval of in-house programs, in part because of the uncertainty and potential delay for in-house training programs that are waiting to be approved. ADEQ has changed the language in the rule from “approved” to “acceptable”. Department review will most likely begin at a site visit. Although this means that in-house programs are essentially “pre-approved” until reviewed, ADEQ retains the ability to find a program unacceptable at the time of review. ADEQ will review and evaluate any in-house programs under the standards set forth in § 9010 of the Solid Waste Disposal Act, the EPA regulation, and A.R.S. § 49-1083.

The retraining subsections (G and H) attempt to match the stringency of the EPA regulation while allowing the maximum flexibility provided for therein.

R18-12-270. Temporary Closure. ADEQ amended this Section to conform to EPA’s 2015 regulation and provide that tanks meeting either new system standards or standards for upgraded tanks can remain in temporary closure indefinitely, while tanks that do not meet those standards must be permanently closed. For those tanks that must close, the EPA regulation provides that states may provide an extension of temporary closure if a site assessment is done.

ADEQ records indicate that all currently operating tanks in Arizona meet either new or upgraded tank standards, and that as few as 34 tanks, all not operating, do not meet these

standards. These 34 tanks have not operated for an average of 27 years and are technically still in temporary closure.

This final rule ends the previous Arizona system of temporary closure. Under the 2015 EPA regulation, tanks not meeting standards are required to be permanently closed after at most 12 months of temporary closure. Because all other tanks can now remain in temporary closure indefinitely, these 34 tanks are the only tanks that would need to apply to ADEQ for an extension of temporary closure.

In this final rule, ADEQ modified its extension procedure to facilitate permanent closure of these tanks by creating two types of extensions: a standard extension and a limited extension. The final rule provides that the owner or operator of a non-upgraded tank who wants to extend temporary closure does not need to apply for a standard extension or submit a site assessment if they have begun the process of permanent closure, a baseline assessment, or confirmation of a release. These three actions do not need a site assessment or standard extension because there will be some form of site assessment performed as part of these actions.

During public meetings, stakeholders requested that after a denial of an extension of temporary closure, the owner or operator retain the privilege of having 180 days to return to service as in the existing rule. ADEQ believes that permitting return to service after 12 months of temporary closure is not allowed under 40 CFR 280.70, which allows a state agency to extend the temporary closure period but says nothing about a return to operation. The obligation to permanently close tanks not meeting standards is stated clearly in 40 CFR 280.21. Under the EPA regulation, all substandard tanks, operating or not, were to be permanently closed as of October 13, 2018.

This final rule keeps previous language by which the Department may set the “duration and the terms and conditions of the extension.” The Department believes that valid economic reasons may exist for a temporarily closed and non-upgraded tank to be left in the ground on a temporary basis. Applying for funding under the statutory programs for tank removal is one obvious reason. Construction or demolition on site that requires coordination with tank removal is another. ADEQ is retaining the deadline by which tank owners have to apply for an extension, and extending it from 11 to 12 months.

In public meetings, stakeholders also asked whether the requirement to permanently close a substandard tank that has been in temporary closure for more than 12 months ends once the tank is upgraded. It should be noted that beginning an upgrade process without one of the three actions listed in subsection (F)(2) still requires a site assessment for an extension of temporary closure. The upgrade, if successfully completed, ends the requirement to close. However, unless an extension of temporary closure has been granted, the requirement to permanently close continues before and during the upgrade and could become the subject of an enforcement action.

R18-12-281. UST System Codes of Practice and Performance Standards: ADEQ made changes to R18-12-281 in order to resolve potentially conflicting requirements with EPA's regulations that cite codes of practice. Previous ADEQ language in R18-12-281 stated that "compliance shall be determined by utilization of" one or more specific codes or standards. The 2015 EPA regulation states that the code(s) of practice "may be used" to comply. (Further explained by EPA at 80 FR 41611-41612) To be consistent with and no more stringent than EPA, as required by A.R.S. § 49-1009(F), the Department changed its language to "compliance may be determined" by use of a certain code or codes for most of R18-12-281. This does not mean that compliance with the core requirement, such as tanks shall be protected from corrosion, is optional. Rather, it means that the code of practice is an optional way of complying with the core requirement.

ADEQ is incorporating these standards and codes of practice by reference because they are too long to be placed in the rule. Under Arizona's incorporation by reference statute, A.R.S. § 41-1028(B), ADEQ must lock in a particular version when referring to a code or standard and state that no "later amendments or editions" are included. In contrast, EPA states that their "final UST regulation does not require use of a specific version or edition of any code." (80 FR 41611-41612) These two approaches are consistent. By stating that a specific incorporated code of practice "may" be used, ADEQ only locks in that particular code version as a method of compliance while still allowing other methods of compliance.

The EPA also concluded that the standards listed in its regulation when it became effective in October 2015 were protective of human health and the environment but that using older versions that had been replaced at the time of the final regulation was not allowed. (80 FR

41612) ADEQ agrees with EPA that the codes in existence as of October 13, 2015 are protective of human health and the environment and has incorporated by reference the newest versions or revisions in existence as of October 13, 2015. Similar to EPA, ADEQ allows later revisions of these standards to be used although they are not listed in the rule due to the requirement in A.R.S. § 41-1028 that only one version be incorporated. ADEQ will review the use of older codes on a case-by-case basis. ADEQ has retained the “shall” language in R18-12-281(Q), (R), and (S) because those subsections are not based on the EPA regulation, and has updated the incorporated by reference material.

Effective Date. When this final rule was proposed, it contained a number of effective dates appropriate for a state rule expressed in terms of on or after “the effective date of this rule.” This rule was considered and approved at the October 1, 2019 GRRC meeting and would have normally been effective as early as December 2, 2019. ADEQ determined that good cause existed to specify an exact effective date, and chose January 1, 2020, under A.R.S. § 49-1032(B), to allow the regulated community a little extra time to prepare for the new requirements, and to allow ADEQ to insert actual dates for various effective dates in the rule text. ADEQ concluded that the public interest would not be harmed by the later date. GRRC approved the later effective date. January 1, 2020 replaced “the effective date of the rule” in the proposed rule and March 1, 2020 replaced “60 days after the effective date of the rule.”

Changes related to IBR material. ADEQ made some changes to the way the incorporated by reference material is cited to make the rule more clear, concise and understandable. 1) Titles and revision information were corrected in places so that every reference to a document was worded in the identical way. 2) The list of incorporated material and standard IBR language was consolidated alphabetically into a new Section (R18-12-103) so that references to that material in R18-12-281 and elsewhere in the rule text were more concise. Neither of these changes had a substantive effect on the rule’s requirements.

Technical corrections. Nearly all of the changes to Articles 3, 4, 5 and 8 are nonsubstantive or technical corrections such as clarifications and updated citations. The new incorporation by reference dates in Article 3 are needed for authorization and possible State Program Approval. This rulemaking also contains minor changes previously considered by the

Governor's Regulatory Review Council through the submission of 5 year review reports such as those changes in R18-12-263.04(E).

7. A reference to any study relevant to the rules that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

As noted in the preliminary summary of economic impact, ADEQ reviewed "Assessment of the Potential Costs, Benefits, and Other Impacts of the Proposed Revisions to EPA's Underground Storage Tank Regulations", August 2011, prepared for EPA by Industrial Economics, Inc. This document is available from ADEQ and from the federal government at <https://www.regulations.gov/document?D=EPA-HQ-UST-2011-0301-0191>.

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. A summary of the economic, small business and consumer impact:

Identification of the rulemaking. 18 A.A.C. 12, Articles 1 through 5, 8 and 9 (For further information, see Part 6 of this Notice.)

The state Underground Storage Tank (UST) Program is administered by the Arizona Department of Environmental Quality (ADEQ) and is designed to prevent, detect and clean up releases of gasoline, diesel, and other hazardous substances from USTs into groundwater, surface water, and soil. The Program was established in 1986 by the Arizona legislature to implement UST laws enacted by Congress in 1984 as part of the federal Resource Conservation and Recovery Act. Under A.R.S. § 49-1014, ADEQ has general authority to implement rules for the administration of the UST Program, currently in Arizona Revised Statutes, Title 49, Chapter 6. Additionally, A.R.S. § 49-1014 requires that the rules be approvable by EPA as a UST program to be operated by Arizona in lieu of the federal rules.

ADEQ's UST program is funded by a one cent per gallon tax on gasoline and other petroleum products placed in underground storage tanks, a small annual EPA grant, and a \$100 per year per tank fee established by A.R.S. § 49-1020.

The majority of this final rule updates the state UST rules to conform to a 2015 EPA regulation. Arizona rules must conform to the 2015 regulation in order to be considered for state program approval or SPA, which allows ADEQ to implement an equivalent state UST program in Arizona in lieu of EPA implementing the federal program. The previous version of the EPA regulation was adopted in 1988, and much of previous Arizona rule text was built on that dated regulation.

The 2015 EPA regulation added secondary containment requirements for new and replaced tanks and piping, operator training requirements; periodic operation and maintenance requirements for UST systems; requirements for new release prevention and detection technologies, and addressed UST systems deferred in the 1988 UST regulation. Adoption of these updates into Arizona rule will greatly reduce the potential of leaks in Arizona's approximately 6,000 currently operating tanks and increase the efficiency of release cleanup.

Separate from the update for the 2015 EPA regulation, this final rule adds a plan review process for review of UST modifications, new installations, and permanent closures. ADEQ has been performing these plan reviews since 2017 when they were discontinued by the State Fire Marshal. The plan reviews are designed to prevent future releases by ensuring appropriate complying equipment is properly installed through plan review and inspections for new UST installations and modifications. The large number of standards and codes of practice incorporated in this rule to conform to the EPA regulation aid in this process.

There are approximately 2,000 UST facilities with 6,000 operating tanks in Arizona. A variety of factors may affect the likelihood of a release from an operating UST system, including the age and construction of the tank and its associated piping as well as the UST system's compatibility with the products it stores. Approximately 31% of Arizona UST systems were installed more than 30 years ago (the typical warranty on a tank), which calls into question the reliability of a significant portion of the UST infrastructure in our state. ADEQ expects that the adoption of new EPA regulations will help reduce the potential for severe releases from these systems.

There are several direct benefits of avoided releases and their reduced severity. A significant consideration is avoided cleanup or remediation costs, which are currently paid from a number of sources, including insurance companies, state UST funds derived from the penny per gallon tax, and owners and operators themselves. Other benefits to be considered are avoided product loss, increased human health and ecological benefits, protection of groundwater quality, and avoidance of reduced real estate values and the reduced tax base that results from contaminated orphan sites.

This rulemaking also contains numerous nonsubstantive and technical changes, as agreed to with the Governor's Regulatory Review Council through the submission of 5-year review reports. ADEQ expects no direct impact from these changes other than that which accrues to rules that are more clear, concise and understandable.

Identification of the persons who will be directly affected by, bear the costs of, or directly benefit from the rules:

- UST owners and operators: from several that own hundreds or even thousands of tanks to small mom and pops, many of which are considered small businesses under A.R.S. § 41-1001
- ADEQ
- Other state agencies
- Political Subdivision (cities, towns, school districts, etc.)
- Consumers

Cost/benefit analysis:

In A.R.S. § 49-1014(A) and elsewhere in the UST statutes, (see the statutes listed in part 2 of the Notice of Final Rulemaking) the legislature has provided ADEQ twin directives regarding Arizona UST rules: 1) adopt rules necessary to cause the program to be approved by EPA (State Program Approval or SPA), and 2) the UST rules adopted . . . “shall be consistent with and no more stringent than federal regulations in effect on the date on which the rules are adopted.”

These directives express the conclusion of the legislature that the impacts of adopting federally equivalent rules necessary for SPA are less than the impacts of not adopting them and having EPA implement their UST program in Arizona. ADEQ nevertheless is including in this summary estimates of the impacts of the federal rules as well as other changes to inform the regulated entities and others about the rule revisions.

Table 1 summarizes the numerous costs and benefits of this rulemaking as arrived at by ADEQ after comments. Values from the EPA regulation's economic impact statement referenced in part 6 of the Notice of Proposed Rulemaking were used as a starting point. Information from Arizona sources helped ADEQ reduce the impact of training.

Note that the table qualifies effect as either direct or indirect. In a state like Arizona, which does not have formal State Program Approval, new federal regulations are effective in the state on the federal effective date, before the state takes any action on them. This means that for any new or modified federal UST requirement, the economic impact on owners and operators of ADEQ subsequently adopting the requirement into Arizona rule is only the indirect effect of officially adding ADEQ as an another enforcement agency for that requirement. Although compliance may improve with state enforcement present, the requirement was already effective. The direct effect of adopting the requirement into Arizona rule is the beneficial effect it has for owners and operators when EPA decides to allow ADEQ to administer the federal UST program in Arizona. Based on the table and the facts gathered in this rulemaking, ADEQ has determined that the benefits of this rule are greater than the costs.

Note: ADEQ is currently authorized to administer its UST regulations in Arizona in lieu of EPA administering the federal program. This authority is not through State Program Approval (SPA), but rather through a Memorandum of Agreement (MOA) as provided for in 40 CFR 280. See the definition of "implementing agency" in 40 CFR 280.12.

ADEQ requested input on the accuracy of this table in its preliminary summary and received no data. General information provided to ADEQ by regulated entities helped ADEQ make adjustments to the adopted rules and the adjustments remained consistent with and no more stringent than federal regulations. ADEQ increased the cost of doing this rule from moderate

to substantial based in part on the total cost of ordering copies of the materials incorporated by reference.

Table 1

| Description of Affected Groups | Description of Effect ¹ | Increased Cost/Decreased Revenue | Decreased Cost/Increased Revenue |
|--|---|---------------------------------------|----------------------------------|
| A. State and Local Government Agencies | | | |
| ADEQ | Direct effect: Arizona rules match EPA rules so that ADEQ can continue implementing the UST program in Arizona | Substantial cost to do the rulemaking | Significant |
| ADEQ | Direct effect: processing Plan Review in place of State Fire Marshal for new and modified USTs | Moderate | Significant |
| Other state agencies, cities, towns and school districts that own USTs | Same effects as private owners and operator, see below | See private owners | See private owners |
| City or county agencies acting as regulatory authorities | None: this rule does not affect the right of local jurisdictions to enter delegation agreements with ADEQ to review plans | None | None |
| B. Privately Owned Businesses | | | |
| Underground storage tank owners and operators (UST O/Os) | Direct effect: Arizona rules match EPA rules so that ADEQ can continue implementing the UST program in | None | Significant |

¹ Effects are either “Direct” - the effect would not exist but for the ADEQ rule; or “Indirect” -the effect would exist without the ADEQ rule because the federal regulation is effective in Arizona even without an ADEQ rule

| Description of Affected Groups | Description of Effect ₁ | Increased Cost/Decreased Revenue | Decreased Cost/Increased Revenue |
|--------------------------------|--|----------------------------------|---|
| | Arizona | | |
| UST O/Os | Direct effect: Processing Plan Review in place of State Fire Marshal for new and modified USTs | None | Moderate: ADEQ does not charge \$350 per tank as State Fire Marshal did |
| UST O/Os | Direct effect: Indefinite temporary closure allowed for newer and upgraded tanks | None | Minimal per site |
| UST O/Os | Indirect: Overfill prevention equipment inspections; 3 yrs. | Minimal per site | None |
| UST O/Os | Indirect: Spill prevention equipment tests; 3 yrs. | Minimal per site | None |
| UST O/Os | Indirect: Elimination of flow restrictors in vent lines for all new tanks and when overfill devices are replaced | Minimal per site | None |
| UST O/Os | Indirect: Release detection equipment operability checks, annual, | Minimal per site | None |
| UST O/Os | Indirect: Demonstration of compatibility for fuels containing >E10 and >B20 | Minimal per site | None |
| UST O/Os | Indirect: Containment sump tests; 3 years. Annual | Minimal per site | None |

| Description of Affected Groups | Description of Effect ₁ | Increased Cost/Decreased Revenue | Decreased Cost/Increased Revenue |
|--------------------------------|---|---|----------------------------------|
| | checks | | |
| UST O/Os | Indirect: Walkthrough inspections every 30 days | Minimal per site | None |
| UST O/Os | Indirect: Interstitial integrity tests | Minimal per site | None |
| UST O/Os | Indirect: Removal of deferrals for airport hydrant systems and UST systems with field constructed tanks | Moderate per site | None |
| UST O/Os | Indirect: Removal of release detection deferral for emergency generator tanks | Minimal per site | None |
| UST O/Os | Indirect: Updated codes of practice | Minimal per site | None |
| UST O/Os | Indirect: Operator training | Minimal per site | None |
| UST O/Os | Indirect: Electronic records allowed | None | Minimal per site |
| C. Consumers | | | |
| Arizona motor fuel purchasers | Indirect: One cent per gallon for ADEQ to run the program | Minimal to moderate for most purchasers | None |
| All Arizona citizens | Fewer and less severe releases | None | Significant |

| Minimal | Moderate | Substantial | Significant |
|-----------------|---------------------|------------------|--|
| \$1,000 or less | \$1,000 to \$10,000 | \$10,001 or more | Decrease in Cost or Burden cannot be calculated, but the |

| | | | |
|--|--|--|--|
| | | | Department expects it to be significant. |
|--|--|--|--|

Probable Impact and Reduction of Impact on Small Businesses.

A UST owner or operator with either fewer than 100 full-time employees or gross annual receipts less than \$4 million per year is considered a small business under A.R.S § 41-1001. EPA’s economic impact document referenced in part 7 of this Notice characterizes the EPA regulation as follows: “The regulatory requirements generally focus on additional testing and inspection of existing equipment, and do not reflect large-scale investments in equipment or significant changes to operations at the facility level. . . . Given the small per-facility costs of the rule (less than \$900 for the average facility, as documented in this chapter), closures or changes in market structure represent an unlikely response to the rule.” After requesting comment on this description, ADEQ still agrees with this characterization and with the small per-facility costs for the average facility.

Despite the relatively small per-facility impacts of the changes due to the federal regulation, ADEQ believes that those impacts could still be significant for the very small, such as those owners or operators with just one facility. A.R.S. § 41-1035 lists methods state agencies should use to reduce the impact of a rulemaking on small businesses, if legal and feasible in meeting the statutory objectives of the rule. As discussed previously, the legislature has directed ADEQ to adopt rules as stringent, but no more stringent, than EPA’s to be authorized to implement the UST program in Arizona. These related requirements leave no legal and feasible small business alternatives for exemptions, less stringent performance standards, or compliance or reporting requirements that would apply only to small businesses.

ADEQ notes that it has recently made available an on-line training option which can be completed in approximately half a day and which is free for operators at an Arizona facility. This is an option under R18-12-237(F)(2). (As with the in-person option for this training, the \$140 fee is paid for by ADEQ if the operator is associated with a valid facility ID number) A commenter with twelve sites had stated that sending seven of their operators to an all-day training class was a significant burden. This on-line option should prove to be less

burdensome and less intrusive for owners and offer more flexibility for scheduling training. The elimination of the 12 month temporary closure limit for upgraded tanks was also finalized in this rulemaking in R18-12-270(D) and should increase flexibility and reduce impacts for large and small owners alike.

ADEQ is not aware of other ADEQ requirements in rule that were more stringent than EPA that could be relaxed for small and large businesses alike. For similar reasons, ADEQ has determined that the final changes to its rules were necessary to conform to the EPA regulation, and there were no less intrusive or less costly methods of achieving the purposes of the rule.

ADEQ's plan review process for inspection and approval of newly installed and modified tanks does not have to conform directly to a corresponding EPA regulation. Instead, EPA's 40 CFR 281.30(a) requires that "the state must have requirements that ensure all new underground storage tanks . . . [b]e designed, constructed, and installed in a manner that will prevent releases for their operating life due to manufacturing defects, structural failure, or corrosion." 40 CFR 281.31(a) is worded similarly for existing tanks that are upgraded. In the proposed rule, ADEQ requested ideas for making plan review requirements for new installations and modifications less burdensome or less stringent for owners or operators with less than 4 million dollars in annual receipts or fewer than 100 full-time employees while still meeting these objectives. In response to a comment, ADEQ clarified the notice requirements for emergency repairs at R18-12-221(B) and (D) to allow emergency repairs to begin first, followed by the notice to the department.

10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:

ADEQ made a number of changes throughout the rule, on its own and at the request of GRRC staff, to make the rule more clear, concise and understandable. Other changes, described further below, were made in response to comments.

ADEQ and GRRC changes

A new rule section, R18-12-103. Material Incorporated by Reference, was added to consolidate alphabetically all of the incorporated by reference material in Chapter 12. This allows the incorporation by reference language required by A.R.S. § 41-1023 to be stated once in a single place, instead of repeatedly each time a code or standard is referenced. The incorporation by reference language was removed from the sections where the incorporated material is actually cited. There was no change in substantive requirements as a result of this consolidation.

Effective dates. As discussed in the preamble to the proposed rule at page 1489, ADEQ requested a January 1, 2020 effective date at the October GRRC meeting. GRRC approved the rule and the later effective date at the October meeting. As further described in the preamble, January 1, 2020 would replace “effective date of the rule” and March 1, 2020 would replace “60 days after the effective date of the rule.”

In addition, “January 1, 2009” replaced federal effective dates of April 11, 2016 in R18-12-241 to avoid being in conflict with the effective date in A.R.S. § 49-1009(B). The January 1, 2009 effective date from A.R.S. § 49-1009 also occurs in R18-12-220(A) and (G).

ADEQ made minor changes in the rule so that the titles of standards and codes of practice are referred to consistently throughout the rule. See for example, “Petroleum Equipment Institute Publication RP1200-17”, now referred to consistently in R18-12-235(A), R18-12-240(A) and R18-12-281(N).

Changes made in response to comments

In response to a comment, ADEQ clarified notice requirements for emergency repairs at R18-12-221(B) and (D).

In response to a comment, ADEQ changed the text in R18-12-237(E)(3) from “approved” to “acceptable” to minimize potential backlogs that could occur while waiting for ADEQ to approve in-house training.

11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:

ADEQ held several public meetings in 2018 and 2019 prior to publishing the proposed rule and many comments were received and addressed at that time. During the public comment period and at the oral proceeding, ADEQ received the following comments from three commenters.

Commenter 1: Regarding the language in the proposed rule at R18-12-221.D.2, “the City recommends that the facility be able to start emergency repairs immediately and then notify ADEQ. Language should be amended to allow a facility to take care of the emergency and then follow up after the emergency with ADEQ.”

Response: ADEQ agrees with the comment and has edited the text in R18-12-221(D)(2) to provide for this.

Commenter 1: ADEQ should amend R18-12-237(E)(3) to minimize potential backlogs that could occur while waiting for ADEQ to approve in-house training. “We recommend that facilities be allowed to submit their in-house training to ADEQ and proceed with the training without waiting on approval.”

Response: ADEQ agrees with the comment and has changed the text in R18-12-237(E)(3) from “approved” to “acceptable”. The department’s review will most likely begin at a site inspection, which is required at least every three years. Although this means that in-house programs are pre-approved until reviewed, ADEQ retains the ability to find an in house operator training program unacceptable at the time of review.

Commenter 2: The proposed rule at R18-12-237(G) requires operator training at least every three years and this is stricter than the federal regulation on operator training and therefore violates A.R.S. § 49-104(16) which provides “Unless specifically authorized by the legislature, [The department, through the director, shall:] ensure that state laws, rules, standards, permits, variances and orders are adopted and construed to be consistent with and no more stringent than the corresponding federal law that addresses the same subject matter.”

Response: Although in general Arizona’s UST rules cannot be more stringent than EPA’s, it is allowed if an Arizona statute allows or requires it. Here, EPA’s operator training regulation does not have a requirement for retraining frequency, but A.R.S. § 49-1083(E) does, requiring retraining at least every three years. The Arizona rule therefore has to follow the

Arizona statute. No change to the rule.

Commenter 2: Based on “the amount of time the training program developed by the ADEQ takes (basically, a full day) and the number of personnel that would require such training, the City believes the effects of the increased training frequency for all classes of operators in Arizona will increase the costs of operating a fuel distribution facility, which will result in increased fuel prices, leading to increased costs in goods and services.”

Response: ADEQ acknowledges that the economic impact of training can be significant for owners that choose to send multiple operators off-site for training and has taken steps to reduce this impact. There is currently an online option through www.petroclassroom.com which can be finished in approximately half a day and which is free for operators at an Arizona facility. (As with off-site training, the \$140 fee is paid for by ADEQ if the operator is associated with a valid Arizona facility ID number.) Consistent with A.R.S. § 49-1083(E), ADEQ is keeping the rule at the lowest allowed retraining frequency of every three years and cannot make this less frequent. Finally, ADEQ has removed the requirement for retraining when new leak detection equipment is installed, as proposed at R18-12-237(G)(5). EPA had indicated in the preamble to their final regulation that they considered retraining for equipment changes but decided against it. See EPA’s discussion at 80 FR 41573.

Commenter 3: We agree that a January 1, 2020 effective date for the Arizona rule would be helpful for clarity and preparation of the regulated community for compliance.

Response: ADEQ requested and GRRC approved this later effective date.

Commenter 3: As discussed during the public hearing, ARS 49-1009(C) on piping replacement and ARS 49-1009(D) on under dispenser containment and the proposed rule referencing these statutory provisions are currently in conflict with (1) the federal UST regulations and (2) Arizona law that prohibits rules from being more stringent than federal regulations. See ARS 49-1009(F). We support alignment of the proposed rule and state statutes with the federal regulations. Can the Department please clarify how they intend to manage these discrepancies until the state law matches federal rule?

Response: ADEQ will explore legislation that would change the Arizona statute to make it equivalent to EPA regulation in these areas. At the time of this Notice, it was not known whether the Governor would approve this legislation, or if introduced from another source, whether ADEQ would support it or be neutral. From January 1, 2020 until any legislation

amending this statute is effective, ADEQ intends to enforce the rule and statute as written.

Commenter 3: We also recommend that sites be allowed to make minor repairs to the tank system below the shear valve without a requirement to notify the department in advance. See R18-12-221(B). Even with the addition of Subsection D, the draft rule will require 30 days notice for most repairs. It is unclear where the Department intends to draw the line between "regular maintenance" that does not require notification and "repairs" that do.

Response: In response to this and another comment, ADEQ has amended R18-12-221(D)(2) so that the facility is able to start emergency repairs immediately and then notify ADEQ. However, ADEQ does not believe that "as soon as possible before the date of" a minor repair is too much of a burden. Once the facility knows it is going to undertake a repair, the notice as an email or fax can be sent even as the repair is getting ready to begin. ADEQ has removed the phrase "the date of" to clarify that it need not be the day before. However, there may be cases where an owner may be asked to demonstrate that the notice was sent as soon as possible. ADEQ expects to use the common meanings of maintenance and repair to differentiate when notice is required and when it is not. Regular maintenance is something that is expected, planned for, and scheduled to occur before a repair is required, while the need for repair is not foreseeable until the component or part has broken or moved into a state of disrepair.

Commenter 3: For recordkeeping, the currently drafted "one business day after" provision for offsite records is not an adequate time period to cure a document production deficiency. We would recommend that three business days is a more reasonable timeframe. Especially with the large number of operator training records, allowance of three business days will allow site managers to locate the correct documentation and provide it to the department. See R18-12-234 and R18-12-237.

Response: ADEQ consulted with EPA and determined that one business day is both fair and necessary for the proper functioning of the EPA mandated "at least every three years" inspection. For repair records, the EPA regulation requires that they either be "immediately available" or "at a readily available alternative site and be provided . . . upon request." ADEQ believes that records that can't be provided within one business day are not at a "readily available" alternative site. For training records, the EPA regulation requires the documentation to be "maintained" and specifically allows for either paper or electronic

records. ADEQ believes one business day allows enough flexibility for facilities to comply with production of off-site records. No change to the rules.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

This rulemaking amends existing rules (18 A.A.C. 12, Article 8, Tank Service Provider Certification) that require a license. This rulemaking does not require a general permit because the issuance of these licenses is authorized under A.R.S. § 49-1082 and is covered by the exception in A.R.S. § 41-1037(A)(2): “2. The issuance of an alternative type of permit, license or authorization is specifically authorized by state statute.”

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

These rules are not more stringent than corresponding federal laws, except as authorized by statute. As discussed in part 6 of this Notice for R18-12-220, these final rules follow two specific statutory requirements in A.R.S. § 49-1009 that are more stringent than federal law. In addition, A.R.S. § 49-1083(E) requires ADEQ to specify a retraining frequency of every three years while the EPA regulation has no requirement for retraining after a given amount of time.

c. Whether a person submitted an analysis to the agency regarding the rule’s impact on the competitiveness of businesses in this state as compared to the competitiveness of businesses in other states:

No person has submitted a competitiveness analysis under A.R.S. § 41-1055(I).

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

| Material incorporated by reference | Location |
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| American Society for Testing and Materials Standard D975-18, “Standard Specification for Diesel Fuel Oils” | R18-12-101 |
| “Low Level Hydrostatic Testing for Underground Storage Tank Containment Sumps”, amended October 9, 2018 | R18-12-235(A) |
| Petroleum Equipment Institute Publication RP1200-17, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities” | R18-12-235(A) R18-12-240(A) R18-12-281(N) |
| Petroleum Equipment Institute RP900-17, “Recommended Practices for the Inspection and Maintenance of UST Systems” | R18-12-236(A) |
| NACE International Standard Practice SP0285-2011, “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection” | R18-12-281(A), (C), (F), (H), (J), (L); R18-12- 952(C) |
| NACE International Standard Practice SP0169-2013, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems” | R18-12-281(A), (F), (J); R18-12- 952(C) |
| American Petroleum Institute Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems”, 3rd edition | R18-12- 281(A),(F), and (H) |
| Steel Tank Institute Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems”, revised January 2006 | R18-12-281(A) and (F) |
| Underwriters Laboratories Standard 1316, “Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures”, 3rd edition | R18-12-281(B) |
| Underwriters Laboratories of Canada S615-14, “Standard for Fibre Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids” | R18-12-281(B) |
| Steel Tank Institute sti-P3 “Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks”, revised May 2018 | R18-12-281(C) |
| Underwriters Laboratories Standard 1746, “Standard for External Corrosion | R18-12-281(C) |

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| Protection Systems for Steel Underground Storage Tanks”, 3 rd edition, amended December 19, 2014 | R18-12-281(D) |
| Underwriters Laboratories of Canada CAN/ULC-S603-14, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of October 2014; | R18-12-281(C) |
| Underwriters Laboratories of Canada CAN/ULC-S603.1:2017, “Standard for External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of February 2017 | R18-12-281(C) |
| Underwriters Laboratories of Canada Standard S631-05, “Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems”, amended as of July 2005 | R18-12-281(C) |
| Steel Tank Institute Standard F841, “Standard for Dual Wall Underground Steel Storage Tanks”, January 2006 | R18-12-281(C) |
| Underwriters Laboratories Standard 58, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, 10 th edition, amended as of January 31, 2018 | R18-12-281(C) |
| Steel Tank Institute ACT-100, “Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks-F894”, revised May 2018 | R18-12-281(D) |
| Steel Tank Institute ACT-100U Specification F961, “Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks”, February 2017 | R18-12-281(D) |
| Steel Tank Institute Specification F922, “Steel Tank Institute Specification for Permatank®”, February 2017 | R18-12-281(D) |
| Underwriters Laboratories 971, “Standard for Nonmetallic Underground Piping for Flammable Liquids”, 2 nd edition, June 17, 2008; | R18-12-281(E) |
| Underwriters Laboratories of Canada Standard S660 “Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids”, 1 st edition, May 1, 2008 | R18-12-281(E) |
| Underwriters Laboratories Subject 971A, “Outline of Investigation for Metallic Underground Fuel Pipe”; 1 st edition, October 18, 2006 | R18-12-281(F) |
| American Petroleum Institute Publication 1615, “Installation of Underground Hazardous Substances or Petroleum Storage Systems”, 6 th edition, April 2011 | R18-12-281(G) |
| Petroleum Equipment Institute Publication PEI/RP100-17, “Recommended Practices for Installation of Underground Liquid Storage Systems” | R18-12-281(G) |

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| National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code”, 2018 edition | R18-12-281(G) R18-12-281(L) |
| National Fire Protection Association Standard 30A, “Code for Motor Fuel Dispensing Facilities and Repair Garages”, 2018 edition | R18-12-281(G) |
| American Petroleum Institute Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”, 5th edition | R18-12-281(H) R18-12-281 (L) R18-12-281 (P) |
| National Leak Prevention Association Standard 631, “Chapter A, Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks”; and Chapter B, “10 And 5 Year Inspection for Lined Tanks without Cathodic Protection”, 2009 revision | R18-12-281(H) |
| National Fire Protection Association Publication 385, “Standard for Tank Vehicles for Flammable and Combustible Liquids”, amended as of 2017 | R18-12-281(I) |
| American Petroleum Institute Recommended Practice 1007, “Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles”, 1st edition, amended as of March 2001, reaffirmed February 2011 | R18-12-281(I) |
| American Petroleum Institute Recommended Practice 1621, “Bulk Liquid Stock Control At Retail Outlets”, 5th edition | R18-12-281(I) R18-12-281(O) |
| NACE International Standard Test Method TM0101-2012, “Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems” | R18-12-281(J) |
| NACE International Standard Test Method TM0497-2012, “Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems” | R18-12-281(J) |
| Steel Tank Institute Recommended Practice R051, “Cathodic Protection Testing Procedures for STI-P3® USTs”, April 2017 | R18-12-281(J) |
| American Petroleum Institute Recommended Practice 1626, “Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations”, 2nd edition | R18-12-281(K) |
| American Petroleum Institute Recommended Practice 2200, “Repairing Hazardous Liquid Pipelines”, 5th edition | R18-12-281(L) |
| National Fire Protection Association Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”, 2015 edition | R18-12-281(L) R18-12-281(P) |

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| National Leak Prevention Association Standard 631, Chapter A, “Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks”, (2009 revision) | R18-12-281(L) |
| Steel Tank Institute Recommended Practice R972, “Recommended Practice for the Addition of Supplemental Anodes to STI-P3® USTs”, December 2010 | R18-12-281(L) |
| Fiberglass Tank and Pipe Institute Recommended Practice T-95-1, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks” | R18-12-281(L) R18-12-281(M) |
| Steel Tank Institute Recommended Practice R012, “Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks”, revised July 2016 | R18-12-281(N) |
| Fiberglass Tank and Pipe Institute Protocol RP 2007-2, “Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space” | R18-12-281(N) |
| American Petroleum Institute Recommended Practice 1604, “Closure of Underground Petroleum Storage Tanks”, 3rd edition | R18-12-281(P) |
| American Petroleum Institute Standard 2015, “Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks”, 8th edition | R18-12-281(P) |
| American Petroleum Institute Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”, 1st edition | R18-12-281(P) |
| The National Institute for Occupational Safety and Health Publication 80-106, “Criteria for a Recommended Standard: Working in Confined Spaces”, amended as of December 1979 | R18-12-281(P) |
| American Society for Testing and Materials Standard D5088-15a, “Standard Practice for Decontamination of Field Equipment Used at Waste Sites” | R18-12-281(Q) |
| American Society for Testing and Materials Standard D4547-15: “Standard Guide for Sampling Waste and Soils for Volatile Organic Compounds” | R18-12-281(R) |
| American Society for Testing and Materials Standard D4700-15, “Standard Guide for Soil Sampling from the Vadose Zone” | R18-12-281(R) |
| American Society for Testing and Materials Standard D4840-99 (2018)e1, “Standard Guide for Sample Chain-of-Custody Procedures” | R18-12-281(S) |
| 40 CFR 280.10, amended as of October 13, 2015 | R18-12-300(D) |
| 40 CFR 280.111(b)(11)(i), amended as of October 13, 2015 | R18-12-301(C) |

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| 40 CFR 144.63, amended as of October 13, 2015 | R18-12-305(B) |
| 40 CFR 264.147(f)(1), amended as of October 13, 2015 | R18-12-305(C) |
| 40 CFR 280.95(d), amended as of October 13, 2015 | R18-12-305(D) |
| 40 CFR 280.96(c), amended as of October 13, 2015 | R18-12-306(C) |
| 40 CFR 280.97(b)(1) and (2), amended as of October 13, 2015 | R18-12-307(B) |
| 40 CFR 280.98(b) amended as of October 13, 2015 | R18-12-308(B) |
| 40 CFR 280.99(b) amended as of October 13, 2015 | R18-12-309(B) |
| 40 CFR 280.103(b)(1) and (2), amended as of October 13, 2015 | R18-12-312(B) R18-12-313(B) |
| 40 CFR 280.104(d), amended as of October 13, 2015 | R18-12-314(D) |
| 40 CFR 280.104(e), amended as of October 13, 2015 | R18-12-314(E) |
| 40 CFR 280.105(c) amended as of October 13, 2015 | R18-12-315(C) |
| 40 CFR 280.106(d) amended as of October 13, 2015 | R18-12-316(D) |
| 40 CFR 280.106(e) amended as of October 13, 2015 | R18-12-316(E) |
| 40 CFR 280.107(d) amended as of October 13, 2015 | R18-12-317(B) |
| 40 CFR 280.112(b)(2)(i), amended as of October 13, 2015 | R18-12-322(B) |
| Unified Facilities Criteria (UFC) 3-460-01, Petroleum Fuel Facilities Design, With Change 2, revised 6/17/15 | R18-12-951(D) |
| National Leak Prevention Association Standard 631, Chapter C, "Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection", 2009 revision | R18-12-952(C) |
| American Society for Testing and Materials Standard G158-98, "Standard Guide for Three Methods of Assessing Buried Steel Tanks" | R18-12-952(C) |
| Department of Defense Directive 4140.25-M, volume 9 | R18-12-952(E) |
| ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, revision 2004.1 | R18-12-952(E) |

14. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency

shall state where the text was changed between the emergency and the final rulemaking packages:

Not applicable

15. The full text of the rules follows:

**TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 12. DEPARTMENT OF ENVIRONMENTAL QUALITY –
UNDERGROUND STORAGE TANKS**

ARTICLE 1. DEFINITIONS; APPLICABILITY

Section

- R18-12-101. Definitions
- R18-12-102. Applicability
- R18-12-103. Repealed Material Incorporated by Reference

ARTICLE 2. TECHNICAL REQUIREMENTS

Section

- R18-12-210. Applicability
- R18-12-211. Prohibition for Certain UST Systems Installation Requirements for Partially Excluded UST Systems
- R18-12-219. Reserved Installation of New UST Systems
- R18-12-220. Performance Standards for New UST Systems
- R18-12-221. Upgrading of Existing UST Systems
- R18-12-222. Notification Requirements
- R18-12-230. Spill and Overfill Control
- R18-12-231. Operation and Maintenance of Corrosion Protection
- R18-12-232. Compatibility
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ARTICLE 1. DEFINITIONS; APPLICABILITY

R18-12-101. Definitions

In addition to the definitions prescribed in A.R.S. §§ 49-1001 and 49-1001.01, the terms used in this Chapter have the following meanings definitions apply in this Chapter:

“Aboveground release” means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

“Accidental release” means, with respect to Article 3 only, any sudden or nonsudden release of petroleum arising from operating an UST system that is neither expected nor intended by the UST system owner or operator, that results in a need for one or more of the following:

- Corrective action,
- Compensation for bodily injury, or
- Compensation for property damage.

“Airport hydrant fuel distribution system” or “airport hydrant system” means a petroleum UST system 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.

“Ancillary equipment” means any device used to distribute, dispense, meter, monitor, or control the flow of regulated substances to and from an UST system.

“Annual” means, with respect to R18-12-240 through R18-12-245 only, a calendar period of 12 consecutive months.

“Applicant,” for purposes of Article 7 only, means an owner or operator who applies for a grant from the UST grant account.

“Application,” for purposes of Article 6 only, means a written claim for reimbursement or preapproval from the assurance account on a form provided by the Department.

“Assets” means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

“Aviation fuel,” for the purpose of Article 4 only, has the definition at A.R.S. § 28-101.

“Belowground release” means any release to the subsurface of the land or to groundwater. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

“Bodily injury” means injury to the body, sickness, or disease sustained by any person, including death resulting from any of these at any time.

“CAP” means corrective action plan.

“Cathodic protection” means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell.

“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 a person shall have education and experience in soil receptivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

“CERCLA” means the federal Comprehensive Environmental Response, Compensation, and Liability Act as defined in A.R.S. § 49-201.

“CFR” means the Code of Federal Regulations, with standard references in this Chapter by Title and Part, so that “40 CFR 280” means Title 40 of the Code of Federal Regulations, Part 280.

“Change-in-service” means changing the use of an UST system from the storage of a regulated substance to the storage of a non-regulated substance.

“Chemical of concern” means any regulated substance detected in contamination from the LUST site that is evaluated for potential impacts to public health and the environment.

“Chief financial officer” means, with respect to local government owners and operators, the individual with the overall authority and responsibility for the collection, disbursement, and use of funds by the local government.

“Class A operator” means the individual who has primary responsibility to operate and maintain the UST system in accordance with applicable requirements established by this Chapter and Arizona Revised Statutes, title 49, chapter 6. The Class A operator typically manages resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements.

“Class B operator” means the individual who has day-to-day responsibility for implementing applicable regulatory requirements established by this Chapter and Arizona Revised Statutes, title 49, chapter 6. The Class B operator typically implements in-field aspects of operation, maintenance, and associated recordkeeping for the UST system.

“Class C operator” means the individual responsible for initially addressing emergencies presented by a spill or release from an UST system. The Class C operator typically controls or monitors the dispensing or sale of regulated substances.

“Clean Water Act” has the definition at A.R.S. § 49-201.

“Compatible” means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another under conditions likely to be encountered in the UST during the operational life of the UST system.

“Conceptual site model” means a description written and visual representation of the complete current and potential exposure pathways, based on existing and reasonably anticipated future use.

“Connected piping” means all underground piping including valves, elbows, joints, flanges, and flexible connectors that are attached to a tank system and through which regulated substances flow. For the purpose of determining how much piping is connected to an individual UST system, the piping that joins multiple tanks shall be divided equally between the tanks.

“Consultant” means a person who performs environmental services in an advisory, investigative, or remedial capacity.

“Containment sump” means a liquid-tight container that protects the environment by containing leaks and spills of regulated substances from piping, dispensers, pumps and related components in the containment area. Containment sumps may be single walled or secondarily contained 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).

“Contamination” means the analytically determined existence of a regulated substance within environmental media outside the confines of an UST system, that ~~which~~ originated from the UST system.

“Contractor” means a person who is required to obtain and hold a valid license from the Arizona Registrar of Contractors which permits bidding and performance of removal, excavation, repair, or construction services associated with an UST system.

“Controlling interest” means direct ownership of at least 50 percent of a firm, through voting stock, or otherwise.

“Copayment” means the percentage of Department-approved costs of eligible activities that are not paid by the Department from the assurance account under §§ 49-1052(I) or 49-1054(A).

“Corrective action rules” means, for purposes of Article 6 only, R18-12-250 through R18-12-264.01.

“Corrective action service provider” means a person acting as a licensed contractor or consultant that performs services to fulfill the statutory requirements of A.R.S. § 49-1005 and the corrective action rules.

“Corrective action services” means any service that is provided to fulfill the statutory requirements of A.R.S. § 49-1005 and the rules made under § 49-1005.

“Corrective action standard” means the concentration of the chemical of concern in the medium of concern that is protective of public health and welfare and the environment based on either pre-established non-site-specific assumptions or site-specific data, including any applied environmental use restriction.

“Corrosion expert” means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by 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. The person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

“Cost work sheet” means a form provided by the Department that includes all claimed or proposed tasks and increments to those tasks and associated costs in accordance with the schedule of corrective action costs for any of the following:

A phase of corrective action for a specified time period,

A tank or UST closure or tank upgrade, or

The preparation of an application or direct payment request.

“Current assets” means assets which can be converted to cash within one year and are available to finance current operations or to pay current liabilities.

“Current liabilities” means those liabilities which are payable within one year.

“Decommissioning” means, with respect to Article 8 only, activities described in R18-12-271(CD)(1) through R18-12-271(CD)(4).

“De minimis” means that quantity of regulated substance which is described by one of the following:

When mixed with another regulated substance, is of such low concentration that the toxicity, detectability, or corrective action requirements of the mixture are the same as for the host substance.

When mixed with a non-regulated substance, is of such low concentration that a release of the mixture does not pose a threat to public health or the environment greater than that of the host substance.

“Department” means the Arizona Department of Environmental Quality.

“Derived waste” means any excavated soil, soil cuttings, and other soil waste; fluids from well drilling, aquifer testing, well purging, sampling, and other fluid wastes; or disposable decontamination, sampling, or personal protection equipment generated as a result of release confirmation, LUST site investigation, or other corrective action activities.

“Dielectric material” means a material that does not conduct electrical current and that is used to electrically isolate UST systems or UST system parts from surrounding soils or portions of UST systems from each other.

“Diesel” means, with respect to Article 4 only, a liquid petroleum product that meets the specifications in American Society for Testing and Materials Standard D-975-94 ~~D975-18~~, “Standard Specification for Diesel Fuel Oils” amended April 15, 1994 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

“Director” means the Director of the Arizona Department of Environmental Quality.

“Direct payment” means a payment from the assurance account for approved corrective actions associated with a Department-approved preapproval work plan.

“Direct payment request” means a claim for direct payment on a form provided by the Department.

“Dispenser” means equipment located aboveground that dispenses regulated substances from the UST system.

“Dispenser system” means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system.

“Electrical equipment” means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

“Eligible activities” means those activities described in R18-12-601(B).

“Eligible person” means, with respect to Article 6 only, an owner, operator, volunteer, or a political subdivision taking corrective action under A.R.S. § 49-1052(H).

“Emergency power generator” means a power generator which is used only when the primary source of power is interrupted. The interruption of the primary source of power shall not be due to any action or failure to take any action by the owner or operator of either the emergency generator or of the UST system which stores fuel for the emergency generator.

“Engineering Control” for soil, surface water and groundwater contamination has the definition at R18-7-201.

“Excavation zone” means the volume that contains or contained the tank system and backfill material and is bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

“Excess lifetime cancer risk level” for soil, surface water, and groundwater contamination, has the definition at R18-7-201.

“Existing tank system” means a tank system used to contain an accumulation of regulated substances on or before December 22, 1988, or for which installation has commenced on or before December 22, 1988.

“Exposure” for soil, surface water, and groundwater contamination, has the meaning defined in R18-7-201.

“Exposure assessment” means the qualitative or quantitative determination or estimation of the magnitude, frequency, duration, and route of exposure or potential for exposure of a receptor to chemicals of concern from a release.

“Exposure pathway” for soil, surface water, and groundwater contamination, has the meaning defined in R18-7-201.

“Exposure route” for soil, surface water, and groundwater contamination, has the definition at R18-7-201.

“Facility” means a single parcel of property and any contiguous or adjacent property on which one or more UST systems are located.

“Facility identification number” means the unique number assigned to a facility by the Department either after the initial notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved under R18-12-409.

“Facility location,” for the purpose of Article 4 only, means the street address or a description of the location of a storage facility.

“Facility name” means the business or operational name associated with a storage facility.

“Farm tank” means a tank system located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. The term “farm” includes fish hatcheries, rangeland, and nurseries with growing operations.

“Field-constructed tank” means a tank 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.

“Financial reporting year” means the latest consecutive 12-month period, either fiscal or calendar, for which financial statements used to support the financial test of self-insurance under R18-12-305 are prepared, including the following, if applicable:

A 10-K report submitted to the Securities and Exchange Commission.

An annual report of tangible net worth submitted to Dun and Bradstreet.

Annual reports submitted to the Energy Information Administration or the Rural Electrification Administration Utilities Service.

“Firm” means any for-profit entity, nonprofit or not-for-profit entity, or local government. An individual doing business as a sole proprietor is a firm for purposes of this Chapter.

“Flow-through process tank” means a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. The term “flow-through process tank” does not include a tank used for the storage of materials prior to their introduction into the production process or for the storage of finished products or byproducts from the production process.

“Free product” means a mobile regulated substance that is present as a nonaqueous phase liquid (e.g. liquid not dissolved in water).

“Gathering lines” means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

“Grant request” means the total amount requested on the application for a grant from the UST grant account, plus any cost to the Department for conducting a feasibility determination under R18-12-710, in conjunction with the application

“Groundwater” means water in an aquifer as defined at A.R.S. § 49-201.

“Hazard Index” for soil, surface water, and groundwater contamination, has the definition at R18-7-201.

“Hazard quotient” for soil, surface water, and groundwater contamination, has the definition at R18-7-201.

“Hazardous substance UST system” means an UST system that contains a hazardous substance as defined in A.R.S. § 49-1001(14)(b) or any mixture of such substance and petroleum, which is not a petroleum UST system.

“Heating oil” means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, or No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils for heating purposes.

“Hydraulic lift tank” means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

“IFCI” “ICC” means the International Fire Code Institute Code Council.

“Implementing agency” means, with respect to Article 3 only, the Arizona Department of Environmental Quality for UST systems subject to the jurisdiction of the state of Arizona, or the EPA for other jurisdictions or, in the case of a state with a program approved under 42

U.S.C. 6991 (or pursuant to a memorandum of agreement with EPA), the designated state or local agency responsible for carrying out an approved UST program.

“Incremental cost” means a supplement to a task, established in the schedule of corrective action costs, that is necessary, based on site-specific conditions, to complete the task.

“Incurred” for purposes of Article 6 only, means a cost of eligible activities owed by an eligible person to a corrective action service provider or a person who prepares applications or direct payment requests, as applicable, as demonstrated in an invoice received by the eligible person.

“Indian country” means, under 18 U.S.C. 1151, all of the following:

All land within the limits of an Indian reservation under the jurisdiction of the United States government which is also located within the borders of this state, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

All dependent Indian communities within the borders of the state whether within the original or subsequently acquired territory of the state.

All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through such allotments.

“Induration” means the consolidation of a rock or rock material by the action of heat, pressure, or the introduction of some cementing material not commonly contained in the original mass. Induration also means the hardening of a soil horizon by chemical action to form hardpan (caliche).

“Installation” means the placement and preparation for placement of any UST system or UST system part into an excavation zone. Installation is considered to have commenced if both of the following exist:

The owner and operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the UST system.

The owner and operator has begun a continuous on-site physical construction or installation program or has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction at the site or installation of the UST system to be completed within a reasonable time.

“Institutional control” for soil, surface water, and groundwater contamination, has the definition at R18-7-201.

“Legal defense cost” means, with respect to Article 3 only, any expense that an owner or operator, or provider of financial assurance incurs in defending against claims or actions brought under any of the following circumstances:

- By EPA or a state to require corrective action or to recover the costs of corrective action;
- By or on behalf of a 3rd party for bodily injury or property damage caused by an accidental release; or
- By any person to enforce the terms of a financial assurance mechanism.

“Liquid trap” means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect

liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

“Local government” means a county, city, town, school district, water and aqueduct management district, irrigation district, power district, electrical district, agricultural improvement district, drainage and flood control district, tax levying public improvement district, local government public transportation system, and any political subdivision defined in A.R.S. § 49-1001.

“LUST” means leaking UST, or one that has leaked.

“LUST case” means all of the documentation related to a specific LUST number, which is maintained on file by the Department.

“LUST number” means the unique number assigned to a release by the Department after the notification requirements of A.R.S. § 49-1004(A) are met.

“LUST site” means the UST facility from which a release has occurred.

“Maintenance” means those actions necessary to ensure the proper working condition of an UST system or equipment used in corrective actions.

“Monitored natural attenuation” means the reliance on natural attenuation processes, within the context of a carefully controlled and monitored site cleanup approach, to achieve site-specific remediation objectives within a time-frame that is reasonable compared to that offered by other more active methods.

“Motor vehicle fuel,” for the purpose of Article 4 only, has the definition at A.R.S. § 28-101.

“Natural attenuation” means a reduction in mass or concentration of a chemical of concern in groundwater over time or distance from the release point due to naturally occurring physical, chemical, and biological processes, such as: biodegradation, dispersion, dilution, sorption, and volatilization.

“Nature of the regulated substance” means the chemical and physical properties of the regulated substance stored in the UST, and any changes to the chemical and physical properties upon or after release.

“Nature of the release” means the known or estimated means by which the contents of the UST was dispersed from the UST system into the surrounding media, and the conditions of the UST system and media at the time of release.

“New tank system” means a tank system that will be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988.

“Noncommercial purposes” means, with respect to motor fuel, not for resale.

“On-site control” means, for the purpose of Article 8 only, being at the location where tank service is being performed while tank service is performed.

“On the premises where stored” means, with respect to A.R.S. § 49-1001(18)(b) only, a single parcel of property or any contiguous or adjacent parcels of property.

“Operational life” means the period beginning when installation of the tank system has begun and ending when the tank system is properly closed under R18-12-271 through R18-12-274.

“Overfill release” means a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of a regulated substance to the environment.

“Owner identification number” means the unique number assigned to the owner of an UST by the Department after the initial notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved pursuant to R18-12-409.

“Petroleum marketing facility” means a facility at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

“Petroleum marketing firm” means a firm owning a petroleum marketing facility. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

“Petroleum UST system” means an UST system that contains or contained petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. These systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

“Phase of corrective action” means a major step in corrective action as described in rules made under A.R.S. § 49-1005, and the schedule of corrective action costs.

“Pipe” or “Piping” means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.

“Pipeline facility” means new or existing pipe rights-of-way and any associated equipment, gathering lines, facilities, or buildings.

“Point of compliance” means the geographic location at which the concentration of the chemical of concern is to be at or below the risk-based corrective action standard determined to be protective of public health and the environment.

“Point of exposure” for soil, surface water, and groundwater contamination, has the definition at R18-7-201 for “exposure point.”

“Property damage” means physical injury to, destruction of, or contamination of tangible property, including all resulting loss of use of that property; or loss of use of tangible property that is not physically injured, destroyed, or contaminated, but has been evacuated, withdrawn from use, or rendered inaccessible.

“Provider of financial assurance” means an entity that provides financial assurance to an owner or operator of an UST through one of the mechanisms listed in R18-12-306 R18-12-305 through R18-12-312 or R18-12-316 R18-12-317, including a guarantor, insurer, risk retention group, surety, or issuer of a letter of credit.

“RCRA” means the Resource Conservation and Recovery Act, in 42 U.S.C. 6924 (u)

“Receptor” means persons, enclosed structures, subsurface utilities, waters of the state, or water supply wells and wellhead protection areas.

“Release confirmation” means free product discovery, or reported laboratory analytical results of samples collected and analyzed in accordance with the sampling requirements of R18-12-280 and A.A.C. Title 9, Chapter 14, Article 6 which indicates indicate a release of a regulated substance from the UST system.

“Release confirmation date” means the date that an owner or operator first confirms the release, or the date that the owner or operator is informed of a release confirmation made by another person.

“Release detection” means determining whether a release of a regulated substance has occurred from the UST system into the environment or a leak has occurred into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

“Remediation” for soil, surface water, and groundwater contamination, has the definition at A.R.S. § 49-151, except that “soil, surface water and groundwater” is substituted for “soil” where it appears in that Section.

“Repair” means to restore to proper operating condition a tank or pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused or may cause a release of regulated substance from the UST system or has failed to function properly.

“Replaced” means:

(a) For a tank - to remove a tank and install another tank.

(b) For piping - removing and replacing any piping component.

“Report of work” means a written summary of corrective action services performed.

“Reserved and designated funds” means those funds of a nonprofit, not-for profit, or local government entity which, by action of the governing authority of the entity, by the direction of the donor, or by statutory or constitutional limitations, may not be used for conducting UST upgrades, replacements, or removals, or for installing UST leak detection systems, or conducting corrective actions, including payment for expedited review of related documents by the Department, on releases of regulated substances.

“Residential tank” means an UST system located on property used primarily for dwelling purposes.

“Retrofit” means to add to an UST system, equipment or parts that were not originally included or installed as part of the UST system.

“Risk characterization” means the qualitative and quantitative determination of combined risks to receptors from individual chemicals of concern and exposure pathways, and the associated uncertainties.

“Routinely contains product” or “routinely contains regulated substance” means the part of an UST system which is designed to contain regulated substances and includes all internal areas of the tank and all internal areas of the piping, excluding only the vent piping.

“SARA” means the Superfund Amendments and Reauthorization Act of 1986, P.L. 99-499.

“Secondary containment” or “Secondarily contained” 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.

“Septic tank” means a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The

effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

“Site location map” means a representation by means of signs and symbols on a planar surface, at an established scale, of the streets, wells, and general use of the land for properties within at least one-quarter mile of the facility boundaries, with the direction of orientation indicated.

“Site plan” means a representation by means of signs and symbols on a planar surface, at an established scale, of the physical features (natural, artificial, or both) of the facility and surrounding area necessary to meet the requirements under which the site plan is prepared, with the direction of orientation indicated.

“Site Vicinity Map vicinity map” means a representation by means of signs and symbols on a planar surface, at an established scale, of the natural and artificial physical features, used in the exposure assessment, that occur within at least 500 feet of the facility boundaries, with the direction of orientation indicated.

“Solid Waste Disposal Act” for the purposes of this Chapter means the “federal act” as defined by A.R.S. § 49-921.

“Source area” means either the location of the release from an UST, the location of free product, the location of the highest soil and groundwater concentration of chemicals of concern, or the location of a soil concentration of chemicals of concern which may continue to impact groundwater or surface water.

“Source of contamination” means with respect to this Chapter, the conditions described in A.R.S. § 49-1052(N) 49-1053(J).

“Spill” means the loss of regulated substance during the transfer of a regulated substance to an UST system.

“Storage facility” means, for the purpose of Article 4 only, the common, identifiable, location at which deliveries of regulated substances are made to an UST, an above ground storage tank, or to a group of underground and above ground storage tanks, and to which the Department has assigned a single facility identification number.

“Storm-water or wastewater collection system” means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or of domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

“Submitted” means received by the Department on the earliest of the date of the Department’s date-stamp on the application, direct payment request, or component, or the date on the return receipt, if the application, direct payment request, or component is sent to the Department by certified mail.

“Substantial business relationship” means the extent of a business relationship necessary under Arizona law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued “incident to that relationship” if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.

“Substantial governmental relationship” means the extent of a governmental relationship necessary under Arizona law to make an added guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract under R18-12-316 is issued “incident to that relationship” if it arises from a clear commonality of interest in the event of an UST release such as coterminous boundaries, overlapping constituencies, common ground water groundwater aquifer, or other relationship other than monetary compensation that provides a motivation for the guarantor to provide a guarantee.

“Substituted work item” means a work item that is included in a direct payment request, in place of a preapproved work item, that accomplishes the work objectives of the preapproved work item using a different methodology and meets the requirements of A.R.S. § 49-1054(C)(1).

“Summary of work” means a brief written description, on a form provided by the Department, of the corrective actions and a rationale for the performance of the corrective actions that are the subject of the application or direct payment request, and that allows the Department to evaluate or determine whether the claimed activities are eligible activities.

“Supplier” means, for the purpose of Article 4 only, with respect to collection of the UST excise tax, a person who is described by either A.R.S. § 28-6001(A) or (B). The term “supplier” includes a distributor, as defined in A.R.S. § 28-5601, who is required to be licensed by A.R.S. Title 28, Chapter 16, Article 1.

“Supplier identification number” means, for the purpose of Article 4 only, the unique number assigned to the supplier by the Department of Transportation for the purpose of administering the motor vehicle fuel tax under A.R.S. Title 28, Chapter 16, Article 1.

“Surface impoundment” means a natural topographic depression, artificial excavation, or diked area formed primarily of earthen materials, but which may be lined with artificial materials, that is not an injection well.

“Surface water” has the definition at R18-11-101.

“Surficial soil” means any soil occurring between the current surface elevation and extending to that depth for which reasonably foreseeable construction activities may excavate and relocate soils to surface elevation, and any stockpiles generated from soils of any depth.

“Suspected release discovery date” means the day an owner or operator first has reason to believe, through direct discovery or being informed by another person, that a suspected release exists.

“Suspected release notification date” means the day the Department informs an owner or operator, as evidenced by the return receipt, that a UST may be the source of a release.

“Tangible net worth” means, for purposes of R18-12-101 and R18-12-305, the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, “assets” means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

“Task” means an action, including any and all personnel and project management, necessary to satisfy the technical requirements associated with a phase of corrective action, as established in the schedule of corrective action costs.

“Tax” means, for the purpose of Article 4 only, the excise tax on the operation of USTs levied by A.R.S. Title 49, Chapter 6, Article 2.

“Taxpayer” means, for the purpose of Article 4 only, the owner or operator of an UST who pays the tax.

“Tester” means a person who performs tightness tests on UST systems, or on any portion of an UST system including tanks, piping, or leak detection systems.

“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 UST systems that meets the requirements of A.R.S. § 49-1083 and this Chapter.

“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.

“Underground area” means an underground room, such as a basement, cellar, shaft, or vault that provides enough space for physical inspection of the exterior of the tank, situated on or above the surface of the floor.

“Underground storage tank” has the definition at A.R.S. § 49-1001.

“Under review” means an application or direct payment request is submitted and the Department has not made an interim determination under R18-12-610 or, for incorrect applications or direct payment requests under R18-12-601(C) only, the Department has not made a final determination under R18-12-611.

“Unreserved and undesignated funds” means those funds that are not reserved or designated funds and can be transferred at will by the governing authority to other funds.

“Upgrade” means the addition to or retrofit of an UST system or UST system parts, under R18-12-221, to improve the ability to prevent release of a regulated substance.

“UST” means an underground storage tank as defined at A.R.S. § 49-1001.

“UST grant account” or “grant account” means the account designated under A.R.S. § 49-1071.

“UST regulatory program” means the program established by and described in A.R.S. Title 49, Chapter 6 and the rules promulgated under that program.

“UST system” or “tank system” means an UST, connected underground piping, impact valve and connected underground ancillary equipment and containment system, if any.

“Vadose zone” has the definition at A.R.S. § 49-201.

“Volatile regulated substance” means any regulated substance that generally has the following chemical characteristics: a vapor pressure of greater than 0.5 mmHg at 20° C, a Henry’s Law Constant of greater than 1×10^{-5} atm m³/mol, and which has a boiling point of less than 250° - 300° C.

“Volunteer” means a person described under A.R.S. § 49-1052(I).

“Wastewater treatment tank” means a tank system that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

“Work item” means a line item or group of line items on a direct payment request for claimed costs for a task or increment in accordance with the schedule of corrective action costs under A.R.S. § 49-1054(C).

“Work objectives of the preapproved work plan” means the purpose, as stated in a preapproval application, of the proposed corrective actions to be performed, within a phase of corrective action, on the release or releases specified in the preapproval application preapproved by the Department.

R18-12-102. Applicability

- A. Owners and operators. As provided in A.R.S. § 49-1016(A), the responsibilities of this Chapter, unless indicated otherwise, are imposed on persons who are the owner or the operator of an UST. If the owner and operator of an UST are separate persons, only one person is required to discharge any specific responsibility. Both persons are liable in the event of noncompliance.
- B. Persons in possession or control of property. The requirements of this Chapter are applicable to a person acting under the provisions of A.R.S. § 49-1016(C).
- C. No supersedence. Nothing in this Chapter supersedes the requirements of the following:
 - 1. A ~~An order of a court of competent jurisdiction in effect before August 20, 2002,~~
 - 2. An order of the Director under A.R.S. § 49-1013 in effect before August 20, 2002.

R18-12-103. Repealed Material Incorporated by Reference

The following materials are incorporated by reference and applicable in this Chapter unless specifically stated otherwise. The materials include no future editions or amendments, are on file with the Department, and are also available as indicated below:

40 CFR 280.10, 40 CFR 280.95(d), 40 CFR 280.96(c), 40 CFR 280.97(b)(1) and (2), 40 CFR 280.98(b), 40 CFR 280.99(b), 40 CFR 280.103(b)(1) and (2), 40 CFR 280.104(d), 40 CFR 280.104(e), 40 CFR 280.105(c), 40 CFR 280.106(d), 40 CFR 280.106(e), 40 CFR 280.107(d), 40 CFR 280.111(b)(11)(i), 40 CFR 280.112(b)(2)(i), 40 CFR 144.63, and 40 CFR 264.147(f)(1), amended as of October 13, 2015 and available at www.ecfr.gov;

American Petroleum Institute Recommended Practice 1007, “Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles”, 1st edition, amended as of March 2001, reaffirmed February 2011, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 1604, “Closure of Underground Petroleum Storage Tanks”, 3rd edition, available at www.techstreet.com;

American Petroleum Institute Publication 1615, “Installation of Underground Hazardous Substances or Petroleum Storage Systems”, 6th edition, April 2011, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 1621, “Bulk Liquid Stock Control At Retail Outlets”, 5th edition, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 1626, “Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations”, 2nd edition, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”, 5th edition, available at www.techstreet.com

American Petroleum Institute Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems”, 3rd edition, available at www.techstreet.com;

American Petroleum Institute Standard 2015, “Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks”, 8th edition, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”, 1st edition, available at www.techstreet.com;

American Petroleum Institute Recommended Practice 2200, “Repairing Hazardous Liquid Pipelines”, 5th edition, available at www.techstreet.com;

American Society for Testing and Materials Standard D975-18, “Standard Specification for Diesel Fuel Oils”, available at www.techstreet.com;

American Society for Testing and Materials Standard D4547-15: “Standard Guide for Sampling Waste and Soils for Volatile Organic Compounds”, available at www.techstreet.com;

American Society for Testing and Materials Standard D4700-15, “Standard Guide for Soil Sampling from the Vadose Zone”, available at www.techstreet.com;

American Society for Testing and Materials Standard D4840-99 (2018)e1, “Standard Guide for Sample Chain-of-Custody Procedures”, available at www.techstreet.com;

American Society for Testing and Materials Standard D5088-15a, “Standard Practice for Decontamination of Field Equipment Used at Waste Sites”, available at www.techstreet.com;

American Society for Testing and Materials Standard G158-98, “Standard Guide for Three Methods of Assessing Buried Steel Tanks”, available at www.techstreet.com;

ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, revision 2004.1, available at <https://publications.airlines.org>;

Department of Defense Directive 4140.25-M, volume 9, available at www.esd.whs.mil/Directives/issuances/dodm;

Fiberglass Tank and Pipe Institute Protocol RP 2007-2, “Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space”, available at www.fiberglasstankandpipe.com;

Fiberglass Tank and Pipe Institute Recommended Practice T-95-1, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks”, available at www.fiberglasstankandpipe.com;

“Low Level Hydrostatic Testing for Underground Storage Tank Containment Sumps”, amended October 9, 2018, available at ADEQ;

NACE International Standard Practice SP0169-2013, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”, available at www.techstreet.com;

NACE International Standard Practice SP0285-2011, “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”, available at www.techstreet.com;

NACE International Standard Test Method TM0101-2012, “Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems”, available at www.techstreet.com;

NACE International Standard Test Method TM0497-2012, “Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems”, available at www.techstreet.com;

National Fire Protection Association Publication 385, “Standard for Tank Vehicles for Flammable and Combustible Liquids”, amended as of 2017, available at www.nfpa.org;

National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code”, 2018 edition, available at www.nfpa.org;

National Fire Protection Association Standard 30A, “Code for Motor Fuel Dispensing Facilities and Repair Garages”, 2018 edition, available at www.nfpa.org;

National Fire Protection Association Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”, 2015 edition, available at www.nfpa.org;

National Leak Prevention Association Standard 631, “Chapter A, Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks”; and Chapter B, “10 And 5 Year Inspection for Lined Tanks without Cathodic Protection”, 2009 revision, available at www.nlpa-online.org;

National Leak Prevention Association Standard 631, Chapter A, “Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks”, (2009 revision), available at www.nlpa-online.org;

National Leak Prevention Association Standard 631, Chapter C, “Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection”, 2009 revision, available at www.nlpa-online.org;

Petroleum Equipment Institute Publication PEI/RP100-17, “Recommended Practices for Installation of Underground Liquid Storage Systems”, available at www.techstreet.com;

Petroleum Equipment Institute Publication RP1200-17, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities”, available at www.techstreet.com;

Petroleum Equipment Institute RP900-17, “Recommended Practices for the Inspection and Maintenance of UST Systems”, available at www.techstreet.com;

Steel Tank Institute ACT-100, “Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks-F894”, revised May 2018, available at www.steeltank.com;

Steel Tank Institute ACT-100U Specification F961, “Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks”, February 2017, available at www.steeltank.com;

Steel Tank Institute Recommended Practice R012, “Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks”, revised July 2016, available at www.steeltank.com;

Steel Tank Institute Recommended Practice R051, “Cathodic Protection Testing Procedures for STI-P3® USTs”, April 2017, available at www.steeltank.com;

Steel Tank Institute Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems”, revised January 2006, available at www.steeltank.com;

Steel Tank Institute Recommended Practice R972, “Recommended Practice for the Addition of Supplemental Anodes to STI-P3® USTs”, December 2010, available at www.steeltank.com;

Steel Tank Institute Specification F922, “Steel Tank Institute Specification for Permatank®”, February 2017, available at www.steeltank.com;

Steel Tank Institute Standard F841, “Standard for Dual Wall Underground Steel Storage Tanks”, January 2006, available at www.steeltank.com;

Steel Tank Institute sti-P3 “Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks”, revised May 2018, available at www.steeltank.com;

The National Institute for Occupational Safety and Health Publication 80-106, “Criteria for a Recommended Standard: Working in Confined Spaces”, amended as of December 1979, available at www.cdc.gov/niosh;

Underwriters Laboratories 971, “Standard for Nonmetallic Underground Piping for Flammable Liquids”, 2nd edition, June 17, 2008, available at www.shopulstandards.com;

Underwriters Laboratories of Canada CAN/ULC-S603.1:2017, “Standard for External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of February 2017, available at www.techstreet.com;

Underwriters Laboratories of Canada CAN/ULC-S603-14, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of October 2014, available at <https://canada.ul.com/ulcstandards/>;

Underwriters Laboratories of Canada S615-14, “Standard for Fibre Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids”, available at www.techstreet.com;

Underwriters Laboratories of Canada Standard S631-05, “Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems”, amended as of July 2005, available at www.techstreet.com;

Underwriters Laboratories of Canada Standard S660 “Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids”, 1st edition, May 1, 2008, available at www.techstreet.com;

Underwriters Laboratories Standard 58, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, 10th edition, amended as of January 31, 2018, available at www.shopulstandards.com;

Underwriters Laboratories Standard 1316, “Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures”, 3rd edition, available at www.techstreet.com;

Underwriters Laboratories Standard 1746, “Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks”, 3rd edition, amended December 19, 2014, available at www.techstreet.com;

Underwriters Laboratories Subject 971A, “Outline of Investigation for Metallic Underground Fuel Pipe”; 1st edition, October 18, 2006, available at www.shopulstandards.com;

Unified Facilities Criteria (UFC) 3-460-01, Petroleum Fuel Facilities Design, With Change 2, revised 6/17/15, available at www.wbdg.org.

ARTICLE 2. TECHNICAL REQUIREMENTS

R18-12-210. Applicability

- A.** The requirements of this Article apply to all owners and operators of an UST system, except as otherwise provided in subsections (B) through (D) and (C).
1. Previously deferred UST systems. Airport hydrant fuel distribution systems, UST systems with field-constructed tanks, and UST systems that store fuel solely for use by emergency power generators shall meet the requirements of this Chapter as follows:
 - a. Airport hydrant fuel distribution systems and UST systems with field-constructed tanks shall meet the requirements in Article 9.
 - b. UST systems that store fuel solely for use by emergency power generators installed on or before January 1, 2020 shall meet the release detection requirements of R18-12-240 through R18-12-245 on or before March 1, 2020.
 - c. UST systems that store fuel solely for use by emergency power generators installed after January 1, 2020 shall meet all applicable requirements of this Chapter at installation.
 2. Any UST system listed in subsection (C) of this Section shall meet the requirements of R18-12-211.
- B.** Excluded UST systems. The following UST systems are excluded from the requirements of this Article:
1. Any UST system holding hazardous wastes which are listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;
 2. 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;

3. Equipment or machinery that contains regulated substances solely for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
 4. Any UST system with a capacity of 110 gallons or less;
 5. Any UST system that contains a de minimis concentration of regulated substances;
 6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use.
- C. Partially excluded UST systems. Except as noted in subsection (C)(2) below, only Only R18-12-101, R18-12-210, R18-12-211, R18-12-222, R18-12-261 through R18-12-264.01, and the provisions of A.R.S. §§ 49-1001.01 and 49-1005 and the rules promulgated thereunder apply to the following types of UST systems:
1. Wastewater treatment tank systems other than those specified in subsection (B)(2);
 2. Aboveground storage tanks associated with:
 - a. Airport hydrant fuel distribution systems regulated under Article 9.
 - b. UST systems with field-constructed tanks regulated under Article 9.
 23. Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2011 et seq.;
 34. Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated licensed by the Nuclear Regulatory Commission under and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to 10 CFR 50 Appendix A;
 4. Airport hydrant fuel distribution systems;
 5. UST systems with field-constructed tanks.
- D. R18-12-240 through R18-12-245 do not apply to any UST system that stores fuel solely for use by emergency power generators.

R18-12-211. Prohibition for Certain UST Systems Installation Requirements for Partially Excluded UST Systems

- A. A person Owners and operators shall not install installing an UST system listed in R18-12-210(C)(1), (3), or (4) for the purpose of storing regulated substances unless the UST system, whether of single-wall or double-wall construction, shall ensure that it meets all of the following requirements:
1. The UST system will prevent releases due to corrosion or structural failure for the operational life of the UST system;
 2. The UST system is cathodically protected against corrosion, constructed of noncorrodible non-corrodible material, steel clad with a noncorrodible non-corrodible material, or designed in a manner to prevent the release or threatened release of any stored substance;
 3. The UST system is constructed or lined with material that is compatible with the stored substance.
- B. Notwithstanding subsection (A), an UST system 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 operational life. Owners and operators shall maintain records that demonstrate compliance with the requirements of this subsection for the remaining operational life of the UST system.
- C. Compliance with the corrosion protection provisions of this Section shall be determined in accordance with the standards codes of practice set forth in R18-12-281(A).

R18-12-219. Reserved Installation of New UST Systems

- A. An owner or operator that intends to bring a new underground storage tank system into operation shall submit to the Director on a Department form all of the following information at least 30 days before beginning installation:
1. The tank's size, construction material, manufacturer, and intended system contents;
 2. The certified UST service provider who will perform or supervise the installation;
 3. Detailed installation plans showing the site drawn to scale, piping layouts, electrical service, and stating that the tanks will be installed according to the manufacturer's instructions, and the applicable installation standards and codes of practice in R18-12-220 and R18-12-281;
 4. Evidence that the intended system contents are compatible with the UST system;
 5. A statement describing how the owner or operator plans to satisfy financial responsibility in accordance with Article 3;
 6. The intended installation schedule with the proposed backfill date.
- B. Within 15 calendar days of receipt of the information required in subsection (A), the Department shall send the owner or operator an email indicating whether the proposed installation may or may not proceed, or whether further information is necessary.
- C. An owner or operator may not backfill a new tank system installation until approval by a representative of the Director after an onsite inspection. At the time of inspection the owner or operator shall have on site certifications for all equipment and test results for all piping.

R18-12-220. Performance Standards for New UST Systems

- A. Owners and operators of a new UST system shall meet the requirements described in this Section in order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances. In addition, except for suction piping that meets the requirements of R18-12-241(C)(2)(a) through (e), tanks and piping installed or replaced after January 1, 2009 shall be secondarily contained and use interstitial monitoring in accordance with R18-12-243(G). Secondary containment shall be able to contain regulated substances leaked from the primary containment until they are detected and removed and prevent the release of regulated substances to the environment at any time during the operational life of the UST system. For cases where the piping to be replaced exceeds the percentage in A.R.S. § 49-1009(C), the entire piping run shall be secondarily contained.
- B. A tank shall be properly designed and constructed, and any portion underground that routinely contains a regulated substance shall be protected from corrosion according to one of the following methods in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:
1. The tank is constructed of fiberglass-reinforced plastic. Compliance with this subsection shall may be determined in accordance with the performance standards set forth in R18-12-281(B);
 2. The tank is constructed of steel and is cathodically protected, in accordance with one of the performance standards of R18-12-281(C), by all of the following:
 - a. The tank is coated with a suitable dielectric material;
 - b. The field-installed cathodic protection systems are designed by a corrosion expert;

- c. The impressed current systems, if used, are designed to allow determination of current operating status as required in R18-12-231(C);
 - d. The cathodic protection systems are operated and maintained in accordance with R18-12-231.
3. The tank is constructed of a steel-fiberglass-reinforced-plastic composite and clad or jacketed with a non-corrodible material. Compliance with this subsection shall be determined in accordance with one of the performance standard standards set forth in R18-12-281(D).
 4. The tank is constructed of metal without additional corrosion protection measures, and both of the following conditions are met:
 - 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;
 - b. Owners and operators maintain records that demonstrate compliance with the requirements of subsection (B)(4)(a) for the remaining operational life of the tank.
 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 regulated substance in a manner that is no less protective of human health and the environment than the requirements of subsections (B)(1) through (4).
- C. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed, constructed, and protected from corrosion according to one of the following methods in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:
1. The piping is constructed of fiberglass-reinforced plastic non-corrodible material. Compliance with this subsection shall may be determined in accordance with the performance standard set forth in R18-12-281(E).
 2. The piping is constructed of steel and in meeting the performance standards of R18-12-281(F) is cathodically protected according to all of the following:
 - a. The piping is coated with a suitable dielectric material;
 - b. Field-installed cathodic protection systems are designed by a corrosion expert;
 - c. Impressed current systems, if used, are designed to allow determination of current operating status as required in R18-12-231(C);
 - d. Cathodic protection systems are operated and maintained in accordance with R18-12-231.
 3. The piping is constructed of metal without additional corrosion protection measures, and all of the following requirements are satisfied:
 - 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;
 - b. The piping meets the performance standards of R18-12-281(G);
 - cb. Owners and operators maintain records that demonstrate compliance with the requirements of this subsection (a) for the remaining life of the piping.
 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 regulated substance in a manner that is no less protective of human health and the environment than the requirements in subsections (C)(1) through (3).

- D.** Except as provided in subsections (D)(3) and (D)(4), owners and operators shall use both of the following spill and overflow prevention equipment systems to prevent spilling and overflowing associated with transfer of a regulated substance to the UST system:
1. Spill prevention equipment that will prevent release of a regulated substance to the environment when the transfer hose is detached from the fill pipe;
 2. Overflow prevention equipment that will do one or more of the following:
 - a. Automatically shut off flow into the tank when the tank is no more than 95% full;
 - b. Alert the transfer operator when the tank is no more than 90% full by restricting the flow into the tank or triggering a high-level alarm that can be heard at the point of transfer;
 - c. Restrict flow 30 minutes prior to overflowing, alert the operator with a high level alarm that can be heard at the point of transfer one minute before overflowing, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to a regulated substance due to overflowing.
 3. Owners and operators are not required to use the spill and overflow prevention equipment specified in subsections (D)(1) and (2) if either of the following conditions is met:
 - a. Alternative equipment is used that is determined by the Department to be no less protective of human health and the environment than the equipment specified in subsections (D)(1) or (2);
 - b. The tank is filled by transfers of no more than 25 gallons at one time.
 4. Flow restrictors used in vent lines may not be used to comply with subsection (D)(2) of this Section when overflow prevention is installed or replaced.
 5. Spill and overflow prevention equipment shall be periodically tested or inspected in accordance with R18-12-235.
- E.** All tanks and piping The UST system shall meet both of the following requirements:
1. Be properly installed in accordance with the manufacturer's instructions;
 2. Be installed according to the performance standards set forth and in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, such as those listed in R18-12-281(H)(G).
- F.** Owners and operators shall ensure, in addition to the installation being inspected and approved by the Department under R18-12-219, that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with subsection (E):
1. The installer has been certified by the tank and piping manufacturers,
 2. The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation, or
 3. The installation has been inspected and approved by the Department,
 43. All work listed in the manufacturer's installation checklists has been completed, or
 54. Owners and operators have complied with another method for ensuring compliance with subsection (E) that is determined by the Department to be no less protective of human health and the environment.
- G.** Under-dispenser containment. Each UST system shall be equipped with under-dispenser containment for any new dispenser installed or replaced after January 1, 2009. Under-dispenser containment shall be liquid-tight on its sides, bottom, and at any penetrations. Under-dispenser containment shall allow for visual inspection and access to the components in the containment system or be periodically monitored for leaks from the dispenser system.

H. Notwithstanding subsection (G), under dispenser containment is only required when a new dispenser system is installed if the requirement for under dispenser containment in A.R.S. § 49-1009(D) is changed to apply only to new dispenser system installation. A dispenser system is considered new when both the dispenser and the equipment needed to connect the dispenser to the underground storage tank system are installed at an UST facility. The equipment necessary to connect the dispenser to the underground storage tank system includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are underneath the dispenser and connect the dispenser to the underground piping.

GI. Owners shall provide a certification of compliance on the UST Notification Form in accordance with R18-12-222(D) and shall ensure that a certification statement in accordance with the applicable requirements of R18-12-222(E) is signed by the installer on the Notification Form prior to submission to the Department.

H. If an UST system is installed or modified to meet the requirements of this Section, owners shall notify the Department in accordance with R18-12-222(F)(2) within 30 days of the date that the UST system is brought into operation or modified.

R18-12-221. Upgrading of Existing UST Systems

A. Owners and operators shall permanently close (in accordance with R18-12-270 through R18-12-274) any UST system that does not meet the new UST system performance standards in R18-12-220 or has not been upgraded in accordance with subsections (F) through (I) of this Section. This does not apply to previously deferred UST systems described in Article 9 and where an upgrade is determined to be appropriate by the Department. Not later than December 22, 1998, each All existing UST system systems shall comply with one of the following requirements:

1. New UST system performance standards under R18-12-220;
2. The upgrading requirements described in subsections (B)(E) through (E)(H);
3. Closure requirements under R18-12-270 through R18-12-274, including applicable requirements for release reporting and corrective action, under R18-12-270 through R18-12-274 R18-12-250 through R18-12-264.01.

B. Except for repairs described in subsection (D), an owner or operator that intends to modify an underground storage tank system, including upgrading to comply with subsection (A), shall submit to the Director on a Department form all of the following information at least 30 days before beginning the tank system modifications:

1. The tank's size, construction material, location and intended use.
2. The certified UST service provider(s) performing or supervising the modification.
3. A description of the modifications, including detailed plans, where necessary, showing the site, piping layouts, electrical service, and stating that the modifications will be installed according to the manufacturers' instructions, and the applicable standards and codes of practice in R18-12-220 and R18-12-281.
4. When applicable, evidence that compatibility under R18-12-232 has been considered.
5. The intended modification schedule with any proposed backfill date.

C. For the purposes of this Section, "modify" means any of the following: changing dispensers, installing under dispenser containment, relining or retrofitting a tank, replacing pipe, adding or changing corrosion protection, or making repairs in response to a confirmed or suspected release. Modify does not mean scheduled maintenance or repair above the shear valve.

- D.** The owner or operator shall submit the information in subsection (B) to the Department as soon as possible after the start of emergency repairs and as soon as possible before the date of the following proposed repairs:
1. Repairs in response to a confirmed or suspected release if an owner or operator is removing a UST from operation for the repairs;
 2. Minor repairs, including replacement of a leak detection sensor, and repairs to fittings.
- E.** Within 15 calendar days of receipt of information under subsection (B), the Department shall send the owner or operator an email indicating whether the proposed modification may or may not proceed, whether a Department inspection will be required, or whether further information is necessary. At the time of the modification, the owner or operator shall have on site service provider certifications and test results for all equipment installed.
- BE.** A steel tank shall be upgraded to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory:
1. A tank may be Tanks upgraded by internal lining if shall meet both of the following conditions are met:
 - a. The internal lining is installed in accordance with the requirements of R18-12-233, and R18-12-281(H)(1) or (2);
 - b. Within 10 years after the internal lining is installed, 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 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 code of practice developed by a nationally recognized association or independent testing laboratory, then the lined tank shall be permanently closed in accordance with R18-12-270 through R18-12-274.
 2. A tank may be Tanks upgraded by cathodic protection if the cathodic protection system meets shall meet the requirements of R18-12-220(B)(2)(b) through (d), and the integrity of the tank is shall have been ensured by using at least one of the following methods:
 - a. The tank is was internally inspected and assessed to ensure that it is was structurally sound and free of corrosion holes prior to installing the cathodic protection system;
 - b. The tank has had been installed for less than 10 years and is monitored monthly for releases in accordance with R18-12-243(D) through (HI);
 - c. The tank has had been installed for less than 10 years and is was assessed for corrosion holes by conducting two tightness tests that meet the requirements of R18-12-243(C). The 1st tightness test shall be conducted prior to installing the cathodic protection system. The 2nd tightness test shall be conducted between three and six months following the 1st operation of the cathodic protection system; or
 - d. The tank is was assessed for corrosion holes by a method that is determined by the Department to prevent releases in a manner that is no less protective of human health and the environment than the methods described in subsections (B)(2)(a) through (c).
 3. A tank may be Tanks upgraded by both internal lining and cathodic protection if shall meet both of the following requirements are met:
 - a. The lining is installed in accordance with the requirements of R18-12-233,
 - b. The cathodic protection system meets the requirements of R18-12-220(B)(2)(b) through (d).

- CG.** Metal piping that routinely contains regulated substances and is in contact with the ground shall be cathodically protected in accordance with the applicable requirements of R18-12-220(C)(2)(b) through (d).
- DH.** Any upgrading by use of corrosion protection described in this Section shall be accomplished in accordance with the performance standards set forth in R18-12-281(I)(H).
- EI.** To prevent spilling and overfilling associated with the transfer of a regulated substance to the UST system, all existing UST systems shall comply with new UST system spill and overfill prevention equipment requirements specified in R18-12-220(D).
- FJ.** Owners or operators shall ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with the requirements of this Section by providing a certification of compliance on the UST Notification Form in accordance with R18-12-222(D):
1. The installer has been certified by the equipment or system manufacturers;
 2. The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation, or if required under subsection (D), by the Department;
 3. All work listed in the manufacturer's installation checklists has been completed;
 4. The owner has complied with another method for ensuring compliance with the requirements of this Section that is determined by the Department to be no less protective of human health and the environment.
- GK.** Owners and operators shall ensure that a certification statement in accordance with the applicable requirements of R18-12-222(E) is signed by the installer on the Notification Form prior to submission to the Department.
- H.** If an UST system is upgraded in accordance with this Section, owners and operators shall notify the Department in accordance with R18-12-222(F)(2) within 30 days of the date that the UST system is upgraded.

R18-12-222. Notification Requirements

- A.** An owner of an UST system shall comply with the notification requirements of this Section in accordance with those described in A.R.S. § 49-1002.
- B.** An owner shall submit the most current and complete information on each UST system at each facility utilizing the Departmental form titled "Notification for Underground Storage Tanks" ("Notification Form"). An owner shall submit a separate Notification Form to the Department for each facility which is owned. Submitted information shall include all of the following for each UST system:
1. Type of notification specifying one of the following:
 - a. New facility,
 - b. Amendment of previous Notification Form,
 - c. Closure.
 2. The name and mailing address of the owner of the UST system;
 3. Facility street address and the associated county assessor book, map, and parcel;
 4. Type of owner, specifying whether government, commercial, or private;
 5. Whether the UST system is located within Indian country;
 6. Facility type;
 7. The name and mailing address of the operator of the UST system;

8. Compliance with financial responsibility requirements in accordance with R18-12-300 through R18-12-325, and the mechanism or mechanisms used to demonstrate compliance;
 9. Facility map including tanks and associated piping in addition to major structures;
 10. Status of each UST system as one of the following:
 - a. Currently in use,
 - b. Temporarily out of use,
 - c. Permanently out of use.
 11. Date of the UST system installation and date the UST system was 1st first brought into operation;
 12. Estimated total capacity of the tank;
 13. Material of tank construction and method of corrosion protection for each UST system;
 14. Date of tank repair or replacement, if tank has been repaired or replaced;
 15. Material of piping construction and method of corrosion protection for each UST system;
 16. Date of piping repair or any replacement, if piping has been repaired or replaced;
 17. Type of piping delivery system;
 18. Methods of leak detection currently in use for tank and piping;
 19. Whether the UST system is connected to an emergency generator;
 20. Substance currently or last stored in the UST system in greatest quantity by volume;
 21. If the substance currently or last stored in the UST system is a hazardous substance, identification of the CERCLA name or Chemical Abstracts Service number;
 22. If the substance currently or last stored in the UST system is a mixture of substances, identification of the constituents of the mixture.;
 23. Information on under dispenser containment including construction material, and date(s) of any repair, replacement or modification.
- C.** In addition to the information required in subsection (B), if an UST system is permanently closed, temporarily closed, or if a change-in-service has occurred, an owner shall provide all of the following:
1. The estimated date the UST system was last used, and the estimated date the UST system was permanently closed;
 2. Identification of the UST system as one of the following:
 - a. Removed from the ground,
 - b. Closed in the ground and filled with inert solid materials and a description of those materials,
 - c. Completed change-in-service and a description of current use,
 - d. Temporarily closed,
 - e. Temporarily closed with a request for extension of temporary closure.
 3. Whether an UST site assessment was completed;
 4. Whether there was evidence of a leak.
- D.** An owner shall certify under penalty of law that the owner has personally examined and is familiar with the information submitted in the Notification Form and all attached documents, and that based either on direct knowledge or on inquiry of those individuals immediately responsible for obtaining the information, the owner believes that the submitted information is true, accurate, and complete. For a new or upgraded UST system, this certification shall include compliance with all the following requirements:
1. Installation of tanks and piping under R18-12-220(E) and (E);

2. Cathodic protection of steel tanks and piping under R18-12-220(B) and (C), or R18-12-221(B) through (D) (E) through (H);
 3. Spill and overflow protection under R18-12-220(D) or R18-12-221(E)(I);
 4. Release detection under R18-12-240 through R18-12-245;
 5. Financial responsibility under R18-12-300 through R18-12-325.
- E.** An owner of a new or upgraded UST system shall ensure that the installer certifies on the Notification Form that to the best information and belief of the installer the items set forth in subsections (D)(1) through (4) are true and comply with R18-12-219 through R18-12-221.
- F.** Any request for an extension of temporary closure shall be made in accordance with R18-12-270.
- G.** In addition, an owner of an UST system shall notify the Department within 30 days after any one of the following occurs:
1. A change in the operator of the UST system;
 2. A replacement or upgrade of any portion of the UST system in accordance with R18-12-220 or R18-12-221;
 3. A change in leak detection status in accordance with R18-12-240 through R18-12-245;
 42. Temporary closure in accordance with R18-12-270;
 53. Return to active service following temporary closure in accordance with R18-12-270(DA);
 64. Permanent closure or change-in-service in accordance with R18-12-271 through R18-12-274;
 75. A change in the contents of the UST system among the categories of regulated substances described in subsections (B)(20), (21), or (22);
 86. A change in status of financial responsibility in accordance with R18-12-300 through R18-12-325.
- GH.** In the case of a change of ownership of an UST system, one of the following shall occur:
1. When a vendor sells an UST system or a tank for use as an UST after May 8, 1986, the vendor shall inform the purchaser, on a form prescribed by the Department, that the Resource Conservation and Recovery Act (RCRA) requires owners of certain underground storage tanks to notify the Department within 30 days of the existence of the tank.
 2. When a person transfers ownership of an UST system, both of the following shall occur:
 - a. The transferor shall inform the Department in writing of the transfer of its interest in the UST system including the name and address of the transferor and transferee, name and telephone number of the contact person for the transferee and effective date of the transfer. In addition, the transferor shall advise the transferee of the notification requirements of this Section, utilizing the form referenced in subsection (G)(1);
 - b. The transferee shall submit to the Department a completed Notification Form within 30 days of the transfer of interest.
- I.** Owners and operators of tanks partially excluded under R18-12-210(C) shall submit a Notification Form under this Section covering each partially excluded tank and provide the information in subsections (B)(1) through (B)(12), (B)(19), and (B)(20) of this Section. Owners and operators of tanks partially excluded under R18-12-210(C)(4) are not required to provide the information in subsection (B)(9).

R18-12-230. Spill and Overflow Control

- A. Owners and operators shall ensure that releases due to spilling or overfilling do not occur. Owners and operators shall ensure, before the transfer is made, that the volume then available in the tank is greater than the volume of regulated substance to be transferred to the tank. Owners and operators also shall ensure that the operation is monitored constantly to prevent overfilling and spilling. Compliance with this subsection shall be determined in accordance with the performance standards set forth in R18-12-281(J)(I).
- B. Owners and operators shall report, investigate, and clean up any spills and overfills in accordance with A.R.S. §§ 49-1004 and 49-1005 and the rules promulgated thereunder, including R18-12-251(A) and R18-12-260.

R18-12-231. Operation and Maintenance of Corrosion Protection

- A. A corrosion protection system shall be operated and maintained to continuously provide corrosion protection to the metal components of an UST system which are subject to the corrosion protection requirements of R18-12-220 and R18-12-221 and to piping which routinely contains regulated substances and is in contact with the ground.
- B. An UST system equipped with cathodic protection systems shall be inspected for proper operation by a qualified cathodic protection tester. Owners and operators shall ensure compliance with both of the following requirements:
 - 1. A cathodic protection system shall be tested within six months of installation and at least every three years thereafter,
 - 2. The criteria that are used to determine that cathodic protection is adequate as required by this Section shall be in accordance with the performance standards codes of practice set forth in R18-12-281(K)(I).
- C. An UST system with an impressed current cathodic protection system, in addition to meeting the requirements of subsections (A) and (B) shall be inspected every 60 days to ensure the equipment is operating in accordance with its design specifications.
- D. For an UST system using cathodic protection, records of the operation of the cathodic protection shall be maintained in accordance with R18-12-234 to demonstrate compliance with the performance standards in this Section and R18-12-281(J). These records shall provide the following:
 - 1. The results of testing from the last two inspections required by subsection (B),
 - 2. The results of the last three inspections required by subsection (C).

R18-12-232. Compatibility

- A. Owners and operators shall use an UST system made of or lined with materials that are compatible with the substance stored in the UST system. Compliance with this Section shall may be determined in accordance with the performance standards set forth code of practice in R18-12-281(L)(K).
- B. Owners and operators shall notify the Department at least 30 days prior to switching to a regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any blend of isobutanol. In addition, owners and operators with UST systems storing these regulated substances shall meet one of the following:
 - 1. Demonstrate compatibility of the UST system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill

equipment). Owners and operators may demonstrate compatibility of the UST system by using one of the following options:

- a. Certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or
 - b. Equipment or component manufacturer approval. The manufacturer's approval shall 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 and the environment than the options listed in subsection (B)(1) of this Section.

C. Owners and operators shall maintain records in accordance with R18-12-234(B) documenting compliance with subsection (B) of this Section for as long as the UST system is used to store the regulated substance.

R18-12-233. Repairs Allowed

A. Owners and operators of an UST system shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs shall meet the following requirements:

1. Repairs to an UST system shall be properly conducted in accordance with performance standards set forth an applicable code of practice developed by a nationally recognized association or independent testing laboratory as specified in R18-12-281(M)(L);
2. Repairs to a fiberglass-reinforced plastic tank shall may be made by the manufacturer's authorized representative or in accordance with a performance standard the code of practice set forth in R18-12-281(N)(M);
3. Any metal pipe sections and fittings that have released a regulated substance as a result of corrosion or other damage shall be replaced. Fiberglass **Non-corrodible** pipe and fittings shall may be repaired in accordance with the manufacturer's specifications or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

B. Repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping shall have the secondary containment tested for tightness according to the manufacturer's instructions, a code of practice developed by a nationally recognized association or independent testing laboratory, or according to requirements established by the Department within 30 days following the date of completion of the repair. All other repairs to Repaired tanks and piping shall be tightness tested in accordance with the specifications described in R18-12-243(C) and R18-12-244(B) within 30 days following the date of the completion of the repair unless one of the following procedures is employed:

1. The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory listed in R18-12-281(N);
2. The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in R18-12-243(D) through (H)(I); or

3. Another test method is used that is determined by the Department to be no less protective of human health and the environment than those otherwise listed in subsections (B)(1) and (2).
- C.** Within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with R18-12-231(B) and (C) to ensure that it is operating properly.
- D.** Within 30 days following any repair to spill or overfill prevention equipment, the repaired spill or overfill prevention equipment shall be tested or inspected, as appropriate, in accordance with R18-12-235 to ensure it is operating properly.
- DE.** Owners and operators of an UST system shall maintain records of each repair for the remaining operational life of the UST system that demonstrate compliance with the requirements of this Section until the UST system is permanently closed or undergoes a change-in-service pursuant to R18-12-271.

R18-12-234. Reporting and Recordkeeping

- A.** Owners and operators shall submit notification notifications for all UST systems in accordance with R18-12-222. Additionally, owners and operators shall submit the following information to the Department:
1. Reports of all releases including suspected releases according to R18-12-251, confirmed releases according to R18-12-260, and spills and overfills according to R18-12-230 in accordance with A.R.S. § 49-1004;
 2. Corrective actions planned or taken including initial investigation and abatement and site characterization measures in accordance with A.R.S. § 49-1005 R18-12-261, free product removal according to R18-12-261.02, investigation of soil and groundwater cleanup according to R18-12-262, and a corrective action plan according to R18-12-263 and R18-12-263.02;
 3. The information required in accordance with R18-12-271 before starting permanent closure or change-in-service;
 4. The site assessment closure report in accordance with R18-12-271(DE) for owners and operators who are permanently closing or making a change in service to an UST system.
- B.** Owners and operators shall maintain all of the following information:
1. A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used in accordance with under R18-12-211(B), R18-12-220(B)(4) and or R18-12-220(C)(3);
 2. Documentation of operation of corrosion protection equipment in accordance with R18-12-231;
 3. Documentation of compatibility for UST systems as required by R18-12-232;
 34. Documentation of UST system repairs in accordance with R18-12-233(D)(E);
 5. Documentation of compliance for spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping as required by R18-12-235(B);
 6. Documentation of periodic walkthrough inspections as required by R18-12-236(B);
 47. Documentation of compliance with release detection requirements in accordance with R18-12-245.;
 8. Documentation of operator training according to R18-12-237.

- C. Unless otherwise arranged with the Department through pre-inspection communication, owners Owners and operators shall keep the records required by subsection (B) either:
1. At the UST site and immediately available for inspection by the Department, or
 2. At a readily available alternative site and be provided provide those records for inspection to the Department upon request within one business day.
- D. Unless otherwise required, owners and operators may maintain either paper or electronic records to demonstrate compliance with this Chapter. Electronic records shall contain all of the information required for paper records.

R18-12-235. Reserved Periodic Testing of Spill Prevention Equipment and Containment Sumps Used for Interstitial Monitoring of Piping and Periodic Inspection of Overfill Prevention Equipment

- A. Owners and operators of UST systems with spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping shall 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 shall 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 R18-12-236. Owners and operators shall begin meeting subsection (A)(1)(b) of this Section and conduct a test within 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 (Note: Owners and operators may use this option only if the manufacturer has developed requirements);
 - ii. Code of practice developed by a nationally recognized association or independent testing laboratory; or
 - iii. Requirements determined by the Department to be no less protective of human health and the environment than the requirements listed in subsections (A)(1)(b)(i) and (ii) of this Section. The Department’s “Low Level Hydrostatic Testing for Underground Storage Tank Containment Sumps”, amended October 9, 2018, may be used to comply with this subsection (iii) if the system has automatic shutoff of dispenser or submersible pump, as appropriate, to prevent further regulated substances from entering the sump.
 2. Overfill prevention equipment shall be inspected at least once every three years. At a minimum, the inspection shall ensure that overfill prevention equipment is set to activate at the correct level specified in R18-12-220(D) and will activate when regulated substance reaches that level. Inspections shall be conducted in accordance with one of the criteria in subsection (A)(1)(b)(i)-(iii) of this Section.

The following code of practice may be used to comply with subsections (A)(1)(b) and (A)(2) of this Section: Petroleum Equipment Institute Publication RP1200-17, “Recommended

Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities”.

B. Owners and operators shall begin meeting these requirements as follows:

1. For UST systems in use on or before January 1, 2020, the initial spill prevention equipment test, containment sump test and overfill prevention equipment inspection shall be conducted not later than March 1, 2020.
2. For UST systems brought into use after January 1, 2020, these requirements apply at installation.
3. Owners and operators shall maintain records as follows (in accordance with R18-12-234) for spill prevention equipment, containment sumps used for interstitial monitoring of piping, and overfill prevention equipment:
 - a. All records of testing or inspection shall be maintained for three years; and
 - b. 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 shall be maintained for as long as the equipment is periodically monitored.

R18-12-236. Reserved Periodic Operation and Maintenance Walkthrough Inspections

A. To properly operate and maintain UST systems, owners and operators shall 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 (Exception: spill prevention equipment at UST systems 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; or
2. Conduct operation and maintenance walkthrough inspections according to a standard code of practice developed by a nationally recognized association or independent testing laboratory that checks equipment comparable to subsection (A)(1) of this Section; or
3. Conduct operation and maintenance walkthrough inspections developed by the Department that checks equipment comparable to subsection (A)(1) of this Section.

The following code of practice may be used to comply with subsection (A)(2) of this Section: Petroleum Equipment Institute RP900-17, "Recommended Practices for the Inspection and Maintenance of UST Systems".

- B.** Owners and operators shall maintain records (in accordance with R18-12-234) of operation and maintenance walkthrough inspections for one year from the date of the walkthrough inspection. Records may be on a form provided by the Department and shall 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.

R18-12-237. Reserved Operator Training

- A.** Owners and operators shall provide and document training as provided in this Section for operators designated under A.R.S. § 49-1083:

1. For class A and B operators, document the name of the trainee, the date trained, the operator training class completed, the name of the trainer or examiner if applicable, and the training company name, address, and telephone number on a form provided by the Director. A copy of a certificate or other documentation of training, which includes the trainee's name, an acceptable source of instruction, the date(s) of instruction, and the results of any examination, may be substituted.
2. Each current class C operator for the facility shall be entered into a log kept on site legibly showing each operator's name, the date(s) of instruction, and the source of instruction.
3. The records in subsections (1) and (2) above shall be maintained at the facility for at least 3 years from the date of training, or off site if they can be made available to the Director within one business day.

- B.** Class A operator training shall include all of the following:

1. The requirements associated with notification under section 49-1002, release detection under section 49-1003, reporting requirements under section 49-1004, financial responsibility under section 49-1006, closure under section 49-1008, underground storage tank performance under section 49-1009, delivery prohibition under section 49-1023, operator training under section 49-1083, and the rules adopted under those sections, as applicable.
2. The purpose, methods, and function of:
 - a. Spill and overfill prevention;
 - b. Release detection;
 - c. Corrosion protection
 - d. Emergency response;
 - e. Product and equipment compatibility and demonstration;
 - d. Temporary closure;
 - e. Environmental and regulatory consequences of releases; and
3. Class B and class C operator requirements.

- C.** Class B operator training shall include all of the following:

1. The requirements associated with release detection under section 49-1003, reporting requirements under section 49-1004, underground storage tank performance under section 49-1009, delivery prohibition under section 49-1023, and the rules adopted under those sections, as applicable.

2. The purpose, methods, and function of:
 - a. Operation and maintenance;
 - b. Spill and overfill prevention,
 - c. Release detection and related reporting;
 - d. Corrosion protection;
 - d. Emergency response,
 - e. Product and equipment compatibility and demonstration;
 - f. Reporting, recordkeeping, testing, and inspections
 - g. Environmental and regulatory consequences of releases,
 - h. Training requirements for Class C operators,

D. Class C operator training shall provide individuals the knowledge and skills to take appropriate action in response to emergencies or alarms caused by spills or releases from an underground storage tank system, including procedures for contacting a class A or class B individual and any emergency responder.

E. The following sources of instruction are acceptable:

1. Training workshops or online training provided through ADEQ;
2. Any training program or comparable examination developed or administered by an independent organization or recognized authority that meets the minimum requirements of this Section and includes an evaluation through testing, a practical demonstration, or another approach acceptable to the Department.
3. A training program developed and administered in house, if acceptable to the Department after a review initiated during a site visit. An outline of the in house operator training program completed shall be available at the facility or off site if it can be made available to the Director within one business day.

F. The following training formats are acceptable:

1. Distance learning/internet courses
2. On-site courses
3. Classroom and conference style courses

G. Class A, B, and C operators shall be retrained at the following times:

1. Every 3 years;
2. When switching classifications from C to B, from B to A, or from C to A;
3. When changing facilities, unless the equipment is identical, or unless the operator is already trained for multiple facilities; and
4. Class A and class B operators of UST systems determined by the Director to be out of compliance under A.R.S § 49-1083(D). At a minimum, the retraining shall cover each area determined to be out of compliance.

H. Upon request, the Director may excuse retraining under subsection (G) for good cause.

R18-12-240. General Release Detection Requirements for All UST Systems

A. Owners and operators of a new or existing UST system shall provide a method, or combination of methods, of release detection that meets all of the following requirements:

1. Can detect a release from any portion of the tank and the connected underground piping that routinely contains a regulated substance;
2. Is installed, and calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition;

3. 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 code of practice developed by a nationally recognized association or independent testing laboratory; or requirements determined by the Director to be no less protective of human health and the environment than the two options in subsections (A)(1) and (A)(2) above. A test of the proper operation shall 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 or running condition and communication with controller;
 - c. Automatic line leak detector: test operation to meet criteria in R18-12-244(A) by simulating a leak;
 - d. Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller; and
 - e. Hand-held electronic sampling equipment associated with groundwater and vapor monitoring: ensure proper operation.

Note to subsection (A)(3): The following code of practice may be used to comply with subsection (A)(3) of this Section: Petroleum Equipment Institute Publication RP1200-17, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities”.

- 34. Meets the performance requirements in R18-12-243 or R18-12-244, or Article 9, as applicable, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer; and
 - 45. For the methods listed in R18-12-243(B), (C), (D), (H), and (I), R18-12-244(A) and(B), and Article 9, is Is capable of detecting the leak rate or quantity specified for that method in R18-12-243 or R18-12-244 with a Probability of Detection (PD) of a release of 0.95 and a Probability of False Alarm (PFA) of 0.05 by the date shown in subsections (A)(4)(a) or (b) unless the method was permanently installed prior to that date:
 - a. Manual Tank Gauging, in accordance with R18-12-243(B); Tank Tightness Testing, in accordance with R18-12-243(C); Automatic Tank Gauging, in accordance with R18-12-243(D); Line Tightness Testing, in accordance with R18-12-244(B): December 22, 1990;
 - b. Automatic Line Leak Detectors, in accordance with R18-12-244(A): September 22, 1991.
- B.** When a release detection method operated in accordance with the performance standards in R18-12-243 and, R18-12-244, or Article 9 indicates a release may have occurred, owners and operators shall inform the Department in accordance with A.R.S. § 49-1004 R18-12-251.
- C.** Owners and operators of an UST system shall comply with the release detection requirements of this Section and R18-12-241 through R18-12-245 by December 22 of the year listed in the following table:

**SCHEDULE FOR PHASE-IN OF RELEASE
DETECTION**

 Year When release detection is required

system (by December 22 of the year indicated)
 installed 1989 1990 1991 1992 1993

| | | | | | |
|-----------------|----|------|----|----|----|
| Before 1965 | RD | P | | | |
| or date unknown | | | | | |
| 1965-69.. | | P/RD | | | |
| 1970-74.. | | P | RD | | |
| 1975-79.. | | P | | RD | |
| 1980-88.. | | P | | | RD |

New tanks (after December 22, 1988) immediately upon installation.

P = shall begin release detection for all pressurized piping as defined in R18-12-241(B)(1).
 RD = shall begin release detection for tanks and suction piping in accordance with R18-12-241(A), (B)(2), and R18-12-242.

DC. Any existing UST system that cannot apply a method of release detection that complies with the requirements of this Section and R18-12-241 through R18-12-245 shall complete the closure procedures in R18-12-270 through R18-12-274 by the date on which release detection is required for that UST system under subsection (C).

R18-12-241. Release Detection for Petroleum UST Systems

A. Owners and operators of petroleum UST systems shall provide release detection for tanks. Tanks installed on or before January 1, 2009 so that the tanks are shall be monitored for releases at least once every month using one of the methods listed in R18-12-243(D) through (H) (I) except that:

1. An UST system that meets the new or upgraded UST system performance standards of R18-12-220 or R18-12-221, and the monthly inventory control requirements of R18-12-243(A) or the manual tank gauging requirements of R18-12-243(B), may use tank tightness testing conducted in accordance with R18-12-243(C) at least every five years until December 22, 1998, or until 10 years after the tank is was installed or upgraded, whichever is later. The initial tank tightness test shall be performed on or before the compliance date for the tank in accordance with R18-12-240(C); and
2. An UST system that does not meet the performance standards in R18-12-220 or R18-12-221 may use annual tank tightness testing conducted in accordance with R18-12-243(C) in conjunction with either monthly inventory control conducted in accordance with R18-12-243(A) or the manual tank gauging requirements of R18-12-243(B) until December 22, 1998, when the tank shall be upgraded under R18-12-221 or permanently closed under R18-12-271 through R18-12-274. The initial tank tightness test shall be performed on or before the compliance date for the tank as set forth in R18-12-240(C);
32. A tank with a capacity of 550 gallons or less or a tank with a capacity of 551 to 1,000 gallons that meets the tank diameter criteria in R18-12-243(B) may use manual tank gauging conducted in accordance with R18-12-243(B) as a sole method for leak detection.

- B.** Tanks installed after January 1, 2009, shall be monitored for releases at least once every month using one of the methods listed in accordance with R18-12-243(D)(G).
- BC.** Owners and operators of petroleum UST systems shall provide release detection for underground piping installed on or before January 1, 2009 so that. Underground piping that routinely contains petroleum shall be is monitored for releases in a manner that meets one of the following requirements:
1. Underground piping that conveys petroleum under pressure shall meet both of the following requirements:
 - a. Be equipped with an automatic line leak detector which meets the requirements of R18-12-244(A);
 - b. Have an annual line tightness test conducted in accordance with R18-12-244(B) or have monthly monitoring conducted in accordance with R18-12-244(C).
 2. Except as otherwise provided in this subsection, underground piping that conveys petroleum under suction shall either have a line tightness test conducted at least every three years in accordance with R18-12-244(B), or use a monthly monitoring method conducted in accordance with R18-12-244(C). Release detection is not required for suction piping that is designed and constructed to meet all of the following standards:
 - a. The below-grade piping operates at less than atmospheric pressure;
 - b. 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;
 - c. Only one check valve is included in each suction line;
 - d. The check valve is located directly below and as close as practical to the suction pump and is capable of being inspected;
 - e. A method is provided that allows compliance with the requirements of subsections (B)(2)(a) through (d) to be readily determined.
- D.** Piping installed or replaced after January 1, 2009 shall meet one of the following:
1. Pressurized piping shall be monitored for releases at least every 30 days in accordance with R18-12-243(G) and be equipped with an automatic line leak detector in accordance with R18-12-244(A);
 2. Suction piping shall be monitored for releases at least every 30 days in accordance with R18-12-243(G). No release detection is required for suction piping that meets paragraphs (C)(2)(a) through (e) of this Section.

R18-12-242. Release Detection for Hazardous Substance UST Systems

- A.** Owners and operators of existing hazardous substance UST systems shall provide release detection containment that meets the following requirements for petroleum UST systems in R18-12-241 and monitor these systems using R18-12-243(G) at least monthly: By December 22, 1998, each existing hazardous substance UST system shall be upgraded to meet the release detection requirements for new hazardous substance UST systems in subsection (B).
- B.** Owners and operators of a new hazardous substance UST system shall provide release detection which meets the following requirements:
1. Secondary containment systems shall be designed, constructed, and installed to meet all of the following requirements:
 - a. Contain regulated substances released leaked from the UST system primary containment until they are detected and removed,

- b. Prevent the release of regulated substances to the environment at any time during the operational life of the UST system,
 - c. Be checked for evidence of a release at least monthly.
- 2. Double-walled tanks shall be designed, constructed, and installed to meet both of the following requirements:
 - a. Contain a release leak from any portion of the inner tank within the outer wall,
 - b. Detect the failure of the inner wall.
- 3. External liners, including vaults, shall be designed, constructed, and installed to meet all of the following requirements:
 - a. Contain 100% of the capacity of the largest UST system within its boundary,
 - b. Prevent the interference of precipitation or ground-water groundwater intrusion with the ability to contain or detect a release of regulated substances,
 - c. Surround the tank completely so that it is capable of preventing lateral as well as vertical migration of regulated substances.
- 4. Underground piping shall be equipped with secondary containment that satisfies the requirements of subsection (B)(1) ~~this Section (e.g., trench liners, double-walled pipe).~~ and ~~In addition,~~ underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with R18-12-244(A).
- 5. ~~For hazardous substance UST systems installed on or before January 1, 2020, methods of release detection other than those described in subsections (B)(1) through (4) may be used if owners and operators meet all of the following requirements:~~
 - a. Demonstrate to the Department that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in R18-12-243(B) through (H)(I) can detect a release of petroleum;
 - b. Provide information to the Department on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site;
 - c. Obtain approval from the Department in writing to use the alternate release detection method before the installation and operation of the UST system.

R18-12-243. Methods of Release Detection for Tanks

- A. If inventory control is used to meet the requirements of R18-12-241, it shall be used in conjunction with tank tightness testing described in subsection (C). Inventory control shall be conducted monthly in accordance with R18-12-281(O) to detect a release of at least 1.0% of flow-through plus 130 gallons on a monthly basis in the following manner:
 - 1. Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;
 - 2. The equipment used is capable of measuring the level of the regulated substance over the full range of the tank's vertical dimension to the nearest 1/8 of an inch;
 - 3. The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;
 - 4. Measurements, as well as deliveries ~~Deliveries~~ of regulated substances, are made through a drop tube that extends to within one foot of the tank bottom;
 - 5. Dispensing of regulated substances is metered and recorded within the standards established by the entity with jurisdiction. If no standards are established, dispensing

which meets an accuracy of six cubic inches for every five gallons of regulated substance withdrawn shall be used;

6. The measurement of any water level in the bottom of the tank is made to the nearest 1/8 of an inch at least once a month;
7. Inventory control shall not be utilized as the sole method of release detection.

B. Manual tank gauging used to meet the requirements of R18-12-241 shall meet all of the following requirements:

1. Tank liquid level measurements are taken on a weekly basis at the beginning and ending of a period of at least 36 hours equal to the appropriate minimum duration of test in the table below during which no liquid is added to or removed from the UST system;
2. Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period;
3. The equipment used is capable of measuring the level of regulated substance over the full range of the tank's vertical dimension to the nearest 1/8 of an inch;
4. A leak release is suspected and subject to the requirements of A.R.S. § 49-1004 and the rules promulgated thereunder if the statistical variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table:

| Nominal Tank Capacity | Minimum duration of test | Weekly standard (1 test) | Monthly standard (average of 4 tests) |
|---|--------------------------|--------------------------|---------------------------------------|
| 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 |

5. Manual tank gauging may be used as the sole method of release detection only for tanks of 550 gallons or less capacity and tanks with a nominal capacity of 551 to 1,000 gallons that meet the tank diameter criteria in the table in subsection (B)(4) of this Section. Manual tank gauging may be used in place of inventory control in subsection (A), for all other tanks of 551 to 2,000 gallons. This method shall not be used to meet the requirements of R18-12-241 for tanks of greater than 2,000 gallons capacity.

C. If tank Tank tightness testing is used to meet the requirements of R18-12-241, it shall be used in conjunction with the inventory control method described in subsection (A) or the manual tank gauging method described in subsection (B) and shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

D. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control used to meet the requirements of R18-12-241 shall meet both all of the following requirements:

1. The automatic regulated substance level monitor test shall be performed at least monthly and be capable of detecting a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains regulated substance,
 2. The automatic tank gauging equipment shall meet the inventory control (or other test of equivalent performance) shall be conducted in accordance with the requirements of subsection (A). , and
 3. The test shall be performed with the system operating in one of the following modes:
 - a. In-tank static testing conducted at least once monthly; 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 monthly.
- E.** Testing or monitoring for vapors within the soil gas of the excavation zone used to meet the requirements of R18-12-241 shall be conducted at least monthly and shall meet all of the following requirements:
1. The characteristics of In the UST excavation zone, the site are is assessed to ensure that the leak detection method will comply with the requirements in subsections (E)(2) through (8)(6);
 2. The leak detection system is constructed and designed so that the number and positioning of monitoring wells will detect releases into the excavation zone from any portion of the system which routinely contains a regulated substance within 30 days from the date of commencement of a release;
 3. The stored regulated substance, or a tracer compound placed in the UST system, will produce a vapor level that is detectable by the monitoring devices in the monitoring wells within 30 days from the date of commencement of a release from the UST system;
 4. The materials used as backfill will allow diffusion of vapors from releases into the excavation area such that a release is detected within 30 days from the date of commencement of a release from the UST system;
 5. The groundwater, rainfall, soil moisture, or other known interferences will not render the measurement of vapors by the monitoring device inoperable so that a release could go undetected by the monitoring devices in the monitoring wells for more than 30 days from the date of commencement of the release from the UST system;
 6. The level of background contamination at the site will not interfere with the method used to detect releases from the tank system;
 7. The vapor monitors are designed and operated to detect any significant increase in concentration above a documented background level of the regulated substance stored in the tank system, a component or components of that substance, or a volatile tracer compound placed in the tank system;
 8. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.
- F.** Testing or monitoring for liquids on the groundwater used to meet the requirements of R18-12-241 shall be conducted monthly and meet the following requirements:
1. The characteristics of Within and immediately below the UST excavation zone, the site are is assessed to ensure that the leak detection method will comply with the requirements in subsections (F)(2) through (9)(7);

2. The leak detection system shall be constructed and designed so that the number and positioning of monitoring wells or devices will detect releases into the excavation zone from any portion of the system which routinely contains a regulated substance;
 3. The regulated substance stored is immiscible in water and has a specific gravity of less than 1;
 4. Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the material between the UST system and the monitoring wells or devices is not less than 0.01 centimeters per second (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);
 5. Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;
 6. The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;
 7. Monitoring wells shall be sealed from the ground surface to the top of the filter pack;
 78. The continuous monitoring devices or manual methods used can detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells;
 8. Monitoring wells shall be sealed from the ground surface to the top of the filter pack;
 9. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.
- G.** Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it which is used to meet the requirements of R18-12-241 shall be conducted at least monthly and shall be designed, constructed and installed to detect a leak from any portion of the UST system that routinely contains a regulated substance, and shall meet one of the following requirements:
1. For double-walled UST systems, the sampling or testing method shall be able to detect a release leak through the inner wall in any portion of the UST system that routinely contains a regulated substance.
 2. For UST systems with a secondary barrier within the excavation zone, characteristics of the site and system components shall be designed and constructed to detect a release leak between the UST system and the secondary barrier and shall meet all of the following requirements:
 - a. The secondary barrier around or beneath the UST system shall be constructed of synthetic materials which are sufficiently thick and impermeable to prevent structural weakening of the secondary barrier as a result of contact with any released regulated substance. The rate of permeability shall not exceed 10^{-6} centimeters per second for the regulated substance stored. In addition, the secondary barrier shall be capable of directing any release leak to the monitoring point and permit its detection;
 - b. The barrier is compatible with the regulated substance stored so that a release leak from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;
 - c. For cathodically protected UST systems, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;
 - d. The groundwater, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than 30 days;

- e. The characteristics of the UST site are assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions;
 - f. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.
3. For tanks with an internally fitted liner, an automated device shall be able to detect a release leak between the inner wall of the tank and the liner, and the liner shall be compatible with the substance stored.

H. ~~Statistical inventory reconciliation. Release detection methods based on the application of statistical principles to inventory data similar to those described in R18-12-243(A) shall meet the following requirements:~~

- ~~1. Report a quantitative result with a calculated leak rate;~~
- ~~2. Be capable of detecting a leak rate of 0.2 gallon per hour or a release of 150 gallons within 30 days; and~~
- ~~3. Use a threshold that does not exceed one-half the minimum detectible leak rate.~~

HI. Any other type of release detection method, or combination of methods, may be used to meet the requirements of R18-12-241 if all of the following requirements are met:

- 1. The monitoring is conducted at least monthly;
- 2. The Department determines that the method meets either of the following requirements:
 - a. The method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within 30 days with probability of detection and probability of false alarm in accordance with R18-12-240(A)(4);
 - b. Owners and operators ~~The owner and operator~~ can demonstrate that the method is able to detect a release as effectively as any of the methods allowed in subsections (C) through (G)(H). In comparing methods, the Department shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, owners and operators ~~the owner and operator~~ shall comply with any conditions imposed by the Department on its use to ensure the protection of human health and the environment.

R18-12-244. Methods of Release Detection for Piping

- A.** An automatic line leak detection method for piping used to meet the requirements of R18-12-241 which alerts the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if it detects leaks 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 shall be conducted in accordance with the manufacturer's requirements ~~R18-12-240(A)(3)~~;
- B.** A periodic line tightness test of piping may be used as a method of release detection for piping for the purpose of meeting the requirements of R18-12-241 only if it can detect a 0.1 gallon per hour leak rate, at 1½ ~~one and one-half~~ times the operating pressure.
- C.** ~~Except as described in R18-12-241(A), any~~ Any of the applicable tank methods described in R18-12-243(E) through (H)(I) may be used as a method of release detection for piping for the purpose of meeting the requirements of R18-12-241 if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

R18-12-245. Release Detection Recordkeeping

- A. Owners and operators shall maintain records in accordance with R18-12-234 demonstrating compliance with all applicable requirements of R18-12-240 through R18-12-244. The following records shall be maintained for the operational life of the release detection system or five years from the date as indicated below, whichever is the shorter time period:
1. 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 the installer shall be maintained for five years from. The retention period shall start at the date of installation. Records of site assessments required under R18-12-243(E)(1) and (F)(1) shall be maintained for as long as the methods are used. Records of site assessments shall be signed by a professional engineer or professional geologist, or equivalent licensed professional with experience in environmental engineering, hydrogeology, or other relevant technical discipline acceptable to the Department.
 2. Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least one year after the servicing work is completed. The retention period shall start at the date of completion of the servicing work.
- B. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be maintained for at least five years from the date of installation.
- C. Except as otherwise provided in subsection (D), the results of any sampling or testing, or monitoring shall be maintained for at least five years one year from the date of receipt by owners and operators of the results.
- D. The following are exceptions to subsection (C):
1. The results of annual operation tests conducted in accordance with R18-12-240(A)(3) shall be maintained for three years. At a minimum, the results shall list each component tested, indicate whether each component tested meets criteria in R18-12-240(A)(3) or needs to have action taken, and describe any action taken to correct an issue;
 2. Passing results of tank tightness testing conducted in accordance with R18-12-243(C) shall be retained from the date of receipt by owners and operators of the results until the next test is conducted and the results of that test are received.;
 3. Passing results of tank tightness testing, line tightness testing, and vapor monitoring using a tracer compound placed in the tank system conducted in accordance with R18-12-952 D)(2)(b) shall be retained until the next test is conducted; and
 4. Failing results from subsections (D)(2) and (D)(3) above shall be retained for one year after the next test is conducted for which a passing result is received.
- E. Results of any monitoring shall be maintained for at least one year from the date of receipt by owners and operators of the monitoring results.

R18-12-250. Applicability and Scope

- A. Release reporting and corrective action. Except for a release from an UST system excluded by R18-12-210(B), or for the corrective action requirements of R18-12-260 through R18-12-264.01, for a release subject to Subtitle C corrective action requirements in Section 3004(u)

of RCRA, as amended, R18-12-250 through R18-12-264.01 apply to a release or suspected release discovered:

1. On or after the effective date of this Section August 20, 2002; or
 2. Before the effective date of this Section August 20, 2002, but only for those sections of R18-12-250 through R18-12-264.01 with required activities not initiated by the effective date of this Section August 20, 2002.
- B.** No supersedence. Nothing in R18-12-250 through R18-12-264.01 supersedes any of the following:
1. Immediate reporting to the National Response Center and to the Division of Arizona Emergency Services Response Commission within the Arizona Department of Emergency and Military Affairs Environmental Quality, under CERCLA, and SARA Title III;
 2. A CAP submitted to the Department under 40 CFR 280.66 before the effective date of this Section August 20, 2002 and subsequently approved; and
 3. A work plan under the UST Assurance Fund preapproval requirements of Article 6 of this Chapter submitted to the Department before the effective date of this Section and subsequently approved.

R18-12-251. Suspected Release Releases; Secondary Containment Leaks

- A.** 24 hour notification notifications. An owner or operator shall notify the Department, within 24 hours of either of the following:
1. after discovery Discovery of a suspected release, except for either:
 - 1a. A spill or overfill of 25 gallons or less of petroleum, or a hazardous substance that is less than its reportable quantity under CERCLA, contained and cleaned up within 24 hours, or
 2. The conditions described in A.R.S. § 49-1001(16)(b) or (c)(i) exist for 24 hours or less.
 - b. Monitoring results, including investigation of an alarm, from a release detection method required under R18-12-241, R18-12-242 or R18-12-243(G) that indicate a release may have occurred if one of the following is true:
 - i. 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
 - ii. The leak is contained in the secondary containment and:
 - (1) Except as provided for in R18-12-243(G)(2)(d), any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed, and
 - (2) Any defective system equipment or component is immediately repaired or replaced; or
 - iii. In the case of inventory control described in R18-8-243(A), a second month of data does not confirm the initial result or the investigation determines no release has occurred; or
 - iv. 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).

2. Discovery of liquid in the interstitial space of secondarily contained systems unless the leak is contained in the secondary containment and all of the following are true:
- a. The system equipment or component is found not to be releasing regulated substances to the environment;
 - b. Any defective system equipment or component is immediately repaired or replaced; and
 - c. For secondarily contained systems, except as provided for in R18-12-243(G)(2)(d), any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed.
- B.** 24 hour notification content. If known, the The notification shall identify the:
1. Individual notifying the Department;
 2. UST involved and the reason for notifying the Department;
 3. Facility involved;
 4. Owner and the operator of the UST facility; and
 5. Investigation and containment actions taken as of the date of the notification.
- C.** Requirement to investigate suspected releases. Within 90 ~~60~~ calendar days from the suspected release discovery date or the suspected release notification date, whichever is earlier, an owner or operator shall complete the investigation requirements of this subsection and confirm whether the suspected release is a release. The investigation shall include:
1. Tightness tests of the tank and all connected piping meeting the requirements of R18-12-243(C) and R18-12-244(B), or, as appropriate, secondary containment testing as described in R18-12-233(B). The tests shall determine whether a leak exists in that portion of the tank that routinely contains product, or the attached delivery piping, or whether a breach of either wall of the secondary containment has occurred. Further investigation is required if the results of the tightness test tests indicate that the system is either not tight or contaminated media is the basis for suspecting a release.
 2. If further investigation is required under subsection (1), a site check meeting the requirements of this subsection must shall be performed. An The owner or operator shall measure for the presence of a release where contamination is likely to be present and shall consider the:
 - a. Nature The nature of the regulated substance;
 - b. Type The type of initial alarm or cause for suspicion;
 - c. Type The type of backfill;
 - d. Depth The depth to groundwater; and
 - e. Conditions of the regulated substance and the site in identifying the presence and source of the release Other factors appropriate for identifying the presence and source of the release.
- D.** Interstice Leak or Release Confirmation. If the testing confirms a leak into the interstice or a release, the owner or operator shall repair, replace, upgrade or close the UST system. If In addition, if a release is confirmed, the owner or operator shall notify the Department as required by R18-12-260(A), cease further compliance with this Section, and perform corrective actions under R18-12-260 through R18-12-264.01
- E.** 14 day report. The owner or operator shall submit a written status report, on a form provided by the Department, within 14 calendar days after the suspected release discovery date or the suspected release notification date, whichever is earlier. If the suspected release is confirmed to be a release within the 14 day period, the 14 day report is satisfied when the report

required by R18-12-260(C) is submitted. If known on the date the 14 day report is submitted, an owner or operator shall identify the:

1. UST that is the source of the suspected release;
 2. Nature of the suspected release;
 3. Regulated substance suspected to be released; and
 4. Initial response to the suspected release.
- F.** 90 day report. If the suspected release is not confirmed to be a release the owner or operator shall submit a written report, on a form provided by the Department, within 90 calendar days after the suspected release discovery date or suspected release notification date, whichever is earlier, showing that the investigation has been completed and a release does not exist. Unless previously submitted, the 90 day report shall identify the:
1. UST suspected to be the source of the release;
 2. Nature of the suspected release;
 3. Regulated substance suspected to be released;
 4. Response to the suspected release;
 5. Repair, recalibration, or replacement of a monthly monitoring device described in R18-12-243(D) through (H) or R18-12-244(C), and any repair or replacement of faulty UST system equipment, including any piping, that may have been the cause of the suspected release;
 6. Results of any tightness test conducted under subsection (C)(1);
 7. Person, if the site check described in subsection (C)(2) was not performed, having direct knowledge of the circumstances of the suspected release who observed contaminated media during the discovery or investigation.
 8. Laboratory analytical results on samples collected during the site check described in subsection (C)(2); and
 9. Site plan showing the location of the suspected release and site check sample collection locations.
- G.** Investigation of suspected releases required by the Department. If the Department becomes aware of an on- or off-site impact of a regulated substance, the owner or operator shall be notified and may be required, based on an assessment of site specific information, to perform an investigation under subsection (C). If an investigation is required, the Department shall describe the type of impact and the rationale for its decision that the UST system may be the source of the impact.

R18-12-252. Reserved Investigation Due to Off-Site Impacts

When required by the Department, owners and operators of UST systems shall follow the procedures in R18-12-250 to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters) that has been observed by the Department or brought to its attention by another party.

R18-12-260. Release Notification, and Reporting

- A.** 24 hour release notification. An owner or operator shall notify the Department within 24 hours after the release confirmation date of the following:
1. A release of a regulated substance;

2. A spill or overflow of petroleum that results in a release exceeding 25 gallons, or causes a sheen on nearby surface water that is reportable to the National Response Center under 40 CFR 110;
 3. A spill or overflow of petroleum resulting in a release of 25 gallons or less that is not contained and cleaned up within 24 hours;
 4. A spill or overflow of a hazardous substance that equals or exceeds its reportable quantity under CERCLA; and
 5. A spill or overflow of a hazardous substance that is less than the reportable quantity under CERCLA, not contained and cleaned up within 24 hours.
- B.** Release notification information. If known on the date that the 24 hour notification is submitted, an owner or operator shall notify the Department under subsection (A) and shall include the:
1. Individual providing notification;
 2. UST involved and the reason for confirming the release;
 3. Facility involved;
 4. Owner and operator of the facility involved; and
 5. Investigations, containment, and corrective actions taken as of the date and time of the notice.
- C.** 14 day report. An owner or operator shall submit a report, on a form provided by the Department, within 14 calendar days after the release confirmation date. The report shall include:
1. The nature of the release, and the regulated substance and the estimated quantity released;
 2. The elapsed time over which the release occurred;
 3. A copy of the results of any tightness test, meeting the requirements of R18-12-243(C) or R18-12-244(B), performed to confirm the release;
 4. Laboratory analytical results of samples demonstrating the release confirmation; and
 5. The initial response and corrective actions taken as of the date of the report and anticipated actions to be taken within the first 90 calendar days after the release confirmation date.
- D.** UST system modifications. An owner or operator shall repair, ~~replace~~, upgrade, or close the UST system, that is the source of the release, as required under this Article and the owner shall notify the Department as required by R18-12-222.

R18-12-261. Initial Response, Abatement, and Site Characterization

- A.** 24 hour initial response. An owner or operator shall begin response actions within 24 hours of the release confirmation date to prevent any further release, and identify and mitigate fire, explosion, and vapor hazards.
- B.** 60 day initial abatement. An owner or operator shall begin the following initial abatement measures as soon as practicable, but not later than 60 calendar days of the release confirmation date:
1. Removal of as much of the regulated substance from the UST system as is necessary to prevent a further release;
 2. Visually inspect for and mitigate further migration of any aboveground and exposed below ground ~~belowground~~ release into surrounding soils and surface water;
 3. Continue to monitor and mitigate any fire and safety hazards posed by vapors or free product; and

4. Investigate for the possible presence of free product and, if found, initiate the requirements of R18-12-261.02.
- C.** Initial site characterization required. An owner or operator shall develop, from readily available sources, initial site characterization information on site-specific geology, hydrology, receptors, potential sources of the contamination, artificial pathways for contaminant migration, and occupancies of the facility and surrounding area. Information on any discovered free product shall be gathered and a site check, meeting the requirements of R18-12-251(C)(2)(3), shall be performed, unless conducted as part of the investigation of a suspected release.
- D.** 90 day report. An owner or operator shall submit an initial site characterization report to the Department, on a Department provided form, within 90 calendar days after the release confirmation date. If known, the report shall include the:
1. Nature of the release, the regulated substance released, and the estimated quantity of the release;
 2. The estimated time period when the release occurred;
 3. Initial response and abatement actions described in subsections (A) and (B), and any corrective actions taken as of the date of the submission;
 4. Estimated or known site-specific lithology, depth to bedrock, and groundwater depth, flow direction, and quality. The date and source of the information shall be included;
 5. Location, use, and identification of all wells registered with Arizona Department of Water Resources, and other wells on and within one-quarter mile of the facility;
 6. Location and type of receptors, other than wells, on and within one-quarter mile of the facility;
 7. Current occupancy and use of the facility and properties immediately adjacent to the facility;
 8. Data on known sewer and utility lines, basements, and other artificial subsurface structures on and immediately adjacent to the facility;
 9. Copies of any report of any tightness test meeting the requirements under R18-12-243(C) or R18-12-244(B), performed during the investigation of the suspected release;
 10. Laboratory analytical results of samples analyzed and received as of the date of the report;
 11. Site plan showing the location of the facility property boundaries, release, sample collections for samples with laboratory analytical results submitted with the report, and identified receptors;
 12. Current LUST site classification form described in R18-12-261.01(E); and
 13. Information on any free product discovered under R18-12-261.02.; and
 14. Results of any site check required under subsection (C).

R18-12-261.01. LUST Site Classification

- A.** No change
- B.** No change
 1. No change
 2. No change
 3. No change
 4. No change
 5. No change

- 6. No change
- C.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
- D.** No change
- E.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. The regulated substance and the estimated volume (in gallons) released, the UST facility identification number from the notification form described in R18-12-222, the component of the UST where the release occurred, and whether the release is a spill or overfill;
 - 5. No change
 - 6. No change
 - 7. No change
 - 8. No change

R18-12-261.02. Free Product

- A.** Free product investigation. An owner or operator shall investigate for free product if site specific information indicates the potential existence for free product, and if discovered, determine its extent.
- B.** Free product removal. If free product is discovered, the owner or operator shall:
 - 1. Begin removal as soon as practicable;
 - 2. Remove free product in a manner minimizing the spread of contamination using recovery and disposal techniques based on site-specific hydrologic, geologic, and demographic conditions;
 - 3. Comply with local, state, and federal laws or regulations when treating, discharging, or disposing recovery byproducts;
 - 4. Use abatement of free product migration as a minimum objective for the design of the free product removal system; and
 - 5. Handle any flammable product in a safe and competent manner to prevent fire and explosion.
- C.** Forty-five day free product report. If free product is discovered, the owner or operator shall submit a status report, on a Department provided form, within 45 calendar days of free product discovery and with subsequent reports required by the Department. The status report shall contain the following information known at the time of the report:
 - 1. The name of the person(s) responsible for implementing the free product removal measures;
 - 12. The estimated quantity, type, extent and thickness of free product observed or measured in wells, boreholes, and excavations;
 - 23. A description of free product removal measures taken;
 - 34. A description of any discharge that will take place during the recovery operation and where this discharge will be located; and

45. A description of the type of treatment applied to and the effluent quality expected from any discharge.;
6. The steps that have been or are being taken to obtain necessary permits for any discharge;
and
7. The disposition of the recovered free product.

R18-12-262. LUST Site Investigation

- A.** Requirement to investigate. An The owner or operator shall investigate a release at and from a LUST site to determine the full extent of the release of regulated substances and shall:
1. Determine the full extent of contamination;
 2. Identify physical, natural, and artificial features at or surrounding the LUST site that are current or potential pathways for contamination migration;
 3. Identify current or potential receptors; and
 4. Obtain any additional data necessary to determine site-specific corrective action standards and to justify the selection of remedial alternatives to be used in responses to contaminated soil, surface water, and groundwater.
- B.** Completion of investigation activities. The owner or operator shall complete the investigation activities described in subsection (A) and submit the report described in subsection (D) within a time established by the Department.
- C.** Determining the full extent of contamination. The owner or operator shall determine, within each contaminated medium, the full extent, location, and distribution of concentrations of each chemical of concern stored in the UST over its operational life. The full extent of contamination shall be determined upon receipt of laboratory analytical results delineating the vertical and lateral extent of the contamination.
- D.** LUST site characterization report. An The owner or operator shall submit a report of the information developed during the investigation required in subsection (A), in a format approved by acceptable to the Department. The report shall be submitted within the time established in subsection (B). The report submitted under this subsection and an on-site investigation report submitted under A.R.S. § 49-1053 shall contain the following minimum information, except that an on-site investigation report is not required to include the extent of contamination beyond the facility property boundaries:
1. A site history summary;
 2. Information on bedrock, if encountered during the investigation;
 3. The hydrologic characteristics and uses of groundwater and surface water of the local area;
 4. A concise description of factors considered in determining the full extent of contamination;
 5. A concise summary of the results of the investigation including a conceptual site model;
 6. A site vicinity map, site location map and a site plan;
 7. A tabulation of all field screening and laboratory analytical results and water level data acquired during the investigation;
 8. Laboratory sample analytical and associated quality assurance and quality control reports and chain-of-custody forms;
 9. A tabulation of all wells registered with the Arizona Department of Water Resources, and other wells located within one-quarter mile of the facility property boundary;
 10. The lithologic logs for all subsurface investigations; and

11. The as-built construction diagram of each well installed as part of this investigation.
- E. Conditions for approval of the site characterization report. The Department shall approve the site characterization report if the Department determines it meets the requirements of this Section and A.R.S. § 49-1005, and contains the information required by subsection (D), or if the Department has enough information to make an informed decision to approve the report.
 - F. Notice of decision. The Department will shall determine if the conditions in subsection (E) are or are not satisfied and shall either approve or not approve the report and notify an the owner or operator in writing. The notification shall include any conditions on which the approval or non-approval is based and an explanation of the process for resolving disagreements under A.R.S. § 49-1091.

R18-12-263. Remedial Response

- A. Remedial response not required. An owner or operator shall comply with R18-12-263.03 for LUST case closure if a remedial response is not required for any chemical of concern, when contaminant concentrations in each contaminated medium, at the point of compliance, are documented to be at or below the corrective action standard under R18-12-263.01(A)(1).
- B. Remedial response required. The owner or operator shall remediate contamination at and from the LUST site as required by this Section. Remediation activities shall continue until:
 - 1. Contaminant concentration of any chemical of concern, in each contaminated medium, at the point of compliance, is documented to be at or below the corrective action standard determined in R18-12-263.01;
 - 2. The requirements for LUST case closure in R18-12-263.03 are completed and approved by the Department; or
 - 3. The requirements for groundwater LUST case closure in R18-12-263.04 are met and approved by the Department.
- C. Remedial responses that may require a CAP. The Department may request the owner or operator, or the owner or operator may voluntarily submit a CAP, meeting the requirements of this Section, any time after submission of the report in R18-12-261(D). If a CAP is requested, it shall be submitted within 120 calendar days of the owner or operator's receipt of the request, or a longer period of time established by the Department. The Department may request a CAP based on the following:
 - 1. Soil or groundwater contamination extends, or has potential to extend, off the facility property and the LUST site is classification 3 in R18-12-261.01(C);
 - 2. Free product extends off the facility property; and
 - 3. Site-specific conditions indicate a potential level of threat to public health and the environment that is equal to or exceeds the threat in subsections (1) and (2). In determining the extent of threat to public health and the environment, the Department shall consider:
 - a. The nature of the regulated substance and the location, volume, and distribution of concentrations of chemicals of concern in soil, surface water, and groundwater;
 - b. The presence and location of known receptors potentially impacted by the release; and
 - c. The presence of complete exposure pathways.
- D. Remedial responses that require a CAP. At any time after Department approval of the report described in R18-12-261(D), the Department shall request that the owner or operator submit

a CAP meeting the requirements of this Section within 120 calendar days, or a longer period of time established by the Department, if any of the following exist:

1. The LUST site is classification 1 or 2 in R18-12-261.01(C);
 2. The owner or operator proposes a corrective action standard for groundwater or surface water under a Tier 2 or Tier 3 evaluation, described in R18-12-263.01;
 3. The owner or operator proposes a corrective action standard for soil under a Tier 3 evaluation, and the point of compliance extends beyond a facility property boundary; or
 4. The intended response or remediation technology involves discharge of a pollutant either directly to an aquifer or the land surface or the vadose zone. For purposes of this subsection, the term pollutant has the definition at A.R.S. § 49-201.
- E.** Determination of remediation response. The owner or operator shall choose a remediation technology based on the corrective action requirements of A.R.S. § 49-1005(D) and (E), and the following:
1. Local, state, and federal requirements associated with the technology;
 2. Reduction of toxicity, mobility, or volume;
 3. Long-term effectiveness and permanence;
 4. Short-term effectiveness; and
 5. Ability to implement the corrective action standard for each chemical of concern, in each contaminated medium, including considering the results presented in the site characterization report, ease of initiation, operation and maintenance of the technology, and public response to any contamination residual to or resulting from the technology.
- F.** On-site derived waste. Nothing in this subsection shall supersede more stringent requirements for storage, treatment, or disposal of on-site derived waste imposed by local, state or federal governments. An owner or operator meeting the requirements of this subsection is deemed to have met the exemption provisions in the definition of solid waste at A.R.S. § 49-701.01 for petroleum contaminated soil stored or treated on-site. The owner or operator shall prevent and remedy hazards posed by derived waste resulting from investigation or response activities under this Article and shall:
1. Contain on-site derived waste in a manner preventing the migration of contaminants into subsurface soil, surface water, or groundwater throughout the time the derived waste remains on-site, and shall:
 - a. Restrict access to contaminated areas by unauthorized persons; and
 - b. Maintain the integrity of any containment system during placement, storage, treatment, or removal of the derived waste;
 2. Label on-site derived waste stored or treated in stockpiles, drums, tanks, or other vessels in a manner consistent with A.R.S. Title 49, Chapter 4, Article 9 and the rules made under that Article; and
 3. Treat on-site derived waste to the applicable corrective action standard in R18-12-263.01 if the derived waste is to be returned to the on-site subsurface.
- G.** Periodic site status report. After approval of the site characterization report, the owner or operator shall submit a site status report, on a form provided by the Department, based on site-specific conditions. The report shall be submitted as requested by the Department, or by the time requested in the CAP under R18-12-263.02. The owner or operator shall continue to submit a site status report until the Department approves a LUST case closure report under R18-12-263.03(F)(1). The report shall:
1. Identify each type of remedial corrective action technology being employed;

2. Provide the date each remedial corrective action technology became operational;
3. Provide the results of monitoring and laboratory analysis of collected samples for each contaminated medium received since the last report was submitted to the Department;
4. Provide a site plan that shows the current location of the components of any installed remediation technology including monitoring and sample collection locations for data collected and reported in subsection (G)(3);
5. Estimate the amount of time that must pass until response activities, including remediation and verification monitoring, will demonstrate that the concentration of each chemical of concern is at or below the corrective action standard determined for that chemical of concern in the specific contaminated medium; and
6. Provide the current LUST site classification form described in R18-12-261.01(E).

R18-12-263.02. Corrective Action Plan

- A. When required under R18-12-263(C) or (D), an An owner or operator shall prepare a CAP that protects public health and the environment. The Department shall apply the following factors to determine if the CAP protects public health and the environment:**
1. The physical and chemical characteristics of the chemical chemicals of concern, including toxicity, persistence, and potential for migration;
 2. The hydrologic and geologic characteristics of the facility and the surrounding area;
 3. The proximity, quality, and current and future uses of nearby groundwater and nearby surface water;
 4. The potential effects of residual contamination on nearby groundwater and nearby surface water;
 5. The risk characterization for current and potential receptors; and
 6. Any information gathered in accordance with R18-12-251 through R18-12-263.03.
- B. CAP contents. An owner or operator shall prepare a CAP in a format provided by the Department that includes:**
1. The extent of contamination known at the time of the CAP submission, including a current LUST site classification form, as described in R18-12-261.01(E);
 2. A description of any responses to soil, surface water, or groundwater contamination initiated;
 3. A determination of the foreseeable and most beneficial use of surface water or groundwater within one-quarter mile of the outermost boundaries of the contaminated water, if a Tier 2 or Tier 3 evaluation is used for the corrective action standard for either medium. In making this determination the owner or operator shall:
 - a. Conduct a survey of property owners and other persons using or having rights to use water within one-quarter mile of the outermost extent of contaminated water; and
 - b. Include within the CAP the names and addresses of persons surveyed and the results;
 4. A description of goals and expected results;
 5. The corrective action standard for each chemical of concern in each affected medium, and the tier evaluation documents;
 6. If active remedial methodologies are proposed the owner or operator shall:
 - a. Describe any permits required for the operation of each remediation technology and system.

- b. Describe, in narrative form, the conceptual design, operation, and total estimated cost of three remedial alternatives proposed to perform corrective actions on contaminated soil, surface water or groundwater. Also include data and conclusions supporting the selection and design of each technology and system, including criteria for evaluation of effectiveness in meeting stated objectives and an abandonment plan. The information described in this subsection is not required if the remedial technology in the CAP is limited to approval of corrective action standards developed under Tier 2 or Tier 3 evaluation.
 - c. Justify the selection of the remedial alternative chosen for the contamination at and from the LUST site. The owner or operator shall consider site-specific conditions and select a remedial alternative that best meets all of the remediation criteria listed in A.R.S. § 49-1005(D).
 - d. Provide schedules for the implementation, operation, and demobilization of any remediation technology and periodic reports as described in R18-12-263(G) to the Department.
7. The reasonably foreseeable effects of residual contamination on groundwater and surface water.
 8. Additional information necessary to analyze the site-specific conditions and effectiveness of the proposed remedial response, which may include, but is not limited to a feasibility study.
- C.** Modification of CAP. The owner or operator shall modify the CAP upon written request of the Department to meet the requirements of subsections (A) and (B). The request for modification shall describe any necessary modification and its rationale. The owner or operator shall respond to the request in writing within 45 calendar days of receipt, or a longer time period approved by the Department. If the requested modification is not made within 45 days, the Department shall disapprove the CAP, and notify the owner or operator in writing under subsection (H)(2).
- D.** Preliminary CAP approval. If the requirements of subsections (B) and (C) are met, the Department shall provide written notice to the owner or operator that the CAP is complete, and provide public notice required by R18-12-264.01.
- E.** Implementation before approval. An owner or operator may, in the interest of minimizing environmental contamination and promoting more effective remediation, begin implementation of the remediation technologies, in the CAP, before the plan is approved by the Department, if the owner or operator:
1. Informs the Department in writing before implementation;
 2. Complies with any conditions imposed by the Department consistent with the provisions of subsection (A), including halting any activity or mitigating adverse consequences from implementation; and
 3. Obtains all necessary permits and approvals for the remediation activities.
- F.** Modification due to public comment. An owner or operator shall modify the CAP upon written request of the Department that modification is required because of public comment received. The request shall describe any necessary modification and its rationale. The owner or operator shall respond to the modification request within 45 calendar days after receipt. If the requested modification is not made in writing within 45 days, the Department may disapprove the CAP and notify the owner or operator in writing described in subsection (H)(2).

- G.** Conditions for CAP approval. The Department shall approve a CAP only if the following conditions are met:
1. The CAP contains all elements required in subsections (B), (C), and (F), or the Department makes a determination that it has enough information to make an informed decision to approve the CAP; and
 2. The CAP demonstrates that the corrective actions described are necessary, reasonable, cost-effective, technically feasible and meet the requirements of A.R.S. § 49-1005.
- H.** Notice of CAP approval. The Department shall notify the owner or operator, and any person that comments on the CAP, in writing that it is approving or disapproving the CAP as follows:
1. If the conditions in subsections (G)(1) and (G)(2) are satisfied, the Department shall approve the CAP and notify the owner or operator. If the approved CAP includes a corrective action standard for water that is based on a Tier 2 or Tier 3 evaluation, the Department shall send a copy of the notice to the Arizona Department of Water Resources, the applicable county, and municipality where the CAP will be implemented, and water service providers and persons having water rights that may be impacted by the release. The notice shall also be sent to any persons submitting written or oral comments on the proposed CAP. The notice shall include any conditions upon which the approval is based and an explanation of the process for resolving disagreements over the determination under A.R.S. § 49-1091.
 2. If the conditions of subsections (G)(1) or (2) are not satisfied, the Department shall disapprove the CAP and notify the owner or operator in writing of the disapproval. The Department shall send the notice to any persons submitting written or oral comments on the proposed CAP. The notice shall include an explanation of the rationale for the disapproval and an explanation of the process for resolving disagreements under A.R.S. § 49-1091.
- I.** CAP implementation. If the CAP is approved, the owner or operator shall begin implementation in accordance with the approved schedule.
- J.** CAP termination. The Department may terminate an implemented CAP, and may require a new CAP if the corrective action standards of the approved CAP are not being achieved. The Department shall provide notice to the owner or operator and the public under R18-12-264.01 if termination of the CAP is being considered.
- K.** Revisions to an approved CAP. The Department may approve revisions to an approved CAP without additional public notice unless the revision involves alternative remediation methodologies, or may adversely affect public health or the environment.
- L.** New CAP. The Department shall require a new CAP under R18-12-263(C) or (D) if a revision involves an alternative remediation methodology or may adversely affect public health or the environment.

R18-12-263.03. LUST Case Closure

- A.** LUST case closure request. An owner or operator requesting LUST case closure by the Department shall do so in writing, and submit a corrective action completion report that meets the requirements of this Section. The owner or operator shall submit the request for LUST case closure only after the site investigation requirements in R18-12-261 and R18-12-262, and any remedial response required by R18-12-263 are satisfied.

- B.** Verification that corrective action standard is met. The owner or operator shall verify that the corrective action standard for each chemical of concern in each contaminated medium is met, and provide documentation of the verification described in subsection (D).
- C.** Method of water quality verification. If LUST site investigations indicate that water quality was threatened or impacted, the owner or operator shall use an appropriate method of water quality verification. The owner or operator shall provide documentation that contaminant concentrations are at or below the corrective action standard for each chemical of concern in the contaminated groundwater and surface water. In selecting a method of water quality verification, the owner or operator shall consider:
1. Site-specific hydrologic conditions;
 2. The full extent of water contamination, as documented in the site characterization report required by R18-12-262; and
 3. The existence and location of known receptors that are or may be impacted by the release.
- D.** Contents of corrective action completion report. The owner or operator shall include the following information in the corrective action completion report, except that identical information previously submitted to the Department is not required to be resubmitted if the name, date, and applicable page(s) of any previous report containing the information required by this subsection is provided:
1. A description of the vertical and lateral extent of contamination;
 2. A statement of the corrective action standard for each chemical of concern in each contaminated medium and the evaluation described in R18-12-263.01(B) for each tier evaluated;
 3. A list of remediation technologies used to reach the corrective action standard;
 4. Documentation verifying that the corrective action standard for each chemical of concern, in each medium of concern, has been met. Verification is not required if an initial investigation regarding soil, surface water, or groundwater described in R18-12-262 demonstrates the corrective action standard for each chemical of concern in each medium of concern has been met;
 5. All sample collection locations shall be shown for both the site investigation described in R18-12-262 and the LUST case closure verification described in this Section;
 6. Verification that Arizona Department of Water Resources permitted monitor wells, recovery wells, or vapor extraction wells that are abandoned before submission of the LUST case closure request, have been abandoned as required under A.A.C. R12-15-816 and that recovery wells or vapor extraction wells without Arizona Department of Water Resources permits have been abandoned in a manner that ensures that the well will not provide a pathway for contaminant migration;
 7. Documentation showing compliance with the requirements for the storage, treatment, or disposal of any derived waste in R18-12-263(F);
 8. Documentation showing any institutional or engineering controls that have been implemented, and any legal mechanisms that have been put in place to ensure that the institutional or engineering controls will be maintained;
 9. The current LUST site classification form in R18-12-261.01(E); and
 10. Any additional information the owner or operator determines is necessary to verify that the LUST case is eligible for closure under this Section.

- E.** Conditions for approval of LUST case closure. The Department shall inform the owner or operator that a corrective action completion report is approved if it meets the requirements of this Section and A.R.S. § 49-1005, and contains all of the information in subsection (D), or the Department determines that it has enough information to make an informed decision to approve the report and close the LUST case file.
- F.** Notice of LUST case closure decision. The Department shall provide written notice to the owner or operator that the corrective action completion report either does or does not comply with the requirements of this Section, and that case closure is approved or denied. LUST case closure occurs as follows:
 - 1. If the Department determines that the conditions in subsection (E) are satisfied, the Department shall approve the report, close the LUST case, and notify the owner or operator. The notification shall include any conditions upon which the approval is based and explain the process for resolving disagreements provided by A.R.S. § 49-1091; or
 - 2. If the Department determines that the conditions in subsection (E) are not satisfied, the Department shall disapprove the report and notify the owner or operator. The notification shall include any conditions upon which the disapproval is based and explain the process for resolving disagreements under A.R.S. § 49-1091.
- G.** Change in foreseeable or most beneficial use of water. If the Department is notified of a change in the foreseeable or most beneficial use of water, documented under a Tier 2 or Tier 3 evaluation, the Department shall may reopen the LUST case file and require the owner or operator to perform additional corrective actions as necessary to meet the requirements of R18-12-261 through R18-12-264.01.
- H.** Subsequent discovery of contamination. If evidence of previously undocumented contamination is discovered at or emanating from the LUST site, the Department may reopen the LUST case file based on an assessment of site specific information and require an owner or operator to perform additional corrective actions necessary to comply with the requirements of R18-12-261 through R18-12-264.01.

R18-12-263.04. Groundwater LUST Case Closures

- A.** Applicability. Pursuant to A.R.S. § 49-1005(E), the Director may approve a corrective action that may result in aquifer water quality exceeding aquifer water quality standards established under A.R.S. § 49-223 after completion of the corrective action, if, in addition to complying with the other corrective action requirements in this Article, the corrective action:
 - 1. Includes a Tier 2 or Tier 3 evaluation performed in accordance with R18-12-263.01(A)(2) or (3), and (4); or
 - 2. Complies with the process described in subsections (B) through (F).
- B.** Site-specific requirements. The Director may approve LUST case closure where there is an exceedance of an aquifer water quality standard without requiring the placement of institutional controls on the deeds of all properties affected by the groundwater contamination related to the UST release, after consideration of the following:
 - 1. Characterization of the groundwater plume,
 - 2. Removal or control of the source of contamination
 - 3. Groundwater plume stability,
 - 4. Natural attenuation,
 - 5. Threatened or impacted drinking water wells,
 - 6. Other exposure pathways,

7. Requirements of A.R.S. § 49-1005(D) and (E), and
 8. Other information that is pertinent to the LUST case closure approval.
- C.** Public notice. If, after consideration of the criteria specified in subsection (B), the Department determines that the LUST site is eligible for LUST case closure, the Department shall provide public notice in accordance with R18-12-264.01.
- D.** Conditions for approval of LUST case closure. After consideration of comments obtained through the public notice process, the Department shall evaluate whether the LUST case meets the requirements of this Section and A.R.S. § 49-1005; and determine if the LUST case closure can be approved.
- E.** Notice of LUST case closure decision. The Department shall provide written notice to the owner or operator and any commenter whether the LUST case closure is approved or denied.
- F.** Future corrective actions. Subsequent to LUST case closure, if the Department becomes aware of site-specific conditions that warrant additional corrective actions, the LUST case file may be re-opened. Future corrective actions shall be performed as follows:
1. If a no further action letter in accordance with R18-12-903(D) has not been issued for the release or has been rescinded in accordance with R18-12-903(G), the UST owner or operator shall perform additional corrective actions necessary to comply with the requirements of R18-12-261 through R18-12-264.01; or
 2. If a no further action letter issued by the Department in accordance with R18-12-903(D) is in effect, the additional corrective actions shall be performed by the Department in accordance with A.R.S. §§ 49-1015.01 and 49-1017.

R18-12-264. General Reporting Requirements

- A.** Standard first page. An owner or operator making a written submission to the Department under R18-12-251 through R18-12-263.03 ~~R18-12-263.04~~ shall prepare a cover page, on a Department provided form, that contains the following:
1. The name, address, and daytime telephone number of the person responsible for submitting the document, identified as owner, operator, a political subdivision under A.R.S. § 49-1052(H) ~~1053(E)~~, a person under A.R.S. § 49-1052(I), or other person notifying the Department of a release or suspected release or conducting corrective actions under A.R.S. § 49-1016(C)(2) or (4), and any identifying number assigned to the person by the Department;
 2. Identification of the type of document or request being submitted;
 3. The LUST number assigned by the Department to the release that is the subject of the document. If no LUST number is assigned, the date the release or suspected release was reported to the Department;
 4. The name and address of the facility, and the facility identification number;
 5. The name, address, daytime telephone number, and any identification number assigned by the Department of the owner and operator and the owner of the property that contains LUST; and
 6. A certification statement signed by the owner or operator or the person conducting the corrective actions under A.R.S. § 49-1016(C) that reads: "I hereby certify, under penalty of law, that this submittal and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

- B.** Professional registration requirements. Both the The registered professional engineer or geologist submitting a written report to the Department under R18-12-260 through R18-12-263.03 and the report shall meet the requirements of the Arizona Board of Technical Registrations Registration under A.R.S. Title 32, Chapter 1 and the rules made under that Chapter.
- C.** Certified remediation specialist. If the contaminated medium is limited to soil and involves only a Tier 1 or Tier 2 evaluation, an owner or operator may request that the Department accept, without review for completeness or deficiencies, a site characterization report described in R18-12-262(D) or corrective action completion report described in R18-12-263.03(D), signed by a certified remediation specialist meeting the requirements of (B). The Department may audit up to 25% of the documents submitted annually under this subsection. The Department shall select documents to be audited at random, unless the Department receives a written request to review a specific document. The Department shall review the audited document to determine whether it complies with R18-12-262 or R18-12-263.03. The Department shall approve the document based solely on the seal and signature of the certified remediation specialist, if the following certification is signed and notarized by both the certified remediation specialist and the owner or operator. The language of the certification shall be as follows:
- “I hereby certify that I have reviewed the attached report on the underground storage tank (UST) release(s) reported to the Arizona Department of Environmental Quality and have determined that all requirements of A.R.S. § 49-1005 and the rules made under that Section have been met. I request approval of this report as submitted. I agree to indemnify and hold harmless the state of Arizona, the Department of Environmental Quality, and their officers, directors, agents or employees from and against all claims, damages, losses, attorneys’ fees, and expenses, arising out of Departmental acceptance of this report based solely on my signature and seal as a certified remediation specialist, including, but not limited to, bodily injury, sickness, disease or injury to or destruction of tangible property, including any loss of use therefrom caused in whole or in part by any negligent act or omission of mine as a certified remediation specialist, any subcontractor, anyone directly or indirectly employed by me or any subcontractor, or anyone for whose acts I or any subcontractor may be liable, regardless of whether or not caused in part by a party indemnified by this certification.”
- D.** Department approval and liability waiver. The owner or operator shall be notified by the Department that the acceptance of a document complying with subsection (C) is based solely on the notarized statement of the certified remediation specialist, without Department review, and that no liability, associated with the acceptance, accrues to the state.

R18-12-264.01. Public Participation

- A.** Public notice. If public notice is required by A.R.S. § 49-1005, or rules made under that Section this Article, the Department shall provide a minimum of 30 calendar days notice to the public regarding a public comment period. The Department shall use one or more methods of public notice designed to reach those members of the public directly affected by the release and the planned corrective actions, which may include, but is not limited to the following: publication in a newspaper of general circulation, posting at the facility, mailing a notice to applicable persons, or posting on the Department’s internet site. At a minimum, the notice shall be sent to the following applicable persons:

1. The UST owner and operator;
 2. Owners of property and other parties directly affected or potentially directly affected by contamination from the release, corrective actions, or LUST case closure;
 3. The Arizona Department of Water Resources;
 4. The applicable county and municipality; and
 5. Water service providers and persons having water rights that may be impacted by the release.
- B. Public notice contents.** The Department shall provide notice to the public that includes all of the following:
1. Identifies the ~~The~~ name of the document that is available for public comment;
 2. Identifies the ~~The~~ facility where the release occurred and the site of the proposed corrective actions, or LUST case closure in accordance with R18-12-263.04.
 3. If the document is a CAP, identifies the date the CAP was submitted to the Department, and name of the person who submitted the CAP;
 4. Provides a ~~A~~ specific explanation if a corrective action standard for water is based on a Tier 2 or Tier 3 evaluation;
 5. Identifies the ~~The~~ location where a copy of the document can be viewed by the public;
 6. Explains ~~An~~ explanation that any comments on the document shall be sent to the Underground Storage Tank Program of the Department within the time-frame specified in the notice; and
 7. Describes the ~~The~~ public meeting provisions of subsection (C).
- C. Public meeting.** The Department may hold a public meeting to receive comments on a document undergoing public review. If the Department holds a public meeting, the Department shall schedule the meeting and notify the public, in accordance with subsection (A), of the meeting time and location.

R18-12-270. Temporary Closure

- A.** Owners and operators shall notify the Department in accordance with R18-12-222(F)(4)(G) within 30 days of the date that an UST system is temporarily closed, and within 30 days of a temporarily closed system brought back into operation.
- B.** Owners and operators of a temporarily closed UST system shall continue operation and maintenance of corrosion protection in accordance with R18-12-231, and release detection in accordance with R18-12-240 through R18-12-245. Discovery of a release or suspected release shall be subject to the provisions of R18-12-274. Release detection and release detection operation and maintenance testing and inspections under R18-12-230 through R18-12-245 are is not required if the temporarily closed UST system is emptied of all regulated substances and accumulated residues. The UST system is empty when all contents have been removed from the system so that no more than 2.5 centimeters (1 inch) of residue or 0.3% by weight of the total capacity of the UST system remain in the system. Spill and overflow requirements operation and maintenance testing and inspections in accordance with R18-12-220(D), R18-12-221(E)(H), and R18-12-230, R18-12-235 and R18-12-236 do not have to be met during temporary closure.
- C.** Owners and operators of any UST system which is temporarily closed for three months or more shall also comply with both of the following requirements before the end of the third month following the date on which the UST system began temporary closure:
1. Vent lines left open and functioning;

2. All other lines, pumps, manways, and ancillary equipment capped and secured in accordance with R18-12-281(P)(1).
- D.** To bring an UST system back into use, owners shall notify the Department in accordance with R18-12-222(F)(5) within 30 days after the date that the UST system is brought back into use.
- E.** Any temporarily closed UST system that cannot be brought back into service within 12 months from the date it went into temporary closure, shall comply with one of the following before the expiration of the 12-month period:
1. Permanently close the system in accordance with R18-12-271 through R18-12-274,
 2. Obtain an extension of temporary closure from the Department in accordance with subsection (G). To be effective, such an extension shall be granted in writing by the Department prior to expiration of the initial 12-month period of temporary closure.
- D.** An UST system that meets the performance standards in R18-12-220 for new UST systems or the upgrade standards in R18-12-221 may remain in temporary closure indefinitely.
- E.** When an UST system that does not meet either the performance standards in R18-12-220 for new UST systems or the upgrade standards in R18-12-221 is temporarily closed for more than 12 months, owners and operators shall permanently close the UST system. Owners and operators of these systems that want to remain in temporary closure longer than 12 months may request either a standard extension or a limited extension of the 12 months of temporary closure according to subsection (F).
- F.** A request for an extension shall be made by the owner using the Notification Form as described in R18-12-222(C)(3). The request shall include the results of a site assessment conducted in accordance with R18-12-272. A site assessment is not required if the UST system meets the new system standards of R18-12-220 or the upgrade standards of R18-12-221 provided both of the following are met:
1. The system has had corrosion protection installed in accordance with R18-12-220(B) and (C) or R18-12-221(B) and (C) which has been maintained in accordance with R18-12-231,
 2. The system has had an external leak detection system installed in accordance with R18-12-243(E) or R18-12-243(F) which has been maintained in accordance with R18-12-240.
- F.** A request for an extension shall be made by the owner or operator using the Notification Form as described in R18-12-222(C) prior to the expiration of the 12-month period of temporary closure.
1. Standard extension. A standard extension extends the 12 month temporary closure period and temporarily postpones the obligation to permanently close the tank. A request for a standard extension shall include the results of a site assessment conducted in accordance with R18-12-272.
 2. Limited extension. A limited extension also temporarily postpones the obligation to permanently close the tank but does not require the results of a site assessment. A limited extension can be requested if:
 - a. The owner or operator has begun the process of permanently closing the tank either with or without the Department's assistance,
 - b. The owner or operator has begun the process of obtaining a baseline assessment either with or without the Department's assistance, or
 - c. The owner or operator has begun the process of confirming a release either with or without the Department's assistance.

G. Owners requesting an extension of temporary closure shall submit the request in accordance with subsection (F) no later than 30 days prior to the expiration of the 12-month period of temporary closure. If the request is timely submitted, the UST shall be considered to be in extended temporary closure until the Department's determination is made and the owner is informed in writing. The Department shall inform the owner, in writing by certified mail, if the extension request is granted or denied. The UST shall be considered to be in extended temporary closure until the Department's determination is made and the owner is informed in writing. An A standard or limited extension of temporary closure which is granted by the Department shall include the duration and the terms and conditions of the extension. Terms and conditions shall be based upon the Department's assessment of what is reasonably necessary to protect human health and the environment. When If the request for extension is denied, the UST system shall complete permanent closure in accordance with R18-12-271 through R18-12-274 or return to active service within 180 days of the date on which the Department informed the owner of the denial of the extension request, as evidenced by the return receipt. In the event of a denial of a request for an extension, the UST shall be considered to be in extended temporary closure until the 180 day period following notice of the denial has elapsed.

R18-12-271. Permanent Closure and Change-in-service

- A.** At least 30 days before beginning permanent closure or a change-in-service under subsection (CD), owners and operators shall inform the Department in writing, on a form provided by the Director, of their intent to permanently close or make a change-in-service of an UST. If closure or change-in-service is not completed within six months from the date the Department is informed, the information is deemed to be expired. Owners and operators shall provide the Department with all of the following information:
1. UST system owner name, address, and telephone number;
 2. Facility name or company site identifier;
 3. Facility street address;
 4. Description of each UST system to be closed, including date of installation, total capacity, and construction material;
 5. The estimated date of permanent closure or change-in-service;
 6. The intended tank service provider.
- B.** The Department shall waive the 30-day notice described in subsection (A) if the permanent closure is in response to a corrective action conducted under A.R.S. § 49-1005 which was reported under A.R.S. § 49-1004. In addition, the Department may determine another reasonable time period for the notice of intent to permanently close or make a change-in-service to the UST system if any of the following exist:
1. An emergency that threatens human health or the environment,
 2. The Department agrees to a request made by an entity operating under an Intergovernmental Agreement with the Department delegating closure inspection authority.
- C.** Within 15 calendar days of receipt of the information required in subsection (A), the Department shall send the owner or operator an email indicating whether the proposed permanent closure may or may not proceed as described, or whether further information is necessary.

CD. To permanently close or make a change-in-service to an UST system, owners and operators shall comply with may follow the applicable standards in R18-12-281(P) and shall perform all of the following steps:

1. Develop documented evidence that the contents of the system are a regulated substance. Unless system contents can be documented through delivery receipts or knowledge of process, a waste determination in accordance with R18-8-261(A) shall be performed. If contents are not a regulated substance, they may be subject to hazardous, solid or special waste regulations as follows:
 - a. If the contents of an UST system are determined to meet the definition of a hazardous waste based upon a waste determination, the contents may be subject to the requirements of A.R.S. §§ 49-901 et seq. and the rules promulgated thereunder;
 - b. If the contents of an UST system are not a regulated substance and not a hazardous waste, the contents may be subject to the requirements of R18-8-511 and R18-8-512 R18-13-311 and R18-13-312.
2. Drain and flush back into the tank regulated substances from piping and any other ancillary equipment that routinely contains regulated substances. All piping, dispensers, and other ancillary equipment to be closed shall be capped or removed;
3. Empty to the standard set forth in R18-12-270(B) and clean the UST by removing all liquids and accumulated residues. The liquids and accumulated residues which meet the definition of hazardous waste pursuant to A.R.S. § 49-921(5) may be subject to regulation under A.R.S. §§ 49-901 et seq. If the liquids and accumulated residues are not hazardous waste, they may be subject to regulation pursuant to A.R.S. §§ 49-701 et seq;
4. Remove from the ground or fill completely with inert solid materials all tanks permanently taken out-of-operation unless the UST system component is making a change-in-service;
5. Perform the site assessment at closure or change-in-service in accordance with R18-12-272. The site assessment shall be performed after informing the Department but prior to completion of the permanent closure or change-in-service. If the tank is removed, samples shall be taken at the time of removal.

DE. Owners and operators who permanently close or make a change-in-service of an UST system shall prepare a closure report in a format provided by the Department. The closure report shall be submitted to the Department within 30 days of the completion of closure or change-in-service. The report shall be maintained by the Department for at least three years from the date of receipt as evidenced by the post mark or the date stamped on the document by the Department. The report shall demonstrate compliance with the requirements of this Section and R18-12-272. In addition, the report shall include all of the following:

1. The name of the facility owner and operator, facility name and address, facility identification number, and a certification statement signed by the UST owner or operator or the authorized agent of the owner or operator that reads: "I hereby certify, under penalty of law, that this submittal and all attachments were prepared under my direction and supervision, and that the information submitted is true, accurate, and complete to the best of my knowledge."
2. Information concerning the required soil sampling, conducted in accordance with R18-12-272, which shall include the rationale for selecting sample types, sample locations, and measurement methods and, for each sample, all of the following: sample location identification number; sample depth; sampling date; date of laboratory analysis; lithology

of sample; field soil vapor readings, if obtained; analytical methods used; laboratory results; numerical detection limits; and all sampling quality assurance and quality control results;

3. Information concerning the required water sampling, conducted in accordance with R18-12-280, which shall include, for each sample, all of the following: sample location identification number; sampling date; date of laboratory analysis; laboratory results; analytical methods used; numerical detection limits; and all sampling quality assurance and quality control results;
4. Copies of all original laboratory reports and chain-of-custody forms, and any supporting laboratory documents which discuss any analytical quality assurance and quality control anomalies experienced by the laboratory. The laboratory reports shall include, for each sample, all of the following: analytical methods; sample collection date; extraction date; sample analysis date; laboratory detection limits; and all analytical quality assurance and quality control analyses conducted by the laboratory for or during the analyses of the subject samples;
5. A brief, site-specific narrative description of the sampling quality assurance and quality control program followed in the field in accordance with R18-12-280(B). Any sampling quality assurance and quality control anomalies shall be discussed in detail. The report shall include a determination as to the validity of the data from a scientific standpoint;
6. A scaled map showing the locations of the tank, piping, and dispensers and the locations of all samples obtained in accordance with R18-12-272.

R18-12-272. Assessing the UST Site at Closure or Change-in-service

- A. Before permanent closure or a change-in-service is completed, owners and operators shall measure for the presence of a release at the UST site by taking samples for laboratory analysis. Samples shall be obtained in the areas where contamination would most likely occur, or where stained soils, odors, vapors, free product, or other evidence indicates that a release may have occurred. Measurement for presence of a release shall be performed according to all of the following:
1. Owners and operators shall document the environmental condition of the UST site and the presence or absence of any contamination resulting from the operation of the UST system at the site through analyses performed on samples of native soil, and of water encountered during the UST closure assessment;
 2. Specific locations for the required sampling at the UST system site shall be determined by the presence of stained soils, odors, vapors, free product, or other evidence indicating that a release may have occurred. In selecting sample types, sample locations, and measurement methods, owners and operators shall also consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors which may identify the presence of a release. At a minimum, each site shall be sampled in accordance with the following:
 - a. If water is not present in the excavation at the time an UST is removed or if the UST is filled with a solid inert material as described in R18-12-271(CD)(4), a minimum of two distinct soil samples shall be taken from native soils beneath each tank that has a capacity to hold more than 550 gallons. The samples shall be taken from beneath each end of each tank. In cases where the fill pipe or pump is located above the center of the tank, an additional sample shall be taken from beneath the center of the tank. If

- the capacity of the tank is 550 gallons or less, then one sample shall be taken from native soils beneath the center of the tank;
- b. If water is present above the floor of the excavation at the time an UST is removed, distinct samples of native soils shall be taken from the walls of the excavation at the soil-water interface at both ends of the tank;
 - c. If native soil cannot be collected in accordance with R18-12-280 due to large clast size or induration, or if the excavation zone is constructed in bedrock one of the following shall be performed:
 - i. Samples of the UST excavation backfill material shall be collected from beneath the UST system in accordance with locations described in subsection (A)(2)(a).
 - ii. If the UST excavation backfill material cannot be sampled, the Department shall be contacted for further instruction.
 - d. If water is encountered during activities required under this Section, a sample of the water shall be collected for analysis. If a sheen or free product is observed on the water or in the sample, the sampling requirements of subsection (A)(2) do not have to be met, however, further reporting and investigation shall be conducted in accordance with R18-12-274;
 - e. If piping is permanently closed in accordance with R18-12-271(CD)(2) distinct samples of native soil shall be collected every 20 linear feet along the piping trench. In addition, distinct samples of native soil shall be collected under elbows, joints, fittings, dispensers and areas of corrosion. In addition, such sampling shall ensure that samples are collected every 20 linear feet along the piping trench;
 - f. Stockpiled excavated soil shall be sampled in accordance with A.R.S. Title 49, Chapter 4, Article 9, and the rules promulgated thereunder.
3. All required sampling shall be performed in accordance with R18-12-280.
- B.** The requirements of this Section are satisfied if owners and operators document all of the following:
1. The UST system is monitored by one of the external release detection methods described in R18-12-243(E) or (F),
 2. The release detection system has been operated in accordance with the requirements of R18-12-240,
 3. The release detection system indicates no releases have occurred.

R18-12-274. Release Reporting and Corrective Action for Closed Systems

If a release or suspected release is discovered during temporary closure under R18-12-270 or in the performance of the procedures described in R18-12-272(A), owners and operators shall report the release and perform corrective action as required under A.R.S. §§ 49-1004 and 49-1005 and the rules promulgated thereunder this Chapter.

R18-12-280. Sampling Requirements

- A.** Required analytical procedures. For all sampling under this Chapter, an owner or operator shall:
1. Analyze samples for the chemicals of concern associated with regulated substances stored in the UST during its operational life by analytical test methods that are approved for analysis of each chemical of concern under A.A.C. R9-14-601 through R9-14-617 9

- A.A.C. 14, Article 6. Before collecting samples, the Department may approve, a different procedure after considering whether the analytical data will be representative of the concentrations and compositions of volatile regulated substances existing in the contaminated medium;
2. Perform sample analyses using a laboratory licensed for the selected analytical method by the Arizona Department of Health Services under A.A.C. R9-14-601 through A.A.C. R9-14-617; and
 3. Analyze samples within the specified time period required for the analytical test method under A.A.C. R9-14-601 through A.A.C. R9-14-617.
- B.** Quality assurance and quality control (QA/QC). For all required sampling under this Chapter, an owner or operator shall:
1. Decontaminate sampling equipment as provided in R18-12-281(Q);
 2. Handle and transport samples using a methodology that will result in analytical data that is representative of the concentrations and compositions of the chemicals of concern that may exist in the contaminated medium;
 3. Follow chain-of-custody procedures under R18-12-281(S)(T), for all required sampling, including the condition and temperature of the samples received by the laboratory on the chain-of-custody record; and
 4. Follow generally accepted industry standards. For the purpose of subsection (B), “generally accepted industry standards” means those QA/QC procedures that are described in publications of national organizations concerned with corrective actions or that otherwise appear in peer-reviewed literature.
- C.** Soil sampling. An owner or operator shall perform all soil sampling required under this Chapter using a methodology that will result in analytical data that is representative of the concentrations and compositions of the chemicals of concern that may exist in the contaminated soil. The owner or operator shall use a sampling method that is based on consideration of all of the following criteria:
1. The specific chemicals of concern potentially involved,
 2. Site-specific lithologic conditions,
 3. Depth of sample collection, and
 4. Generally accepted industry standards. For the purpose of subsection (C), “generally accepted industry standards” means those soil sampling activities that are described in publications of national organizations concerned with corrective actions or that otherwise appear in peer-reviewed literature.
- D.** Groundwater sampling. An owner or operator shall perform all required groundwater sampling under this Chapter using a methodology that will result in analytical data that is representative of the concentrations and compositions of the chemicals of concern that may exist in the groundwater. The owner or operator shall use a sampling method that is based on consideration of all of the following criteria:
1. The specific chemicals of concern potentially involved,
 2. Site-specific hydrologic conditions,
 3. Site-specific monitor well construction details,
 4. Depth of sample collection, and
 5. Generally accepted industry standards. For the purpose of subsection (D), “generally accepted industry standards” means those groundwater sampling activities that are

described in publications of national organizations concerned with corrective actions or that otherwise appear in peer-reviewed literature.

- E. Surface water sampling. An owner or operator shall perform all required surface water sampling under this Chapter using a methodology that will result in analytical data that is representative of the concentrations and compositions of the chemicals of concern that may exist in the surface water. The owner or operator shall use a sampling method that is based on consideration of all of the following:
1. The specific chemicals of concern involved or potentially involved,
 2. Site-specific hydrologic conditions, and
 3. Generally accepted industry standards. For the purpose of subsection (E), “generally accepted industry standards” means those surface water sampling activities that are described in publications of national organizations concerned with corrective actions or that otherwise appear in peer-reviewed literature.

R18-12-281. UST System Codes of Practice and Performance Standards

- A. Compliance Owners and operators may use one of the following to comply with R18-12-211(B)(A): shall be determined by utilization of
1. The National Association of Corrosion Engineers NACE International Standard Practice RP0285-85 SP0285-2011, “Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Control of Underground Storage Tank Systems by Cathodic Protection” amended as of 1985 (and no future amendments or editions),;
 2. NACE International Standard Practice SP0169-2013, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”;
 3. American Petroleum Institute Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems”, 3rd edition; or
 4. Steel Tank Institute Recommended Practice R892, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems”, revised January 2006.

which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

- B. Compliance Owners and operators may use one of the following to comply with R18-12-220(B)(1) shall be determined by utilization of one of the following:
1. Underwriters Laboratories Standard 1316, “Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures” July 1983, and amended May 1991 ,3rd edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State; or
 2. Underwriters Laboratories of Canada CAN4-S615-M83-14, “Standard for Fibre Reinforced Plastic Underground Tanks for Petroleum Products Flammable and Combustible Liquids” February 1983 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American Society for Testing and Materials Standard D 4021-86, “Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks” amended

July 25, 1986 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

C. Compliance Owners and operators may use one of the following five options to comply with R18-12-220(B)(2) shall be determined by utilization of one of the following:

1. Steel Tank Institute, “Specification for STI-P3 System of sti-P3 “Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks” amended as of November 1, 1989 , revised May 2018 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
2. Underwriters Laboratories Standard 1746, “Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks”, 3rd edition, amended November 7, 1990 December 19, 2014 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
3. Underwriters Laboratories of Canada CAN/ULC-S603-14, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of October 2014; Underwriters Laboratories of Canada CAN/ULC-S603.1-92 CAN/ULC-S603.1:2017, “Standard for Galvanic External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids”, amended as of September 1992 February 2017 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State; and Underwriters Laboratories of Canada CAN4-S631-M84 Standard S631-05, “Standard for Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic External Corrosion Protection Systems”, amended as of October 1992 July 2005 (and no future amendments or editions), which are incorporated by reference and are on file with the Department and the Office of the Secretary of State;
4. National Association of Corrosion Engineers Standard RP0285-85, “Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems” and Underwriters Laboratories Standard 58, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids” amended as of August 3, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State. Steel Tank Institute Standard F841, “Standard for Dual Wall Underground Steel Storage Tanks”, January 2006; or
5. NACE International Standard Practice SP0285-2011 “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”; and Underwriters Laboratories Standard 58, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, 10th edition, amended as of January 31, 2018.

D. Compliance Owners and operators may use one of the following to comply with R18-12-220(B)(3) shall be determined by utilization of one of the following:

1. Underwriters Laboratories Standard 1746, “External Corrosion Protection Systems for Steel Underground Storage Tanks”, 3rd edition, amended December 19, 2014;
2. Steel Tank Institute ACT-100, “Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks-F894” amended as of March 6, 1991 , revised May 2018; (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

3. Steel Tank Institute ACT-100U Specification F961, "Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks", February 2017; or
 4. Steel Tank Institute Specification F922, "Steel Tank Institute Specification for Permatank®", February 2017.
- E.** Compliance with R18-12-220(C)(1) shall may be determined by utilization of all one of the following:
1. Underwriters Laboratories Subject 971, "Standard for NonMetallic Nonmetallic Underground Piping for Flammable Liquids" March 17, 1992 ,2nd edition, June 17, 2008; or (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. Underwriters Laboratories Standard 567, "Pipe Connectors of Canada Standard S660 "Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids and LP Gas", 1st edition, amended as of May 29, 1991 May 1, 2008. (and no future amendments or editions), which is incorporated by reference, and on file with the Department and the Office of the Secretary of State;
 3. Underwriters Laboratories of Canada Subject C-107C-M1984, "Guide for Glass Fibre Reinforced Plastic Pipe and Fittings for Flammable Liquids" June 1984 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
 4. Underwriters Laboratories of Canada Standard CAN/ULC-S633-M90, "Standard for Flexible Underground Hose Connectors for Flammable and Combustible Liquids" amended as of June 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- F.** Compliance with R18-12-220(C)(2) shall may be determined by utilization of all one of the following:
1. National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" amended as of August 17, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems" amended as of November 1987, Supplement March 6, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 31. American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems", amended as of December 1987, Supplement March 6, 1989 3rd edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. Underwriters Laboratories Subject 971A, "Outline of Investigation for Metallic Underground Fuel Pipe"; 1st edition, October 18, 2006;
 3. Steel Tank Institute Recommended Practice R892, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems", January 2006;
 4. National Association of Corrosion Engineers NACE International Standard Practice RP0169-92 SP0169-2013, "Standard Recommended Practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems" 1983, amended as of

1992 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.; or

5. NACE International Standard Practice SP0285-2011, "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection".

G. Compliance with R18-12-220(C)(3)(b) shall be determined by utilization of both of the following:

1. National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" (August 17, 1990);
2. National Association of Corrosion Engineers Standard RP0169-92, "Control of External Corrosion on Submerged Metallic Piping Systems" (1992).

HG. Compliance with R18-12-220(E)(2) shall may be determined by utilization of one of the following subsection (1), (2), or (3):

1. American Petroleum Institute Publication 1615, "Installation of Underground Hazardous Substances or Petroleum Storage Systems", November 1987, Supplement March 6, 1989 6th edition, April 2011;
2. Petroleum Equipment Institute Publication PEI/RP100-9017, "Recommended Practices for Installation of Underground Liquid Storage Systems" amended as of 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State; or
3. American National Standards Institute Fire Protection Association Standard B31.3, "Chemical Plant and Petroleum Refinery Piping" 30, "Flammable and Combustible Liquids Code", amended as of 1993 with Addenda 2018 edition; (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State, and American National Standards Institute Standard B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols" 1992 Standard 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages", 2018 edition. (and no future amendments or editions) which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

IH. Compliance with R18-12-221(D)(F) shall may be determined by utilization of all any of the following:

1. American Petroleum Institute Publication Recommended Practice 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks", amended as of April 1992, October 1995 addendum 5th edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
2. National Leak Prevention Association Standard 631, "Chapter A, Spill Prevention, Minimum 10-year Life Extension of Existing Steel Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks By Lining Without the Addition of Cathodic Protection"; and Chapter B, "10 And 5 Year Inspection for Lined Tanks without Cathodic Protection", 2009 revision (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
3. National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" (1985) NACE International Standard

Practice SP0285-2011, “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”; or

4. American Petroleum Institute Publication Recommended Practice 1632, “Cathodic Protection of Underground Petroleum Storage Tanks and Piping System Systems” (December 1987, Supplement March 6, 1989), 3rd edition, which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

JL. Compliance with R18-12-230(A) shall may be determined by utilization of one of the following:

1. National Fire Protection Association Publication 385, “Standard for Tank Vehicles for Flammable and Combustible Liquids”, amended as of 1990 2017 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
2. American Petroleum Institute Recommended Practice 1007, “Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles”, 1st edition, amended as of March 2001, reaffirmed February 2011; or
23. American Petroleum Institute Publication Recommended Practice 1621, “Bulk Liquid Stock Control At Retail Outlets” December 1987, Supplement March 6, 1989, 5th edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

KJ. Compliance with R18-12-231(B)(2) shall may be determined by utilization of one of the following:

1. National Association of Corrosion Engineers Standard RP0285-85, “Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems” (1985) NACE International Standard Practice SP0285-2011, “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”;
2. NACE International Standard Test Method TM0101-2012, “Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems”;
3. NACE International Standard Test Method TM0497-2012, “Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems”;
4. Steel Tank Institute Recommended Practice R051, “Cathodic Protection Testing Procedures for STI-P3® USTs”, April 2017; or
5. NACE International Standard Practice SP0169-2013, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”.

LK. Compliance with R18-12-232(B)(1)(a) shall may be determined by utilization of both of the following:

1. American Petroleum Institute Publication Recommended Practice 1626, “Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Filling Stations”, April 1985 2nd edition. (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
2. American Petroleum Institute Publication 1627, “Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations” August 1986 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

- ML.** Compliance with R18-12-233(A)(1) shall may be determined by utilization of all of the following codes of practice, as applicable:
1. National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code”, (August 17, 1990) 2018 edition;
 2. American Petroleum Institute Publication Recommended Practice 2200, “Repairing Crude Oil, Liquefied Petroleum Gas, and Product Hazardous Liquid Pipelines”, amended as of April 1983 5th edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American Petroleum Institute Publication Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks” (December 1987), 5th edition;
 4. National Fire Protection Association Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”, 2015 edition;
 45. National Leak Prevention Association Standard 631, Chapter A, “Spill Prevention, Minimum 10-year Life Extension of Existing Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks By Lining Without the Addition of Cathodic Protection”, (September 1988 2009 revision).;
 6. Steel Tank Institute Recommended Practice R972, “Recommended Practice for the Addition of Supplemental Anodes to STI-P3® USTs”, December 2010;
 7. NACE International Standard Practice SP0285-2011, “Control of Underground Storage Tank Systems by Cathodic Protection”; and
 8. Fiberglass Tank and Pipe Institute Recommended Practice T-95-1, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks”.
- NM.** Compliance with R18-12-233(A)(2) shall may be determined by utilization of Fiberglass Petroleum Tank & Piping Institute T-90-01 Recommended Practice T-95-1, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks” July 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- N.** Compliance with R18-12-233(B)(1) may be determined by utilization of the following, as applicable:
1. Steel Tank Institute Recommended Practice R012, “Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks”, revised July 2016;
 2. Fiberglass Tank and Pipe Institute Protocol RP 2007-2, “Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space”; or
 3. Petroleum Equipment Institute Recommended Practice RP1200-17, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities”.
- O.** Compliance with R18-12-243(A) shall may be determined by utilization of American Petroleum Institute Publication Standard RP 1621, “Bulk Liquid Stock Control At Retail Outlets” (December 1987, Supplement March 6, 1989), 5th edition.
- P.** Compliance with R18-12-271(CD) shall may be determined by utilization of all of the following, as applicable:
1. American Petroleum Institute Publication Recommended Practice 1604, “Removal and Disposal of Used Closure of Underground Petroleum Storage Tanks”, amended as of

- December 1987, Supplement March 6, 1989 3rd edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
2. American Petroleum Institute Publication Standard 2015, “Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks”, amended as of January 1991 8th edition (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American Petroleum Institute Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”, 1st edition;
 34. American Petroleum Institute Publication Recommended Practice 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks”, (April 1992) 5th edition;
 5. National Fire Protection Association Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”, 2015 edition; and
 46. The National Institute for Occupational Safety and Health Publication 80-106, “Criteria for a Recommended Standard: Working in Confined Spaces”, amended as of December 1979 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- Q.** Compliance with R18-12-280(B)(1) shall be determined by utilization of American Society for Testing and Materials Standard D 5088-90 D5088-15a, “Standard Practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites” revised as of June 29, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- R.** Compliance with R18-12-280(B)(2) and (C) shall be determined by utilization of both of the following:
1. American Society for Testing and Materials Standard D 4547-91 D4547-15: “Standard Practice Guide for Sampling Waste and Soils for Volatile Organics Organic Compounds” revised as of August 15, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State; and
 2. American Society for Testing and Materials Standard D 4700-91 D4700-15, “Standard Guide for Soil Sampling from the Vadose Zone” revised as of July 15, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- S.** Compliance with R18-12-280(B)(3) shall be determined by utilization of American Society for Testing and Materials Standard D 4840-88 D4840-99 (2018)e1, “Standard Practice Guide for Sampling Sample Chain-of-Custody Procedures” approved June 1988 and published in October 1988, re-approved as of 1993 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

ARTICLE 3. FINANCIAL RESPONSIBILITY

R18-12-300. Financial Responsibility; Applicability

- A.** No change
- B.** Owners and operators of a petroleum UST system are subject to the requirements of R18-12-301 through R18-12-325 if the petroleum UST system is being used on the effective date of

this Section or after September 21, 1992, or anytime thereafter as provided in R18-12-951(A).

- C. No change
- D. R18-12-303 through R18-12-325 do not apply to owners and operators of any UST system excluded or deferred under 40 CFR 280.10(b) or partially excluded under 40 CFR 280.10(c)(1), (c)(3), or (c)(4), as described in A.R.S. § 49-1021. 40 CFR 280.10(b) and 40 CFR 280.10(c), amended as of July 1, 1994 October 13, 2015 (and no future amendments or editions), is incorporated by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.
- E. No change

R18-12-301. Financial Responsibility; Compliance Dates; Allowable Mechanisms; Evidence

- A. Owners and operators shall submit to the Department evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Article for an underground storage tank as follows: provided in this Article.
 - 1. All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of \$20 million or more to the U.S. Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration: within 180 days after the effective date of this Section;
 - 2. All petroleum marketing firms owning 100-999 USTs: within 180 days after the effective date of this Section;
 - 3. All petroleum marketing firms owning a total of 13-99 USTs which are located at more than one facility: within 180 days after the effective date of this Section;
 - 4. All petroleum UST owners not described in subsections (A)(1) through (3), excluding all local government entities: by December 31, 1993;
 - 5. All local government entities: one year from the date of final federal promulgation of additional mechanisms for use by local government entities to comply with financial responsibility requirements for underground storage tanks containing petroleum.
- B. No change
 - 1. No change
 - 2. No change
- C. Owners and operators shall submit evidence of compliance with the requirements of this Article. Owners and operators shall submit to, and maintain with, the Department a copy of any one or combination of the assurance mechanisms specified in R18-12-305 through R18-12-312, and R18-12-314 through R18-12-317 currently in effect along with a copy of the standby trust agreement, if required. Owners and operators using an assurance mechanism specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317 shall submit to, and maintain with, the Department an updated copy of a certification of financial responsibility worded as provided in 40 CFR 280.111(b)(11)(i), amended as of October 13, 2015, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.111(b)(11)(i), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State. In addition, local government owners and operators shall comply with one or more of the following:

1. No change
 2. No change
 3. No change
 - a. No change
 - b. No change
 - c. No change.
 4. No change
- D.** No change

R18-12-305. Financial Test of Self-insurance

- A.** No change
- B.** In order to pass a financial test of self-insurance under this subsection, owners, operators, or guarantors shall meet all of the following requirements:
1. Have a tangible net worth of at least 10 times all of the following:
 - a. The total of the applicable aggregate amount required by R18-12-303, based on the number of underground storage tanks for which a financial test of self-insurance is used to demonstrate financial responsibility;
 - b. The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test of self-insurance is used to demonstrate financial responsibility under R18-8-264 or R18-8-265;
 - c. The sum of current plugging and abandonment cost estimates for which a financial test of self-insurance is used to demonstrate financial responsibility to EPA under 40 CFR 144.63, amended as of October 13, 2015, or to a state implementing agency under a state program authorized by EPA under 40 CFR part 145. 40 CFR 144.63, amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
 2. Have a tangible net worth of at least \$10 million,
 3. Have a letter signed by the chief financial officer worded as specified in subsection (D),
 4. Do either one of the following:
 - a. File financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration.
 - b. Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet shall have assigned the firm a financial strength rating of 4A or 5A.
 5. The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
- C.** In order to pass a financial test of self-insurance under this subsection, owners, operators, or guarantors shall meet all of the following requirements:
1. Owners, operators, or guarantors shall meet the financial test requirements of 40 CFR 264.147(f)(1), amended as of October 13, 2015, substituting the appropriate amount specified in either R18-12-303(B)(1) or (2) for the "amount of liability coverage" each time specified in that Section. 40 CFR 264.147(f)(1), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State;

2. No change
 3. No change
 4. No change
 5. No change
 - a. No change
 - b. No change
- D.** To demonstrate that it meets the financial test under subsection (B) or (C), the chief financial officer of owners, operators, or guarantors, shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as provided in 40 CFR 280.95(d), amended as of October 13, 2015, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.95(d), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- E.** No change
- F.** No change
- G.** No change
- H.** No change

R18-12-306. Guarantee

- A.** Owners and operators may satisfy the requirements of R18-12-303 by obtaining a guarantee that conforms to the requirements of this Section. The guarantor shall be either one of the following:
1. No change
 - a. No change
 - b. No change
 - c. No change
 2. No change
- B.** Within 120 days of the close of each financial reporting year, the guarantor shall demonstrate that it meets the financial test criteria of R18-12-305 based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in R18-12-305(D) and shall deliver the letter to owners and operators the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to owners or operators. If the Director notifies the guarantor that the guarantor no longer meets the requirements of the financial test of R18-12-305(B) or (C) and (D), the guarantor shall notify owners and operators within 10 days of receiving such notification from the Director. In both cases, the guarantee terminates no less than 120 days after the date the owner and operator receives the notification, as evidenced by the return receipt. Owners and operators shall obtain alternate coverage as specified in R18-12-318.
- C.** The guarantee shall be worded as provided in 40 CFR 280.96(c), amended as of October 13, 2015, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.96(c), amended as of July 1, 1994 (and no future

amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

D. No change

R18-12-307. Insurance and Risk Retention Group Coverage

A. No change

B. Each insurance policy shall be amended by an endorsement worded as specified in 40 CFR 280.97(b)(1) amended as of October 13, 2015, or evidenced by a certificate of insurance worded as specified in 40 CFR 280.97(b)(2), amended as of October 13, 2015, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted. 40 CFR 280.97(b)(1) and (2) amended as of July 1, 1994 (and no future amendments or editions), are incorporated by reference and on file with the Department and the Office of the Secretary of State. Termination under 40 CFR 280.97(b)(1) and (2) as referenced in this Section means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

C. No change

R18-12-308. Surety Bond

A. Owners and operators may satisfy the requirements of R18-12-303 by obtaining a surety bond that conforms to the requirements of this Section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the June 30, 1995, most recent Circular 570 of the U.S. Department of the Treasury. Circular 570 of the U.S. Department of the Treasury, amended as of June 30, 1995, (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State.

B. The surety bond shall be worded as provided in 40 CFR 280.98(b), amended as of October 13, 2015, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted. 40 CFR 280.98(b) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

C. No change

D. No change

R18-12-309. Letter of Credit

A. No change

B. The letter of credit shall be worded as provided in 40 CFR 280.99(b), amended as of October 13, 2015, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.99(b) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

C. No change

D. No change

R18-12-310. Certificate of Deposit

- A.** No change
 - 1. No change
 - 2. No change
 - 3. No change
- B.** No change
- C.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
 - 5. No change
- D.** No change
- E.** No change
- F.** No change
 - 1. No change
 - 2. No change
- G.** The Department shall pay, from funds received from cashing the certificate of deposit, corrective action expenses if they are determined to be reasonable and necessary. Corrective action expenses shall be considered reasonable if they meet the criteria for reasonableness of cost under R18-12-605.
- H.** The Director shall, within 30 days of the date on which the certificate of deposit is cashed, return to the owner or operator any funds received from cashing the certificate of deposit which are in excess of the amount of financial responsibility being demonstrated by the certificate of deposit. The Director shall place funds received from the certificate of deposit which have not been used to meet the expenses payable under subsection (G) in an the UST Assurance Revolving Fund until such time as they are needed. If upon completion of all corrective action, as evidenced by a corrective action closure letter issued by the Department, the costs incurred for corrective action are less than the amount received from cashing of the certificate of deposit, any excess funds remaining after final payment shall be refunded to the owner or operator within 30 days of receipt by the Department of a written request for refund.

Appendix A. Certification and Agreement - Certificate of Deposit

**CERTIFICATION AND AGREEMENT
CERTIFICATE OF DEPOSIT**

[Name of owner or operator]

[Address of owner or operator]

a _____

[Insert “corporation,” “partnership,” “association,” or “proprietorship”]

Hereby certifies that it has elected to use a Certificate of Deposit in accordance with R18-12-310 to cover all or part of its financial responsibility requirement for taking corrective action under Arizona Revised Statutes Title 49, Chapter 6, § 49-1006 as follows:

Section 1. This coverage is provided under Certificate of Deposit [Certificate of Deposit number] payable to the Department of Environmental Quality issued by [Name and address of issuing institution], [insert “Incorporated in the state of _____” or “a national bank”] for the period from [/ /1920], through [/ /1920] and is automatically renewable for a term of [Insert number of months] months in the amount of \$_____. Both the Certificate of Deposit and the issuing institution meet the requirements of A.A.C. R18-12-310.

Section 2. The original of the Certificate of Deposit has been delivered to the Department of Environmental Quality, hereinafter known as the Department, to be held by the Department, along with this agreement, as proof of [Insert owner or operator]’s financial responsibility for taking corrective action caused by [Insert either “sudden accidental releases” or “nonsudden accidental releases” or “accidental releases”; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks(s) identified in Section 3 of this agreement. The amounts of financial assurance coverage provided by this Certificate of Deposit are:

[insert the dollar amount of “each occurrence” and “annual aggregate” provided by the Certificate of Deposit; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location].

Section 3. The following underground storage tanks are covered by the Certificate of Deposit:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to A.R.S. § 49-1002, and the name and address of the facility.]

Section 4. [Insert owner or operator] is held firmly unto the state of Arizona in the amount of those sums for those periods of time as set forth herein, until this Certification and Agreement is amended or renewed or released in accordance with A.A.C. R18-12-310. The Certificate of Deposit or any funds resulting from cashing of the Certificate of Deposit shall be maintained or disbursed only in accordance with the provisions of AAC A.A.C. R18-12-310.

Section 5. This Agreement shall remain in force during the term of the Certificate of Deposit and during any period of time prior to full expenditure or release of funds received from cashing of the Certificate of Deposit. [Insert owner or operator] shall notify the Department in writing immediately of any event which may impair this agreement. If the Department receives such notice, or otherwise has reason to believe that this agreement has been materially impaired, the Department may unilaterally amend the terms and conditions of this agreement to rectify any such impairment.

Section 6. The institution issuing the Certificate of Deposit is not a party to this agreement. Its obligations are set forth in its Certificate of Deposit. Nothing in this agreement diminishes or qualifies the issuing institution's obligations under its Certificate of Deposit.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

Signed and dated this ____ day of _____, 1920__

Date:

[Typed name of owner or operator]

BY: _____

Title: _____

Appendix A. Certification and Agreement - Certificate of Deposit *Continued*

NOTARIZATION OF SIGNER'S ACKNOWLEDGEMENT

STATE _____)

_____) SS.

COUNTY OF _____)

The foregoing instrument was acknowledged before me this

_____ day of _____, 1920__, by _____

as _____ of _____

NOTARY PUBLIC

My Commission Expires:

APPROVED:

STATE OF ARIZONA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Date: _____ By: _____

_____ Director, ADEQ

R18-12-311. State Fund or Other State Assurance Repealed

- A. Owners and operators may satisfy the requirements of R18-12-303 by obtaining coverage under an approved state fund which conforms to the requirements of this Section. The state fund shall be approved by a U.S. EPA Regional Administrator as a full or partial mechanism which may be used to meet the requirements of 40 CFR 280.93. 40 CFR 280.93 amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State. The state fund may be used to meet the requirements of this Article only as follows:
1. For facilities within this state which are eligible for coverage;
 2. For the amounts and types of coverage approved by the U.S. EPA Regional Administrator;
 3. Until such approval is withdrawn by the EPA Administrator and owners and operators are notified, in accordance with R18-12-319(A)(2), that the fund may no longer be used for compliance with financial responsibility requirements.
- B. Owners and operators shall submit to the Department, in accordance with R18-12-301(C), a copy of the form prescribed by the Department, completed by owners and operators which sets forth the nature of the state's assumption of responsibility. The form shall include, or have attached to it, the following information:
1. The owner or operator's name and address,
 2. The facility's name and address,
 3. The amount of funds for corrective action resulting from sudden accidental releases or non-sudden accidental releases or accidental releases which are assured by the state,
 4. If only certain tanks at a facility are assured by the state, those tanks which are assured by the state shall be identified by the tank identification number.

R18-12-312. Trust Fund

- A. No change
- B. The wording of the trust agreement shall be identical to the wording specified in 40 CFR 280.103(b)(1), amended as of October 13, 2015, and shall be accompanied by a formal

certification of acknowledgment as specified in 40 CFR 280.103(b)(2), amended as of October 13, 2015. 40 CFR 280.103(b)(1) and (2), amended as of July 1, 1994 (and no future amendments or editions), are incorporated by reference and are on file with the Department and the Office of the Secretary of State.

- C. No change
- D. No change
- E. No change
- F. No change

R18-12-313. Standby Trust Fund

- A. No change
- B. The standby trust agreement shall be worded as provided in 40 CFR 280.103(b) (1) and 40 CFR 280.103(b)(2), amended as of October 13, 2015, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.
- C. No change
- D. No change

R18-12-314. Local Government Bond Rating Test

- A. No change
- B. No change
- C. No change
- D. To demonstrate that it meets the local government bond rating test, the chief financial officer of a general purpose local government owner or operator, or the guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.104(d), amended as of October 13, 2015, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.104(d), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- E. To demonstrate that it meets the local government bond rating test, the chief financial officer of a local government owner and operator, or the guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.104(e), amended as of October 13, 2015, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.104(e), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- F. No change
- G. No change
- H. If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the bond rating test or within 30 days of notification by the Director that it no longer meets the requirements of the bond rating test, the owner or operator shall notify the Director of such failure within 10 days.

R18-12-315. Local Government Financial Test

- A. No change

- B.** No change
 - 1. No change
 - a. No change
 - b. No change
 - c. No change
 - d. No change
 - e. No change
 - 2. No change
 - 3. No change
- C.** To demonstrate that it meets the financial test under subsection (B), the chief financial officer of the local government owner or operator shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as provided in 40 CFR 280.105(c), ~~amended as of October 13, 2015~~, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.105(c) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- D.** No change
- E.** No change
- F.** No change

R18-12-316. Local Government Guarantee

- A.** No change
 - 1. No change
 - 2. No change
 - 3. No change
- B.** No change
- C.** No change
 - 1. No change
 - 2. No change
- D.** If the guarantor is a state, the “local government guarantee with standby trust made by a state” shall be worded exactly as provided in 40 CFR 280.106(d), ~~amended as of October 13, 2015~~, except that instructions in brackets are to be replaced with relevant information and the brackets deleted. 40 CFR 280.106(d) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State. If the guarantor is a local government, the “local government guarantee with standby trust made by a local government” shall be worded exactly as provided in 40 CFR 280.106(d), ~~amended as of October 13, 2015~~, except that instructions in brackets are to be replaced with relevant information and the brackets deleted.
- E.** If the guarantor is a state, the “local government guarantee without standby trust made by a state” shall be worded exactly as provided in 40 CFR 280.106(e), ~~amended as of October 13, 2015~~, except that instructions in brackets are to be replaced with relevant information and the brackets deleted. 40 CFR 280.106(e) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State. If the guarantor is a local government, the “local government guarantee without standby trust made by a local government” shall be worded exactly as

provided in 40 CFR 280.106(e), amended as of October 13, 2015, except that instructions in brackets are to be replaced with relevant information and the brackets deleted.

R18-12-317. Local Government Fund

- A. No change
 - 1. No change
 - 2. No change
 - 3. No change
 - a. No change
 - b. No change
- B. To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government owner or operator, or guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.107(d), amended as of October 13, 2015, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.107(d) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

R18-12-318. Substitution of Financial Assurance Mechanisms by Owner and or Operator

- A. Owners and operators An owner or operator may substitute any alternate financial assurance mechanisms as specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317, if at all times owners and operators maintain the owner or operator maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of R18-12-303.
- B. No change
- C. No change

R18-12-319. Cancellation or Nonrenewal by a Provider of Financial Assurance

- A. No change
 - 1. No change
 - 2. No change
- B. If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in R18-12-324, owners and operators the owner or operator shall obtain alternate coverage as specified in this Article within 60 days after receipt of the notice of termination. If owners and operators the owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, owners and operators the owner or operator shall notify the Director of such failure and submit all of the following:
 - 1. No change
 - 2. No change
 - 3. No change

R18-12-320. Reporting by Owner and or Operator

- A. Owners and operators An owner or operator shall submit documented evidence of financial responsibility as described under R18-12-301(C) to the Director according to any of the following:
 - 1. Within 30 days after owners and operators identify the owner or operator identifies a release from an underground storage tank required to be reported under A.R.S. § 49-1004 and the rules promulgated thereunder.
 - 2. If owners and operators fail the owner or operator fails to obtain alternate coverage as required by R18-12-319(B), within 30 days after the owner or operator receives notice of any one of the following:
 - a. No change
 - b. No change
 - c. No change
 - d. No change
 - 3. No change
- B. Owners and operators An owner or operator shall include in the initial or updated Notification Form a certification of compliance with the financial responsibility requirements of this Article.
- C. The Director may, at any time, require owners and operators to submit evidence of financial assurance as described in R18-12-301 or other information relevant to compliance with R18-12-301 through R18-12-325 A.R.S. §§ 49-1006 through 49-1006.02 and this Article.

R18-12-322. Drawing on Financial Assurance Mechanisms

- A. No change
 - 1. No change
 - a. The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and
 - b. The Director determines or has reason to believe that a release from an underground storage tank covered by the financial assurance mechanism has occurred and so notifies the owner or operator, or owners and operators the owner or operator notify the Director pursuant to A.R.S. § 49-1004 and the rules promulgated thereunder of a release from an underground storage tank covered by the financial assurance mechanism.
 - 2. No change
- B. No change
 - 1. The Director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and owners and operators the owner or operator, after appropriate notice and opportunity to comply, have has not conducted corrective action as required under A.R.S. § 49-1005 and the rules promulgated thereunder;
 - 2. The Director receives a certification from the owner or operator and the 3rd-party liability claimant and from attorneys representing the owner or operator and the 3rd-party liability claimant that a 3rd-party liability claim should be paid. The certification shall be worded as provided in 40 CFR 280.112(b)(2)(i), amended as of October 13, 2015, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.112(b)(2)(i), amended as of July 1, 1994 (and no future

amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State; or

3. No change
- C. If the Director determines that the amount of corrective action costs and 3rd-party liability claims eligible for payment under subsection (B) may exceed the balance of the certificate of deposit or standby trust fund and the obligation of the provider of financial assurance, the 1st first priority for payment shall be corrective action costs necessary to protect human health and the environment. The Director shall pay 3rd-party liability claims in the order in which the Director receives certifications under subsection (B)(2) and valid court orders under subsection (B)(3).
- D. No change

R18-12-324. Bankruptcy or Other Incapacity of Owner, Operator, or Provider of Financial Assurance

- A. No change
- B. No change
- C. No change
- D. No change
- E. Owners and operators who obtain An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or certificate of deposit. Owners and operators The owner or operator shall obtain alternate financial assurance as specified in this Article within 30 days after receiving notice of such an event. If owners and operators do the owner or operator does not obtain alternate coverage within 30 days after such notification, owners and operators the owner or operator shall notify the Director.
- F. No change

R18-12-325. Replenishment of Guarantees, Letters of Credit, or Surety Bonds

- A. If a standby trust is funded upon the instruction of the Director with funds drawn from a guarantee, local government guarantee with standby trust, letter of credit, or surety bond, and if the amount in the standby trust is reduced below the full amount of coverage required, owners and operators the owner or operator shall by the anniversary date of the financial mechanism from which the funds were drawn do either of the following:
 1. Replenish the value of financial assurance to equal the full amount of coverage required;
or
 2. Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.
- B. No change

ARTICLE 4. UNDERGROUND STORAGE TANK EXCISE TAX

R18-12-404. Reporting requirements for suppliers

- A. No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
 - 5. No change
 - 6. No change
 - 7. No change
 - 8. No change
 - 9. No change
 - 10. No change
 - 11. No change
 - 12. No change
 - 13. No change
 - 14. No change
- B. The monthly report described in subsection (A) is considered to be the return form required by A.R.S. § 28-1599.45(D) 28-6003(A).
- C. No change

R18-12-405. Invoice requirements requirement for suppliers

Except as otherwise provided in R18-12-410(E), a A supplier shall provide the following information the underground storage tank excise tax associated with that sale, stated as a separate item, on the invoice for each sale of a regulated substance:

- 1. The supplier identification number assigned to that supplier by the Department of Transportation.
- 2. Except as otherwise provided in R18-12-410(E), the underground storage tank excise tax associated with that sale, stated as a separate item.

R18-12-408. Affidavit Statement of tax responsibility

The tax shall be collected from the owner of an underground storage tank unless the owner and the operator of the underground storage tank file a notarized affidavit statement with the Department designating the operator as primarily responsible for the tax.

R18-12-409. Refunds

- A. No change
- B. No change
 - 1. No change
 - 2. No change
 - 3. No change

- 4. No change
- 5. No change
- 6. No change
- 7. No change
- 8. No change
- 9. No change
- C. No change
- D. If the Department determines that a person claiming a refund is entitled to the refund, the Department shall issue a refund payment or a letter of credit. A person who has been denied a refund by the Department may request a hearing on the denial within 30 days after receiving notice of the denial. The hearing shall be conducted pursuant to R18-1-201 through R18-1-219 A.R.S. § 41-1092.03 *et seq.*
- E. No change

R18-12-410. Exemption certificates

- A. No change
- B. An application for an exemption certificate shall be submitted on a form prescribed by the Director. A person applying for an exemption certificate shall provide the following information:
 - 1. The name, address, ~~email, tax identification number,~~ and telephone number of the person applying for the exemption certificate.
 - 2. The facility name and the facility location of the storage facility for which the exemption certificate is sought, ~~including the county, telephone number, and email.~~
 - 3. The reason justifying the issuance of an exemption certificate.
 - 4. ~~A photo of each aboveground storage tank.~~
- C. If the Department determines that the person applying for an exemption certificate is not liable for paying the tax, the Department shall issue the exemption certificate. A person who has been denied an exemption certificate may request a hearing on the denial within 30 days after receiving notice of the denial. The hearing shall be conducted pursuant to R18-1-201 through R18-1-219 A.R.S. § 41-1092.03 *et seq.*
- D. No change
 - 1. No change
 - 2. No change
 - 3. No change
- E. No change

ARTICLE 5. FEES

R18-12-501. Fees

- A. No change
- B. For any check or other instrument used to pay the annual fees described in this Section that is returned to the Department as dishonored by the drawer's financial institution, the owner and operator of the tank shall pay a charge of \$25.00 ~~\$12.00~~.
- C. No change
 - 1. No change

2. Each partial payment made under the schedule will ~~shall be~~ equal to at least 25% of the total payment due on March 15.
3. No change
4. No change

ARTICLE 8. TANK SERVICE PROVIDER CERTIFICATION

R18-12-801. Applicability

- A.** Beginning from and after December 31, 1996, a person shall not perform tank service on an underground storage tank system unless the person is certified under this Article by the Department or is supervised by a person certified under this Article by the Department in accordance with R18-12-802 or R18-12-806. The certification requirements of this Article shall not apply to the site assessment or sampling requirements of this Chapter.
- B.** A person who performs or supervises tank service shall present to the Department proof of certification when requested by the Department.

R18-12-804. International Fire Code Institute Council Certification; Manufacturer Certification

A person qualifies for certification by the Department as a tank service provider if the following conditions are met:

1. The person holds certification from IFCI ICC for the category of certification being sought.
2. If required by the manufacturer, the person holds a manufacturer's certification for the use of a piece of equipment or methodology in addition to holding the IFCI ICC certification for the category of certification being sought.
3. The person submits evidence of qualification under this Section for the category of certification being sought in accordance with R18-12-806(B)(3).

R18-12-805. Alternative Certification

- A.** A person qualifies for certification by the Department as a tank service provider under this Section if the requirements of R18-12-804(1) cannot be met because an IFCI ICC certification is not available for the category of certification being sought and all of the following conditions exist:
 1. The manufacturer of the technology has a process for certification of tank service providers and the person seeking qualification under this Section has received the manufacturer's certification.
 2. The manufacturer's certification is based on training or examination that evaluates competency specific to the category of tank service;
 3. The certification training or examination emphasizes the applicable codes of practice found in A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder;
 4. The tank service technology is protective of human health and the environment;
 5. The person submits evidence of qualification under this subsection for the category of certification being sought in accordance with R18-12-806 (B)(3).
- B.** A person qualifies for certification by the Department for the category of cathodic protection tester without holding an IFCI ICC certification if all the following conditions exist:

1. The person holds certification by the National Association of Corrosion Engineers as a “corrosion specialist,” “cathodic protection specialist,” “senior corrosion technologist,” or a “corrosion technologist.”
 2. The person submits evidence of qualification under this subsection in accordance with R18-12-806(B)(3).
- C. If certification is developed by IFCI ICC for a category that has been previously certified under subsection (A) of this Section, the IFCI ICC certification shall be required. The Department shall notify, in writing, all tank service providers certified for that category of the existence of the replacement IFCI ICC certification. A certified tank service provider will have 90 days from the date of receipt of notice from the Department to obtain the IFCI ICC certification under R18-12-804. Alternative certification under this Section is void 91 days after the tank service provider is notified that the IFCI ICC certification is required for certification under this Article.

R18-12-806. Application; Certification

- A. Except as provided in R18-12-802, a person who seeks to supervise or perform any category of tank service under R18-12-803 beginning from and after December 31, 1996, shall obtain and submit a completed application form to the Department on the form prescribed by the Department. A person who seeks certification for more than one category shall submit a separate application form for each category.
- B. A completed application form shall include all the following information:
1. Name, address (mail and physical), telephone number (home and business), aliases, and employer;
 2. Name of the category of tank service for which certification is sought;
 3. Proof of qualification as described in R18-12-804 or R18-12-805 for the category of tank service for which certification is being sought;
 4. Two A 1 inch by 1 inch color portraits, portrait of the applicant or alternatively, an emailed photo to serviceprovider@azdeq.gov;
 5. A certification statement that the information submitted pursuant to this subsection is true, accurate, and complete.
- C. The Department shall either grant or deny certification within an overall time-frame of 30 days after receipt of an application as evidenced by the date stamped on the application by the Department upon receipt. Within 15 days of receipt of the application, the Department shall issue, by certified mail or personal service email, if an email is available, a notice of deficiency if the application is not administratively complete. If the deficiency is not cured within 30 days of the applicant’s receipt of a notice of deficiency, as evidenced by the return receipt or documentation of service or a returned email receipt, the application is denied and re-application is required for certification. If the application is administratively complete, the Department shall have the remaining number of the total of 30 days for substantive review of the application to either issue a certification card or deny the application. If an application is denied, a hearing may be requested pursuant to A.R.S. Title 41, Chapter 6, Article 10. If the Department issues a written notice of deficiencies within the administrative completeness time-frame, the administrative completeness review time-frame and the overall time-frame are suspended from the date the notice is issued until the date that the Department receives the missing information from the applicant. The date the Department receives the missing information is determined by the date received stamp on the missing information.

R18-12-808. Discontinuation of Tank Service

- A. If the Department discovers that a supervisor or provider of tank service is or has supervised or performed tank service in Arizona without the Department certification required under this Article, or the tank service supervised or performed by a certified person is not in compliance with A.R.S. Title 49, Chapter 6, and the rules promulgated thereunder this Chapter, the Department shall immediately notify the person performing tank service to stop work and make the area safe by securing the tank area to prevent bodily injury and unauthorized access.
- B. If the Department stops work pursuant to subsection (A), before work can continue, a certified tank service provider shall determine if the work already completed complies with the standards set forth in A.R.S. Title 49, Chapter 6, and the rules promulgated thereunder this Chapter and certify the work which meets those standards.

R18-12-809. Suspension; Revocation of Certification

- A. No change
- B. If the Department discovers that a tank service provider has not performed tank service in compliance with A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder this Chapter, the Department shall notify the tank service provider in writing, by certified mail or personal service, that certification is suspended for 30 days, effective 30 days after receipt of the notice, as evidenced by the return receipt or documentation of service, unless a hearing is requested pursuant to A.R.S. Title 41, Chapter 6, Article 10.
- C. If the Department discovers that a tank service provider has not performed tank service in compliance with A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder this Chapter, after the individual has had certification suspended pursuant to subsection (B), the Department shall notify the tank service provider in writing, by certified mail or personal service, that certification is suspended for 90 days, effective 30 days after receipt of the notice as evidenced by the return receipt or documentation of service, unless a hearing is requested pursuant to A.R.S. Title 41, Chapter 6, Article 10. The tank service provider shall surrender the certification card to the Department within 15 days following the effective date of the suspension. Failure to surrender the certification card shall result in revocation of certification for the remainder of the certification period. The tank service provider may request the certification card be returned after the 90-day suspension.
- D. If the Department discovers that a tank service provider has not performed tank service in compliance with A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder this Chapter, after the individual has had certification suspended pursuant to subsection (C), the Department shall notify the tank service provider in writing, by certified mail or personal service, that certification is revoked for two years, effective 30 days after receipt of the notice as evidenced by the return receipt or documentation of service, unless a hearing is requested pursuant to A.R.S. Title 41, Chapter 6, Article 10. The tank service provider shall surrender the certification card to the Department within 15 days following the effective date of the revocation. The Department shall not accept an application from an individual whose certification has been revoked under this subsection for the revoked category of certification until the end of the revocation period.
- E. No change

ARTICLE 9. EXPIRED UST SYSTEMS WITH FIELD-CONSTRUCTED TANKS AND AIRPORT HYDRANT FUEL DISTRIBUTION SYSTEMS

R18-12-950. Reserved

R18-12-951. General Requirements

A. Implementation of requirements. Owners and operators shall comply with the requirements of this Article for UST systems with field-constructed tanks and airport hydrant systems as follows:

1. For UST systems installed on or before January 1, 2020, the requirements are effective according to the following schedule:

| Requirement | Effective Date |
|--|-----------------------|
| Upgrading UST systems; general operating requirements; and operator training | March 1, 2020 |
| Release detection | March 1, 2020 |
| Release reporting, response, and investigation; closure; financial responsibility and notification (except as provided in subsection (B) of this Section). | January 1, 2020 |

2. For UST systems installed after January 1, 2020, the requirements apply at installation.

B. All owners of previously deferred UST systems shall submit a notification form under R18-222 to the Department and shall demonstrate financial responsibility at the time of submission of the notification form.

C. Except as provided in R18-12-952, owners and operators shall comply with the requirements of Articles 1 through 5 and 9 of this Chapter.

D. In addition to the codes of practice listed in R18-12-281, owners and operators may use military construction criteria, such as “Unified Facilities Criteria (UFC) 3-460-01, Petroleum Fuel Facilities Design, With Change 2,” revised 6/17/15, when designing, constructing, and installing airport hydrant systems and UST systems.

R18-12-952. Additions, Exceptions, and Alternatives for UST Systems with Field-Constructed Tanks and Airport Hydrant Systems

A. Exception to piping secondary containment requirements. Owners and operators may use single walled piping when installing or replacing piping associated with UST systems with field-constructed tanks greater than 50,000 gallons and piping associated with airport hydrant systems.

B. Piping associated with UST systems with field-constructed tanks less than or equal to 50,000 gallons not part of an airport hydrant system shall meet the secondary containment requirement when installed or replaced. Where the piping to be replaced exceeds the percentage in A.R.S. § 49-1009(C), the entire piping run shall be secondarily contained.

C. Upgrade requirements. Airport hydrant systems and UST systems with field-constructed tanks shall meet the following requirements or be permanently closed pursuant to R18-12-270 through R18-12-274.

1. Corrosion protection. UST system components in contact with the ground that routinely contain regulated substances shall meet one of the following:

a. Except as provided in subsection (A) of this Section, the new UST system performance standards for tanks at R18-12-220(A) and for piping at R18-12-220(B); or

b. Be constructed of metal and cathodically protected according to a code of practice developed by a nationally recognized association or independent testing laboratory and meets the following:

i. Cathodic protection shall meet the requirements of R18-12-220(A)(2)(ii), (iii) and (iv) for tanks, and R18-12-220(B)(2)(ii), (iii), and (iv) for piping.

ii. Tanks greater than 10 years old without cathodic protection shall be assessed to ensure the tank is structurally sound and free of corrosion holes prior to adding cathodic protection. The assessment shall be by internal inspection or another method determined by the Department to adequately assess the tank for structural soundness and corrosion holes.

Note to subsection (C)(1): The following codes of practice may be used to comply with this subsection:

(A) NACE International Standard Practice SP0285-2011, “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection”;

(B) NACE International Standard Practice SP0169-2013, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems”;

(C) National Leak Prevention Association Standard 631, Chapter C, “Internal Inspection of Steel Tanks for Retrofit of Cathodic Protection”, 2009 revision; or

(D) American Society for Testing and Materials Standard G158-98, “Standard Guide for Three Methods of Assessing Buried Steel Tanks”.

2. Spill and overflow prevention equipment. To prevent spilling and overflowing associated with product transfer to the UST system, all UST systems with field-constructed tanks and airport hydrant systems shall comply with new UST system spill and overflow prevention equipment requirements specified in R18-12-220(C).

D. Walkthrough inspections. In addition to the walkthrough inspection requirements in R18-12-236, owners and operators 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 (see 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 R18-12-236(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.

E. Release detection. Owners and operators of UST systems with field-constructed tanks and airport hydrant systems shall meet the release detection requirements described in this Article as follows:

1. Methods of release detection for field-constructed tanks. Owners and operators of field-constructed tanks with a capacity less than or equal to 50,000 gallons shall meet the

release detection requirements in R18-12-240 through R18-12-245. Owners and operators of field-constructed tanks with a capacity greater than 50,000 gallons shall meet either the requirements in R18-12-240 through R18-12-245 (except R18-12-243(E) and (F) shall be combined with inventory control as stated below) or use one or a combination of the following alternative methods of release detection:

- 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 shall 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 shall 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 (conducted in accordance with R18-12-243(E) 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 (conducted in accordance with Department of Defense Directive 4140.25-M, volume 9; ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, revision 2004.1; or equivalent procedures) 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 (conducted in accordance with R18-12-243(E) or (F), respectively, for the stored regulated substance) at least every 30 days; or
 - f. Another method approved by the Department if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subsections (E)(1)(a) through (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. Owners and operators of underground piping associated with field-constructed tanks less than or equal to 50,000 gallons shall meet the release detection requirements in R18-12-240 through R18-12-245. Owners and operators of underground piping associated with airport hydrant systems and field-constructed tanks greater than 50,000 gallons shall follow either the requirements in R18-12-240 through R18-12-245 (except R18-12-243(E) and (F) shall be combined with inventory control as stated below) or use one or a combination of the following alternative methods of release detection:
- a.i. Perform a semiannual or annual line tightness test at or above the piping operating pressure in accordance with the table below.

| Maximum Leak Detection Rate Per Test Section Volume | | |
|--|---|---|
| Test Section | Semiannual Test - Leak Detection | Annual Test - Leak Detection Rate Not To Exceed (Gallons Per |

| Volume (Gallons) | Rate Not To Exceed (Gallons Per Hour) | 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 |

- ii. Piping segment volumes ≥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 following schedule:

| Phase In For Piping Segments ≥ 100,000 Gallons In Volume | |
|---|---|
| First test | Not later than March 1, 2020 (may use up to 6.0 gph leak rate) |
| Second test | Between March 1, 2020 and March 1, 2023 (may use up to 6.0 gph leak rate) |
| Third test | Between March 1, 2023 and March 1, 2024 (may use up to 3.0 gph leak rate) |
| Subsequent tests | After March 1, 2024, begin using semiannual or annual line testing according to the Maximum Leak Detection Rate Per Test Section Volume table above |

- b. Perform vapor monitoring (conducted in accordance with R18-12-243(E) 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 (conducted in accordance with Department of Defense Directive 4140.25m, volume 9; ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, revision 2004.1; or equivalent procedures) 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 (conducted in accordance with subsection (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 (conducted in accordance with R18-12-243(E) or (F), respectively, for the stored regulated substance) at least every 30 days; or
- d. Another method approved by the Department if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subsections (E)(2)(a) through (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.
3. Recordkeeping for release detection. Owners and operators shall maintain release detection records according to the recordkeeping requirements in R18-12-245.
- E.** Applicability of closure requirements to previously closed UST systems. When directed by the Department, the owner and operator of an UST system with field-constructed tanks or airport hydrant system permanently closed before January 1, 2020 shall assess the excavation zone and close the UST system in accordance with R18-12-270 through R18-12-274 if releases from the UST may, in the judgment of the Department, pose a current or potential threat to human health and the environment.