

FAQs from the NWGLDE

... All you ever wanted to know about leak detection, but were afraid to ask.

CITLDS and Throughput

In this issue of the National Work Group on Leak Detection Evaluations' (NWGLDE's) FAQs, we discuss Continuous In-Tank Leak Detection Systems (CITLDS) protocol throughput limitations. It may help to look back at the last issue's (August 2005) FAQs concerning CITLDS protocols to better understand the following discussion. Please note: The views expressed in this column represent those of the work group and not necessarily those of any implementing agency.

Q. Why does the CITLDS protocol (1/7/2000 edition) include a limitation on throughput?

A. Before we can discuss throughput, we must first know how it is defined in the protocol. According to the CITLDS protocol, throughput is the volume of product dispensed from a tank in a month. The operation of CITLDS depends on "quiet time" (no deliveries and no dispensing operations). Jairus D. Flora Jr., author of the protocol, thought it was important to limit throughput because CITLDS is most commonly used on tank systems at high-throughput, 24-hour-operation facilities. Excessively high throughput could severely limit the amount of "quiet time." Without enough "quiet time" the CITLDS would be unable to perform a valid leak test within the required monthly time period. Dr. Flora believed limiting throughput was the best way to ensure that enough "quiet time" was available for CITLDS to operate properly. The throughput limitation of a CITLDS should be an important consideration for a prospective purchaser who intends to install a CITLDS at a busy location.

Q. How should the monthly throughput limitation be applied to manifolded tank systems?

A. The throughput limitation applies to manifolded tanks as follows. Since the statistical calculations in the protocol are based on dataset records from

tank systems, the monthly throughput limitation must also apply to tank systems, including manifolded tank systems. This means that the throughput limit applies to all the tanks manifolded together and not each one separately. For example, if you have three 10,000-gallon tanks joined by manifolds to each other and are using CITLDS equipment where the evaluation limits the use of a tank system to a monthly throughput of 200,000 gallons, then the throughput limit for this storage system is 200,000 gallons, NOT 600,000 (3 x 200,000) gallons.

About NWGLDE

NWGLDE is an independent work group comprising 10 members, including eight state and two U.S. EPA members. This column provides answers to frequently asked questions (FAQs) NWGLDE receives from regulators and people in the industry on leak detection. If you have questions for the group, please contact them at questions@nwglde.org.

NWGLDE's mission:

- Review leak-detection system evaluations to determine if each evaluation was performed in accordance with an acceptable leak-detection test method protocol and ensure that the leak-detection system meets U.S. EPA and/or other applicable regulatory performance standards
- Review only draft and final leak-detection test method protocols submitted to the work group by a peer review committee to ensure they meet equivalency standards stated in the U.S. EPA standard test procedures
- Make the results of such reviews available to interested parties

L.U.S.T.LINE

New England Interstate Water
Pollution Control Commission
116 John Street
Lowell, MA 01852-1124

Non-Profit Org.
U.S. Postage
PAID
Wilmington, MA
Permit No.
200