

March 26, 2012

More on Hydraulic Load Test Discussions:

Since last summer a subcommittee of the education committee has been working on a draft standard for a hydraulic load test. The draft has been posted on the NAWT website and we have been accepting comments. We appreciate all of the comments and suggestions we have received. From those comments it became evident that the subcommittee needed to establish when a hydraulic load test should be conducted. In other words we received a lot of comments that said that it was neither feasible nor cost effective to conduct such a test. It was never intended that a hydraulic load test be conducted as a part of each and every inspection. During the Pumper and Environmental Expo the subcommittee met and started to put down on paper the “triggers” or times that a hydraulic load test would be conducted.

The discussion centered on when a hydraulic load test should be required and some interpretation of the test results. There are some questions still to be resolved. NAWT members and certified inspectors are welcome to review and comment and suggest additions or changes.

Following is the summary of “triggers” for the hydraulic load test and questions to be resolved.

1. There was general agreement that if the house is vacant a hydraulic load test should be conducted.
2. There was not agreement on the length of time the house should be vacant before the test is conducted. The time period ranged from 1 week to 1 month.
3. A second trigger would be that if during the inspection it is identified that there may be some hydraulic acceptance concerns ie “the entire soil treatment area is full” a HLT should be conducted.
4. For gravity systems the distribution method between trenches needs to be factored into the hydraulic acceptance concerns. The use of drop boxes or distribution boxes needs to be specified as a part of the evaluation.
5. It was suggested that only vacant house mounds get an HLT run? There were questions about whether this is a good criteria.
6. There was consensus that an operation test in an occupied pressure system would be one dose from the pump tank.
7. For seepage pit evaluations where seepage pits are legal; if there is enough volume below the invert of the inlet for one days flow, then the system is okay. If it is within that volume, then run an HLT. If the level is at the invert of the inlet then the system fails.

7a. If the liquid is low; water can be run into the system for additional days to see if the daily flow is accepted. Then it passes as long as it does not rise to the invert of the inlet.

8. An HLT cannot be run without access to the media in the soil treatment area.

9. HLT must be the same regardless of whether the house is occupied or not. Enough water must be run to either fill the rock or add the design flow. On the second day add the design flow to see if it can be absorbed in 24 hours.

Another major result was the identification that the operation test described in the NAWT inspection manual needs to be clarified and reviewed. An operation test would be part of the routine inspection process. The subcommittee is continuing to work on these issues and feedback and comments are welcomed.