

LDAR Annual Report (2015) Summary

November 22, 2016

Regulation 7, Section XVII.F requires owners/operators of well production facilities (WPF) and natural gas compressor stations (NGCS) to report activities regarding leak detection and repair (LDAR), which includes monitoring components for leaks and repairing detected leaks. Regulation 7, Section XVII.F.9 requires owners/operators to submit to the Air Pollution Control Division (“Division”) an annual report by May 31st of each year with the following information regarding LDAR activities conducted during the previous calendar year:

- a. Number of facilities inspected;
- b. Total number of inspections;
- c. Total number of leaks identified, broken out by component type;
- d. Total number of leaks repaired; and
- e. Total number of leaks on the Delay of Repair (DOR) list as of December 31st of the reporting year.

This LDAR Annual Report Summary provides data received from all operators who submitted annual reports for LDAR monitoring activities that occurred during 2015. In all, 135 companies submitted annual reports for the reporting year summarized herein.

Summary of Monitoring Activities

All companies provided information for the required fields (as listed above) in their 2015 annual reports. Facilities inspected include both well production facilities and natural gas compressor stations. Below is the summary of data reported:

Compiled information from all reporting companies:

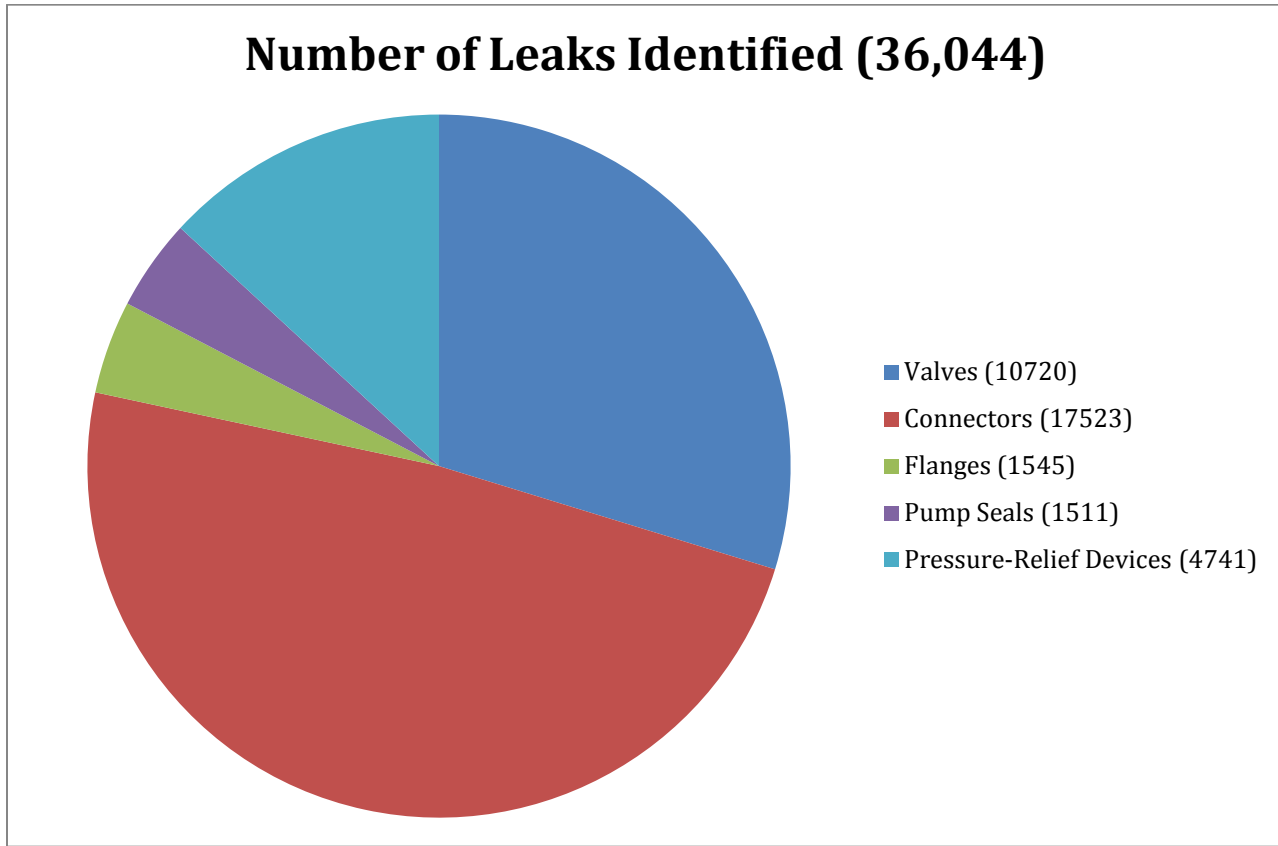
Number of companies reporting	Number of facilities inspected	Total number of inspections (includes AIMM and AVO) ^A
135	18,759	493,814

^A Approved Instrument Monitoring Method (AIMM) and Audio, Visual, and Olfactory (AVO)

Compiled information from all reporting companies regarding leaks:

Component type	Number leaks identified	Leaks repaired	Leaks on DOR
Valves	10,720		
Connectors	17,523		
Flanges	1,545		
Pump seals	1,511		
Pressure relief devices	4,741		
Total^B	36,044	35,494	501

^B The “Leaks repaired” and “Leaks on DOR” do not add up to the total “Number of leaks identified” in part because some leaks identified in the last two weeks of 2015 may not have yet been repaired nor needed to be placed on the delay of repair list. Operators have 5 days to complete a first attempt at repair once a leak is identified.



In addition to the data summarized above, the following voluntary data fields were included on the 2015 annual report form:

- a. Number of the following specific inspections:
 - i. Approved Instrument Monitoring Method (AIMM) at NGCS;
 - ii. AIMM at WPF;
 - iii. Audio, Visual, and Olfactory (AVO) inspections at WPF;
- b. Number of leaks repaired, broken out by component type;
- c. Number of leaks on the DOR as of December 31st of the reporting year, broken out by component type.

These voluntary fields are not required by Section XVII.F.9, but were included to enable companies to provide the Division a more complete data set. However, information reported in the voluntary fields was not included in this summary report because not all companies provided the optional data. Voluntary data provided by companies for this reporting period may be viewed on individual company annual report forms, which have been made publicly available on the Division’s LDAR website.



Upon receipt and initial review of the 2015 annual reports, the Division had questions regarding some of the data reported for the total number of inspections performed. Based on the information received the Division believed some companies may have misinterpreted the meaning of this data field. Subsequently, the Division provided outreach to all companies who submitted annual reports to clearly communicate what the total number of inspections is intended to represent. As a result, the Division received annual report corrections from 35 companies to update the reported total number of inspections completed. The misunderstanding in reporting stemmed primarily from confusion regarding what defines a facility. Accordingly, some annual reports published on our website will reflect submittal dates after the May 31st due date. Additionally, the information reported for the total number of inspections completed may reflect a value that exceeds what is required under Regulation 7, Section XVII.F. Some companies that have implemented more frequent monitoring above and beyond what is required by Regulation 7 chose to include that information in their 2015 annual report.

Conclusions

Of the total number of component leaks identified during the 2015 calendar year 98.5% were repaired and 1.4% remained on the delay of repair list on December 31st. Leaks were identified most commonly at valves and connectors. The Division believes the Regulation 7, Section XVII.F Leak Detection and Repair program has resulted in an increase in the identification and repair of component leaks at well production facilities and natural gas compressor stations by oil and gas companies.

