

Title 5 Inspections:

How to Review a Title 5 Inspection Report

4 Results for a Title 5 Inspection:

1. Passes 2. Fails 3. Conditionally Passes 4. Needs Further Evaluation by the Local Approving Authority

Inspection Reports are valid for 2 years. (See how to extend validity of reports to 3 years by pumping the septic tank found in the last paragraph under "Other things to be aware of")

The first thing to check is to see if the inspector has a current state license as a "System Inspector".

The website to check is www.neiwpcc.org/training/title5approved.asp . Approved System Inspectors are listed by Residing In-State, Out-of-State, and Alphabetically by Last Name.

Passes

Whatever the result of the inspection, the report must be submitted to BoH within 30 days by the System Inspector. 310 CMR 15.301 (10)

Fails

Report Form Section B. Certification D) System Failure Criteria Applicable to All systems p. 4 & 5

The most common reasons for failure are

1. "Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS (Soil Absorption System- leaching area) or cesspool."

The liquid level in a D-box should come up to the bottom of the pipes going out- no higher. (The outlet invert is the bottom of the pipe going out) If the liquid is sitting in the pipes an inch or 2 or more high it means the leaching pipes are not accepting the liquid like they should be- the soil is clogged- often called hydraulic failure.

If there is a small amount of liquid sitting in the pipes, say less than an inch I would expect the inspector to run water into the D-box (can be done with a hose or faucets on in the house) to see how the pipes (lines) are taking the effluent (liquid). If the liquid backs up in box pretty quickly and goes down extremely slowly and stops above the bottom of the pipe you likely have a clogged SAS.

It's important to know that the Failure Criteria says "static liquid level"- where the water is actually sitting when the D-box is inspected. Some inspectors will fail a system if they see staining above the pipes. That does not meet the Failure Criteria. There can be staining above the pipes from times when the system is getting a lot of use- doing a ton of laundry in a short period or a big party with lots of water use.

2. "Any portion of the SAS, cesspool or privy is below high ground water elevation."

Before 1995 when the state changed the Title 5 Regulations, soil testing for the siting of septic systems basically consisted of digging a hole (usually in dry times of the year). If no water seeped in to the hole- they called the groundwater at the bottom of the hole.

Since 1995 we do actual soil testing. From looking at the colors of the soil the estimated seasonal high water table (ESHWT) can be determined.

On page 16 of the Title 5 Official Inspection Form the inspector has to put down the “Estimated depth to high ground water” and how they determined that. So if you see the box checked in front of “Obtained from system design plans on record” and the date of the design plan is before 1995- that is not valid.

If there is no soil testing prior to 1995 for the lot being inspected we oftentimes check neighboring lots to see if we have more current groundwater data. Sometimes there is a dug well on the property that can be looked at to see where the staining line is to show how high the water is at times. There are other ways to determine the ESHWT that you learn in a System Inspectors class but those are the most common. As a last resort a deep hole can be dug and the soils inspected but that is not normally needed in a Title 5 inspection.

Cesspool is a pit that has no septic tank in front of it. If there is a septic tank with a pipe to a pit- it is a **leaching pit**, not a cesspool. Cesspools are very problematic as there is no opportunity to separate the solids from the liquids as there is in a septic tank, so the solids clog up the soil around the cesspool. They are usually quite old and often were installed in the ground water and are causing contamination. Sometimes a pipe may come out of the house into a D-box that has 2 pipes going out to 2 cesspools. Or you may see one cesspool with a pipe to a second cesspool.

Conditionally Passes

Report Form Section B. Certification B) System Conditionally Passes p. 2 & 3

This is pretty self-explanatory- “One or more system components as described in the “Conditional Pass” section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.”

By far the most common repair needed in a Conditionally Pass is for the D-box to be repaired or replaced. Sometimes you will find a septic tank that’s leaking or the baffle or outlet T in the tank is no longer viable, or a pump chamber’s floats need to be adjusted or the alarm is not working.

Note- it talks about system components and describes- septic tank, pump chamber, D-box, broken or obstructed pipe. It does not list clogged leaching area. If the leaching area is clogged- that is hydraulic failure- Failure Criteria.

Needs Further Evaluation by the Local Approving Authority

Report Form Section B. Certification C) Further Evaluation is Required by the Board of Health p 3 & 4

The form lists several situations where the cesspool, privy, or system is too close to a surface water supply, tributary to a surface water supply, bordering vegetative wetland, or private water supply (private well) that would be a major concern.

The most common situation that we see is that the well is between 50 and 100 feet from the leaching area. In that case a well water test is performed at a DEP certified lab. Commonly called a "Title 5 Scan" in order to pass the test results need to show coliform bacteria- absent and ammonia nitrogen and nitrate nitrogen equal to or less than 5 ppm (parts per million).

If the well water test passes- the Title 5 is a Pass. Sometimes there is a hit of bacteria. Homeowners could then have the well "shocked"- treated with bleach- and retest for coliform bacteria. For a retest I always require that chlorine be added to the test. If chlorine is present- even a tiny amount can mask the bacteria. So in order to pass a retest you need to have coliform bacteria absent, and chlorine- not detected.

After a Passing well water test or repair of D-box, etc. the Agent will write on the first page of the Title 5 Report Form checking the box for Passes and date it along with a brief reason for the change from Fails to Passes such as- Well Water Test Passes, or D-box replaced, and sign his/her name and title.

Other things to be aware of-

Inspectors should be using the most recent Title 5 Official Inspection Form. DEP regularly updates the form. (As of 4/05/2017 the most current form is 6/16)

Exception: In lieu of a Title 5 Inspection done before the time of transfer of property, if the owner knows the system is in failure the owner/new owner can sign an enforceable agreement with the BoH to upgrade the septic system within the next 2 years following the transfer of title. 310 CMR 15.301 (4)(b)

Exception: No inspection on the septic system is required if the property is sold or passed to immediate family members: between current spouses, parents and children, or full siblings. 310 CMR 15.301 (4)(d)

Extension of validity of Title 5 Inspection Report from 2 years to three years: If the owner provides records that the septic tank was pumped once in each of the 3 years following inspection the report is valid for 3 years. 310 CMR 15.301 (1) A Certificate of Compliance (C.O.C.) is valid for 3 years if the septic tank is pumped once in the third year following the date on the C.O.C. 310 CMR 15.301 (4)(a)