

LUST Case Closure Request (Corrective Action Completion Report)
Arizona Administrative Code (A.A.C.) 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.

The following applies to UST release closure requests using Tier 1 levels:

A.A.C. R18-12-263.01(B)(1) Risk-based Corrective Action Standards Documentation for Tier 1

- B.** Documentation of tier evaluation. The owner or operator shall document each tier evaluation performed in response to contaminated soil, surface water and groundwater. The owner or operator shall prepare each evaluation using a Department provided format and complying with this subsection.
 1. For a Tier 1 evaluation the owner or operator shall provide the following information:
 - a. Each chemical of concern detected in the contamination at and from the LUST site;
 - b. Each medium contaminated, identified as soil, surface water, or groundwater;
 - c. The maximum concentration of each chemical of concern for each contaminated medium.
 - d. The current and future use of the facility and surrounding properties;
 - e. Each receptor evaluated;
 - f. The Tier 1 corrective action standard for each chemical of concern for each contaminated medium; and

- g. The proposed corrective actions for each chemical of concern that exceeds the Tier 1 corrective action standard.

The following applies to UST release closure requests when site conditions document groundwater contamination that exceeds AWQS:

R18-12-263.01. Risk-based Corrective Action Standards

- A. Conducting risk-based tier evaluation and proposing the applicable corrective action standard. The owner or operator shall propose and document, as described in subsection (B), each applicable risk-based corrective action standard, using the procedures of this subsection. The owner or operator shall ensure that each corrective action standard meets the corrective action requirements of A.R.S. § 49-1005(D) and (E), and is consistent with soil remediation standards and restrictions on property use in A.R.S. Title 49, Chapter 1, Article 4 and the rules made under each. In determining the proposed corrective action standard, the owner or operator shall first perform a Tier 1 evaluation. The owner or operator may subsequently perform progressively more site-specific, risk-based tier evaluations (Tier 2 or Tier 3) after considering the comparative differences in input parameters, the cost effectiveness in conducting both the additional evaluation and remediation to the next tier corrective action standard, and the cumulative estimate of risk to public health and the environment.
 - 1. For a Tier 3 evaluation the owner or operator shall:
 - a. Apply more site-specific data than required in the development of Tier 2 corrective action standards in alternative and more sophisticated equations appropriate to site-specific conditions. The owner or operator shall use equations and methodology of general consensus within the scientific community that is published in peer-reviewed professional journals, publications of standards, and other literature;
 - b. Use the nearest known or potential receptor as the point of exposure;
 - c. Use as the point of compliance the point of exposure or some location between the source and the point of exposure, regardless of the facility boundary;
 - d. Use representative concentrations that are the actual or modeled concentrations in the medium of concern at the point of compliance;
 - e. Use as the Tier 3 corrective action standard a concentration consistent with subsections (A)(3)(a) through (A)(3)(d);
 - f. Compare the representative concentration of each chemical of concern in each contaminated medium at the point of compliance with the Tier 3 corrective action standard to determine if remediation is required; and
 - g. Choose the remedial action upon completion of the Tier 3 evaluation that will result in concentrations of chemicals of concern presenting a hazard index no greater than 1 and a cumulative excess lifetime cancer risk between 1×10^{-6} and 1×10^{-4} .

2. All risk-based corrective action standards proposed under the tier evaluations in subsections (A)(1) through (3) are based on achieving similar levels of protection of public health and the environment. For Tier 2 and Tier 3 evaluations, a cumulative risk assessment is warranted if multiple pathways of exposure are present, or reasonably anticipated, and one or more of the following conditions impacts or may impact current or future receptors:
 - a. More than 10 carcinogens are identified;
 - b. More than one class A carcinogen is identified;
 - c. Any non-carcinogen has a hazard quotient exceeding $1/n$ th of the hazard index of 1, where n represents the total number of non-carcinogens identified; or
 - d. More than 10 non-carcinogens are identified.
- B.** Documentation of tier evaluation. The owner or operator shall document each tier evaluation performed in response to contaminated soil, surface water and groundwater. The owner or operator shall prepare each evaluation using a Department provided format and complying with this subsection.
 1. For the Tier 3 evaluation the owner or operator shall provide the following information:
 - a. Each chemical of concern evaluated;
 - b. Each medium contaminated, identified as surficial soil, subsurface soil, surface water, or groundwater;
 - c. The representative concentration of each chemical of concern for each contaminated medium;
 - d. A detailed description of the current and future use of the facility and surrounding properties, including a demonstration of the current and foreseeable use of groundwater within one-quarter mile of the source;
 - e. The point of exposure;
 - f. The point of compliance;
 - g. A revised conceptual site model;
 - h. Identification and justification for alternate assumptions, methodology or site-specific information used in place of the assumptions for the Tier 2 evaluation;
 - i. Any supporting calculations and reference citations used in the development of Tier 3 corrective action standards;
 - j. Results and validation of modeling for soil leaching, groundwater plume migration, and surface water hydrology;

- k. A table of the calculated Tier 3 corrective action standards;
 - l. Risk characterization, and cumulative lifetime excess cancer risk, and hazard index for current and potential receptors for all chemicals of concern in all contaminated media;
 - m. A description of any institutional or engineering controls to be implemented; and
 - n. Proposed corrective actions for chemical of concern that exceeds a Tier 3 corrective action standard.
2. When a Tier 2 or Tier 3 evaluation relies on the use of an institutional or engineering control in establishing a corrective action standard, the owner or operator shall:
- a. Demonstrate that the institutional or engineering control is legal, and technically and administratively feasible;
 - b. Record any institutional or engineering control with the deed for all properties impacted by the release;
 - c. Communicate the terms of the institutional or engineering control to current and future lessees of the property, and to those parties with rights of access to the property; and
 - d. Ensure that the terms of the institutional or engineering control be maintained throughout any future property transactions until concentrations of chemicals of concern meet a corrective action standard at the point of compliance that does not rely on the use of the institutional or engineering control. For the institutional or engineering control to be implemented, the owner or operator shall prepare an institutional or engineering control that includes the following, as appropriate:
 - i. Chemicals of concern;
 - ii. Representative concentrations of the chemicals of concern;
 - iii. Any Tier 2 or Tier 3 corrective action standard;
 - iv. Exposure pathways that are eliminated;
 - v. Reduction in magnitude or duration of exposures to chemicals of concern;
 - vi. The cumulative excess lifetime cancer risk and hazard index if determined under subsection (A)(4);
 - vii. A brief description of the institutional or engineering control;
 - viii. Any activity or use limitation for the site;

- ix. The person responsible for maintaining the institutional or engineering control;
 - x. Performance standards;
 - xi. Operation and maintenance plans;
 - xii. Provisions for removal of the institutional or engineering control if the owner or operator demonstrates that representative concentrations of chemicals of concern comply with an alternative corrective action standard not dependent on the institutional or engineering control; and
 - xiii. A statement of intent that informs lessees and parties with rights of access of the terms described in subsections (B)(4)(d)(i) through (xii).
- C.** Submittal of tier evaluation. The owner or operator shall submit to the Department the tier evaluation conducted under subsection (A) and provide, in accordance with subsection (B), the following:
- 3. Documentation of the Tier 3 evaluation shall be submitted to the Department as soon as practicable during the course of conducting risk-based responses to contamination, as a stand alone document or in conjunction with the CAP described in R18-12-263.02(B).

A.A.C. 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.

General Reporting Requirements – in addition to the specific reporting requirements listed above, each submittal to the Department must also conform to the general reporting requirements found at A.A.C. R18-12-264:

- A.** Standard first page. An owner or operator making a written submission to the Department under R18-12-251 through R18-12-263.03 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), 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 professional 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 under A.R.S. Title 32, Chapter 1 and the rules made under that 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. 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), 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.