

Site Characterization Report

Arizona Administrative Code (A.A.C.) R18-12-262 LUST Site Investigation

- A.** Requirement to investigate. An 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 owner or operator shall submit a report of the information developed during the investigation required in subsection (A), in format approved by 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.

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.