

NOWRA Position Paper: Importance of Secondary Safety Devices

Introduction

Onsite and Decentralized wastewater systems play a critical role in managing wastewater for millions of households. However, these systems can pose safety hazards if access points are not properly secured. Every year, tragic accidents occur when people, particularly children, and pets fall into improperly protected access points on wastewater treatment tanks. The implementation of secondary safety devices in onsite wastewater systems provides an essential additional barrier against such incidents, mitigating risks, and enhancing safety. Despite the availability of multiple premanufactured safety devices, there is currently not enough urgency put into requiring their use in the United States. This paper advocates for the widespread adoption of the mandatory use of secondary safety devices in onsite wastewater systems to protect people and pets from this preventable issue.

Discussion

Onsite wastewater systems require regular maintenance, which necessitates access to tanks via lids and risers brought to grade. Septic tanks, pump tanks, and aerobic treatment units (ATUs) are examples of tanks that have these access points. While having lids and risers to grade is essential for maintenance access, we must prevent accidental entry if the lid is damaged, unsecured, or missing. Reports indicate that people fall into unprotected access risers every year, often with fatal consequences. In response to these tragedies, several states, including Colorado, Connecticut, Indiana, Kentucky, North Carolina, Michigan, and Texas have introduced regulations requiring secondary safety barriers in access risers to buried wastewater treatment tanks.

A secondary safety device that is manufactured to be able to withstand a reasonable live load and is made using non-corrosive material and hardware safe for the septic tank environment, acts as an additional protective measure, preventing accidental falls into tanks if the primary lid fails. These devices, including safety screens, nets, and reinforced internal lids, provide a crucial safeguard particularly for children, pets, and unsuspecting individuals.

Key reasons for implementing secondary safety devices include:

- **Preventing Fatal Accidents:** The most compelling reason for secondary safety devices is their ability to prevent injury and death. Cases of children falling into tanks due to unsecured or damaged lids underscore the urgent need for additional protective measures.
- **Durability and Reliability:** Primary covers can degrade over time due to environmental exposure, improper installation, or lack of maintenance. Secondary safety barriers provide a mechanism in the event of primary cover removal or failure.
- **Affordability and Ease of Installation:** Many secondary safety devices are cost-effective and easy to install, making them an accessible safety enhancement for both new and existing onsite wastewater systems.
- **Liability:** With knowledge comes responsibility. While homeowners may not be aware of the risks associated with sewage tanks, industry professionals have a duty to understand these risks.

To ensure protection, NOWRA recommends the following implementation strategies be adopted:

- **Regulatory Action:** Advocacy for nationwide adoption of secondary safety barriers in onsite wastewater system regulations to mandate their use in all new installations and require existing onsite wastewater systems to have them installed during resale inspections.
- **Public Awareness and Education:** Informing homeowners about the importance of secondary safety devices on their systems to avoid preventable life-threatening incidents.
- **Professional Training:** Ensuring that industry professionals recognize the need to protect access to these systems and can effectively evaluate system safety.

Conclusion

The National Onsite Wastewater Recycling Association supports the use of secondary safety devices in onsite wastewater systems as a critical measure to prevent life-threatening accidents. While some states have recognized the need for these protective features, nationwide implementation is essential to increase safety for all onsite wastewater systems. Inclusion of these devices is a simple and affordable solution and should become a requirement rather than an optional upgrade. By adopting comprehensive regulations and increasing public awareness, the industry can prevent future tragedies and enhance the overall safety of onsite wastewater systems nationwide.

This position paper was approved unanimously at the July 21, 2025, NOWRA Board of Directors meeting.