

MUNICIPALITY OF ANCHORAGE

DEVELOPMENT SERVICES DEPARTMENT



Policy W.05

“Standard of Care” Regarding the Inspection of Steel Septic Tanks when Performing COSA Inspections

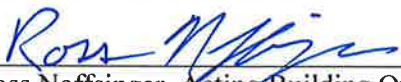
The Municipality of Anchorage, Development Services Department, On-Site Water and Wastewater Section and industry has observed that steel septic tanks utilizing “Coal Tar Pitch” coatings, such as Tnemec #46-465, or equivalent coating systems, are subject to extensive corrosion, and in some cases are structurally compromised less than 10 years after installation. Most steel tanks using this conventional coating method are leaking and/or are structurally unsound within 15-20 years of installation. In the interest of protecting public health and the environment, effective beginning May 1 of 2019, the Municipality of Anchorage will no longer allow the installation of steel septic tanks unless they are coated (interior and exterior) with an approved polyurethane lining or “like” material approved by the Department.

There are thousands of steel septic tanks currently installed in the Municipality of Anchorage. The position of the Department is that steel septic tanks, having a conventional Coal Tar Pitch coating system, over 20 years old are likely compromised to some degree. Effective October 15, 2018, it is the policy of this Department that the following “standard of care” shall apply for engineers inspecting septic systems as part of the Certificate of Onsite Systems Approval (COSA) process:

- Prior to pumping the tank or after the tank has filled back up to operating level, the engineer should measure the liquid depth in the second compartment of the septic tank and note it on the COSA paperwork as a comment.
- If a steel septic tank with a conventional coating is 20 to 30 years old, and the liquid level is in normal operating range (± 3 inches of manufacturer’s published outlet invert elevation) the Department will issue an “Advisory Notice” with the COSA explaining that the septic tank may be approaching the end of its useful life. A liquid level below the normal operating range indicates the tank is leaking and needs to be replaced.
- If a steel septic tank with a conventional coating is over 30 years old, it should be replaced or physically exposed by excavating down to the waterline along one side-wall and one end of the tank and inspecting it for holes. The inspection should be performed by a registered engineer or certified installer. If there are holes in the tank wall, water weeping from the tank wall, or other tank components are compromised, the tank needs to be replaced. If a certified installer deems the tank free of holes or other deficiencies, a registered engineer or On-site staff should be notified to allow verification of tank integrity. Results of the investigation should be noted in the comments section on the COSA form.
- If during the COSA process the engineer observes a condition that would lead them to believe that the tank and/or tank components are compromised, then additional investigative work is necessary to confirm that the tank is structurally sound and watertight.

In addition, if a steel septic tank with a conventional coating is over 10 years old, it should be exposed and inspected for holes at the time of construction to replace a failed drainfield.

The department recommends the installation of fiberglass, plastic, concrete, or polyurethane coated steel septic tanks when site conditions allow. Although installation of conventionally coated steel septic tanks is legal until May 1, 2019, the installation of such tanks is discouraged given their short life expectancy.



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Date: 10/15/18