

NOWRA Position Paper:

Procedure for Verifying Tank Integrity and General System Function During an Onsite System Inspection

Introduction

Properties with an onsite wastewater treatment system should have the tank(s) inspected to verify integrity and general soil treatment area performance any time the tank(s) in the system is pumped out. A pump out can be part of routine scheduled/required maintenance and is often required for property transfer inspections. When should the system tank(s) be pumped to be able to inspect the condition of the tank(s) and the performance of the overall system? This position paper discusses this topic and provides a recommendation based on best practices in the industry.

Discussion

Before any part of a system is pumped out it is important to understand the function of the tank(s) installed and that tanks associated with proprietary treatment equipment are cleaned per the manufacturers' requirements. Also, all involved need to be aware of the groundwater levels before pumping to be sure tanks do not float out of the ground when they are emptied.

Pumping too far ahead of a system inspection can mask the true operation of the onsite system. Inspections need to document the operating level in the tank(s), check for backflow into the tank(s)' outlet from the soil treatment area or other downstream components, and assess the entire system's ability to process household waste under normal conditions. If the tank(s) is emptied before the inspection, inspectors may not see signs of soil treatment area malfunctioning or potential backups, or leaking tanks which could hide serious problems.

Pumping the septic tank and any other system tanks during an inspection allows inspectors to thoroughly assess the general function of the entire system and then when the tank(s) are emptied, they can look for issues such as cracks, buckling of the walls, root intrusion, or malfunctioning vents or baffles. Finding these types of problems helps prevent premature failures, tank collapses, or unexpected and potentially costly repairs or replacements.

Conclusion

The initial assessment of the onsite system should be conducted with the system in full operating state. While the inspector is present the tank(s) should be pumped. At that time, the inspector can check for backflow, check the tank(s)' water tightness and structural integrity. This process ensures an accurate understanding of the system's condition and makes necessary repairs known before an environmental health, public health, or safety issue arises.

By following best practices all parties can ensure a more accurate and transparent evaluation.

This position paper was approved unanimously at the September 16, 2026, NOWRA Board of Directors meeting.