

Leak Detection and Repair (LDAR) Services



With more than 22 years of LDAR experience, Shaw Environmental & Infrastructure Inc. (Shaw) has become a leader in providing quality LDAR services. Shaw offers a wide variety of services related to LDAR programs including:

- Development and implementation of turnkey LDAR programs
- Component identification and tagging
- Simple maintenance of leaking components
- Emissions calculations and reporting
- Full LDAR compliance/efficiency evaluations
- LDAR compliance procedures documentation
- Training programs (internal and external)
- 3rd party audits
- Infrared camera services

Shaw has extensive experience in setting up LDAR programs for chemical and pharmaceutical plants, natural gas processing plants, petroleum refineries, and other regulated industries. We customize programs to satisfy client's needs and budgets. Shaw offers a wide variety of options ranging from simple, low-cost solutions to fully automated systems.

Why Choose Shaw?

Shaw is a full-service environmental consulting firm with thousands of professionals strategically located across the country. We provide "value added" services to our clients by offering not only LDAR services but total environmental consulting services. The success of our LDAR program is based on our ability to attract and keep professional, dependable, high-quality personnel.

Shaw is uniquely positioned to manage your LDAR program. We have a management team with extensive LDAR experience and one of the industry's most experienced technician pools with an average of more than eight years of fugitive monitoring experience. Shaw also has an extremely low turnover rate for technicians.

Shaw can reduce the overall cost of your LDAR program through our competitive pricing, our increased efficiency, and our strict interpretation of the regulations. We saved approximately \$100,000 per year for one client simply by interpreting the regulations appropriately. The former contractor was over-monitoring and the client was not correctly informed of the requirements. Shaw realized the savings before transitioning the program because, as a part of our services, we provided a thorough audit of the existing program at the onset of the program. Our ongoing goal is to reduce LDAR costs while maintaining 100 percent compliance.

Our team consists of experienced professionals with extensive knowledge of federal and state LDAR program requirements. Shaw has coordinated and participated in numerous federal and state air compliance audits and has organized many facility sponsored air compliance audits.

A list of clients, many of which have been our clients for more than 10 years, is available at your request. We are currently providing LDAR services to over 60 facilities across the country.

Professional LDAR Training

Shaw provides several levels of training from monitoring technicians to facility supervisors. We have a training program suited for every phase of LDAR program involvement, as outlined below.

We offer full training to qualify monitoring technicians for leak tester certification, designed for anyone responsible for monitoring volatile

organic compound (VOC) emissions from process equipment. The training program includes reviews of detail sources of fugitive VOC emissions and training on the procedures required for Method 21 testing. Training modules are:

- Basic LDAR training
- Regulated equipment and potential leak sources
- Method 21 testing procedures
- Portable VOC measuring devices
- Regulation training
- Facility audit training

We also train maintenance groups, facility operating personnel, and facility management and support groups. These training modules are tailored to the responsibilities of each group relative to the LDAR program.

QA/QC Program

Shaw has a very stringent QA/QC program that covers all levels from field activities to data management. Some of the QA/QC activities we conduct are weekly time\date stamp evaluations, weekly calibration record checks, quarterly records review, and semi-annual comprehensive audits. The semi-annual audits include a thorough record review and extensive field audit including comparative monitoring.

We also have a few creative, non-standard QA/QC systems in place to ensure data integrity. Shaw knows the regulators are getting more educated and thorough relative to LDAR compliance audits. Data integrity is crucial for a LDAR program to be successful.

Consent Decree Experience

Shaw has extensive experience complying with consent decree requirements. We have tailored our QA/QC and training programs after the requirements spelled out in most consent decrees. We have been successfully managing a 225,000 component facility under a consent decree for several years and assist with the training and QA/QC program required by the decree.

Operating Procedures/Compliance Manuals

A detailed operating/compliance manual is an extremely important part of a LDAR program. Every site should have a written procedures manual documenting responsible parties' roles and responsibilities, as well as detailed procedures for all aspects of the

LDAR program. Shaw has developed numerous procedures manuals that spell out the roles, responsibilities, and expectations for all personnel involved in the program. Every specific task is explained in detail.

Infrared Camera Surveys

Shaw provides infrared (IR) camera surveys not only for the typical LDAR components but also for storage tanks, flares, and fenceline studies. IR camera surveys are also very helpful prior to and immediately after process unit shutdowns to identify potential problems.



Shaw provides turnkey services including tagging, database setup and population, monitoring, simple maintenance of leaking components, and regulatory reporting. We can also help clients develop in-house programs including component tagging and database population, training on software usage, as well as EPA Method 21 field monitoring procedures and techniques. Whatever your LDAR need is, Shaw can help.

Contact

Gary Anderle

320 Westway Drive, Suite 505

Arlington, TX 76018

Phone: 817.691.8691

gary.anderle@shawgrp.com

www.shawgrp.com