PROCEDURES AND REQUIREMENTS FOR REVIEW OF THIRD-PARTY EVALUATIONS

If you wish to have your equipment included in the NWGLDE's List, please adhere to the procedure that follows.

Send new third-party evaluations, which were performed by an "independent third-party evaluator" (consulting firms, test laboratories, not-for-profit research organizations, or educational institutions; with no organizational conflict of interest), to be reviewed by the work group to the team leader and all the members of the team. The team leader and team members, along with their contact specifics, can be found on the Team Members and Group Members pages of the website. To enable the work group to properly review the evaluations, one (1) copy of all applicable information indicated in the following "**Leak Detection Equipment Review - Document List**" must be sent to the team leader and each team member.

In the interest of expediting third-party evaluation reviews, maintaining consistency among evaluations, and adhering to the accepted evaluation protocols, the NWGLDE has adopted the following policies:

1. In order for an evaluation to be listed, third-party evaluation reports must clearly state which protocol was used to conduct the evaluation. The Work Group will not review any evaluations that do not follow either:

    a. An EPA protocol, or

    b. An alternative protocol, e.g., a national voluntary consensus standard or other accepted test procedures developed by an independent third-party. Currently, the mechanism to obtain approval of alternative protocols is to first submit them to a peer review committee. Once the peer review committee determines that the protocol conforms with the minimum requirements as described in the "Foreword" to each of the EPA protocols, they will forward the protocol to the appropriate Work Group Team Leader and recommend that the Work Group add the protocol to the "List". The Work Group Team will then review the protocol to confirm the peer review committee determination.

    c. An existing protocol that has been amended for a specific evaluation. Currently, the mechanism to obtain approval of amended protocols is to have the evaluator submit the amendment to the appropriate Work Group Team Leader prior to conducting the evaluation. The Team will review the amendment and either approve it or suggest modifications.

2. Changes to a listed protocol need to be discussed with the Work Group before testing, or before continuing testing if the evaluator identifies concerns during testing. Regular communication with Work Group members can expedite an evaluation's review.

3. If a problem is discovered with a third-party test after a system data sheet has been added to the List, or if a listed system is modified by the vendor in such a way that the changes affect how it detects and/or quantifies a leak, the vendor shall be given a reasonable time period to provide the necessary information to clarify or modify the listing. The data sheet listing may be removed from the List if:

   a. The vendor must re-evaluate the system,

   b. The vendor fails to meet the time frame set by the Work Group,

   c. The vendor fails to respond to take the appropriate actions.

   The system data sheet may be reinstated on the List after all third-party test concerns are resolved. If concerns cannot be resolved or if there is no response from the vendor, the system will no longer appear on the List.

DISCLAIMER

GENERAL

Appearance on the NWGLDE list is not to be construed as an endorsement by any regulatory agency nor is it any guarantee of the performance of the method or equipment. Equipment should be installed and operated in accordance with all applicable laws and regulations.

This list of Leak Detection Evaluations was prepared by a work group consisting of State and EPA members and is limited to evaluations of leak detection equipment and procedures or systems, conducted by an “independent third-party evaluator” (consulting firms, test laboratories, not-for-profit research organizations, or educational institutions; with no organizational conflict of interest) and reviewed by the work group. This list includes evaluations conducted in accordance with either EPA Standard Test Procedures for Evaluating Leak Detection Methods (EPA/530/UST-90/004 through 010) or other test procedures accepted by the NWGLDE as equivalent to the EPA standard test procedures.

The National Work Group on Leak Detection Evaluations (NWGLDE) does not guarantee the performance of any leak detection method or equipment appearing on this List, nor does it warrant the results obtained through the use of such methods or equipment.

SPECIFIC

- The NWGLDE does not evaluate methods or equipment and appearance on this List does not mean they are automatically acceptable for use in any particular state or local jurisdiction.

- The NWGLDE List is not an EPA List, nor does appearance on this list constitute endorsement or approval by the NWGLDE or EPA. Anyone claiming that a device or method is “EPA approved” because it appears on this list is making a false claim.

- The NWGLDE makes no representations concerning the safe operation of any method or equipment. Users of any method or equipment appearing on this List assume full responsibility for the proper and safe operation of said equipment and assume any and all risks associated with its use.

- On each data sheet, this List reports parameters and data values for methods, equipment, and software that are specific to the most current third-party evaluation submitted to the NWGLDE. Subsequent modifications or changes to the method, equipment, or software may produce parameters and data values that are significantly different than the listed third-party evaluation parameters and data values. It is the responsibility of the local implementing agency to accept or reject those modifications or changes.

- NWGLDE Listings apply to leak detection functionality only and not material compatibility.Since long term material compatibility with the product stored is not addressed in test procedures and evaluations, the NWGLDE makes no representations as to the compatibility of leak detection equipment with the product stored.

- Unless specifically indicated on the individual data sheets, performance with alternative fuels has not been demonstrated **with the following exception:**

    - **Biodiesel B6 through B20 meeting ASTM D7467 and biodiesel B100 meeting ASTM D6751** may be used with all equipment listed for diesel whether or not these alternative fuels are included on individual data sheets. This exception DOES NOT APPLY to leak detection test methods using Out-Of Tank Product Tank Product Detection (Vapor Phase) for B6-B20, and Out-Of Tank Product Detection (Liquid and Vapor Phase) and any tracer-based test methods for B100. For these methods, individual data sheets will have to be referenced to determine applicability.

- Measurements derived for minimum detectable water level and minimum water level change for automatic tank gauge method, continuous automatic tank gauge method, and certain non-volumetric tank tightness test method listings were

calculated in 100% hydrocarbon fuels, unless otherwise noted.

- NWGLDE listed leak detection equipment may be applicable for use with additional liquids after consultation with the manufacturer and/or third party evaluator and subject to approval by the implementing agency.

NWGLDE LEAK DETECTION EQUIPMENT / METHOD EVALUATION REVIEW - DOCUMENT LIST **(Revised October 12, 2011)**

The following is a checklist of the documentation required by the NWGLDE for review of third-party evaluations of storage tank system leak detection equipment / methods. As much as possible, please send the information electronically.

☐1. Documentation establishing intellectual property ownership of the leak detection method.

☐2. A complete third-party evaluation report, including:

- ☐a. Details of the evaluation procedure if the EPA standard procedure was not used for the evaluation. If the EPA evaluation procedure was used, list any deviations or modifications to the procedure.
- ☐b. Version of equipment software, if equipment uses software.
- ☐c. A complete set of all the EPA required attachment sheets.
- ☐d. Individual test logs and/or field notes.
- ☐e. Statistical calculations and any applicable graphs or charts generated during the evaluation.
- ☐f. A statement from the evaluator confirming that all equipment at the test site was properly maintained and calibrated to the level of accuracy necessary for a valid evaluation.

☐3. An outline of the manufacturer's operating procedures for the equipment/system. The summary procedure must be dated and include a revision number, if applicable. A copy of the summary procedure must be provided to the third-party evaluator for enclosure in the report. Also required is a statement from the manufacturer confirming the use of the submitted procedure during the evaluation.

☐4. A complete installation/operations manual for the equipment/system.

☐5. A sample of the test report (including field work-sheets) which will be submitted to the owner/local implementing agency.

☐6. An outline of the test procedures in high groundwater areas. These procedures should be reviewed for adequacy by the third-party evaluator and a statement to that effect should be included with the report.

☐7. An outline of the test procedures for manifolded tank systems. These procedures should be reviewed for adequacy by the third-party evaluator and a statement to that effect should be included with the report.

☐8. An affidavit from the manufacturer confirming that there are no mutual financial interests between the equipment manufacturer and the third-party evaluator.

☐9. A resume, including all applicable formal training and experience, from personnel who conducted the evaluation.

☐10. Equipment calibration procedures and manufacturer recommended schedule of calibration.

☐11. Digital picture(s), or link(s) to picture(s) of the leak detection equipment (300 dpi or greater are best) are requested, but not required. If provided, the Work Group will include the picture(s) on the web site listing.

☐12. The name, address, e-mail address, and phone number of the technical personnel serving as the manufacturer's representative for the response to the regulatory agency questions on the equipment/system. Also, the URL for the manufacturer's web site, if applicable.

☐13. Correspondence letters from state agencies who have reviewed the equipment/system.

14. The following documentation for all permanently-installed leak detection equipment:

    ☐a. An outline of the maintenance procedure (including a list of the parts or functions of the system to be checked, calibrated, or programmed) for the annual functional test by authorized service personnel.

    ☐b. An outline (1-2 pages) "Equipment Check Guidelines for Inspectors" prepared by the manufacturer. This summary should guide local agency inspectors on proper field procedures to follow when inspecting equipment for proper operation, for attempting to access the stored history (for alarms or failed tests) to determine compliance with state requirements.

☐c. A sample of the reports generated and/or printed by the equipment (for all equipment models), and an explanation of the items in the report, if not self-explanatory.

☐d. Information on how the control panel modules connected to the various probes are labeled. The information on the panel should be directly comparable to the equipment name, model/part/probe number which will be included in the committee's list. If necessary, a permanent label containing that information should be affixed to the panel.

15. The following documentation for the systems using tracer analysis:

☐a. The name and certification of the laboratory analyzing vapor samples.

☐b. Quality Assurance Manual of the laboratory.

☐c. The method and amount of tracer injection.

☐d. The vapor sample collection method and chain of custody records.

☐e. The third-party certification for capability of the system to detect leaks from the ullage portion of the tank.

16. The following documentation for the mechanical and electronic line leak detectors:

☐a. The maximum vertical rise of pipeline allowed above the transducer, controller or leak detector.

If you have any questions about these requirements, please contact Don Taylor by phone at **423-309-1599** or by email at **Don.Taylor@tn.gov**.