



Approval #

980051-U
(Replaces 920031-U (Revised.))

Safety & Buildings Division
201 West Washington Avenue
P.O. Box 2689
Madison, WI 53701-2689

Wisconsin Material Approval

Material

AcuRite Pipeline Tester
Pipeline Leak Detection System
Line Tightness Test

Manufacturer

Hasstech, Inc.
A Dover Company
6985 Flanders Drive
San Diego, CA 92121 U.S.A.

SCOPE OF EVALUATION

The AcuRite Pipeline Tester single and multiple line tester, expanded operation range version, manufactured by Hasstech, Inc., has been evaluated for use as an annual line tightness test, complying with s. **ILHR 10.615 (2)** of the current edition of the Wisconsin Administrative Flammable and Combustible Liquids Code.

DESCRIPTION AND USE

The AcuRite system may be used for pipes containing gasoline, diesel fuel, aviation fuel, fuel oil #4, and liquid chemicals that do not attack aluminum. The AcuRite system uses a single test to determine whether a pipeline is leaking. The system declares a leak if the output of the measurement system exceeds a threshold of 0.01 gallon per hour.

The line pressure during a test is to be 150 percent of the operating pressure. The system can be used on pipe lines pressurized to 50 psi, the maximum safe operating pressure for the system.

TESTS AND RESULTS

The performance of the AcuRite pipeline tester, single and multiple line tester, expanded operation range, was determined by Richard E. Walker, Ph.D., using the EPA protocol for evaluation of pipeline leak detection systems. When used as a line tightness test, the systems are capable of detecting a 0.1 gallon per hour leak at 20 psi with a probability of false alarm (P_{FA}) of 0 percent and a probability of detection (P_D) of 100 percent.

The EPA test procedure used addressed only the issue of the methods ability to detect leaks and not safety hazards.

The multiple line tester uses the same basic hardware and consistent test pressure, but contains multiple cylinders. It is manufactured by Hutchinson Hayes International, Inc., P.O. Box 2965, Houston, Texas, 77252.

LIMITATIONS

The AcuRite Pipeline Tester is approved for use on pipeline systems for underground storage tank facilities that contain petroleum or other chemical products. It is approved for use on both rigid and flexible piping.

The operating instructions and test procedures specified by Hasstech, Inc., shall be used to conduct all tests. The leak detection equipment shall not be changed by subsequent modifications. Mechanical line leak detectors shall be removed from the pipeline. The volume of product in any pipeline to be tested with the AcuRite system shall be 150 gallons or less.

The waiting period between the last delivery of product to the tank and the start of data collection shall be at least 12 hours. The waiting period between the last dispensing of product through the pipeline system and the start of data collection shall be at least 30 minutes.

The total time for data collection shall be at least 30 minutes.

This test shall not be used if trapped vapor is present in the system. There is a special test procedure to check the pipeline for trapped vapor.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: _____

Approval Date: _____ By: _____

Ms. Berni Mattsson, P.E.
Chief, Code Application Unit
Program Development Bureau

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