The National Septage and Portable Sanitation Disposal Crisis

*This paper has been written by the National Septage Disposal Crisis Alliance Task Force who has been instrumental in getting this initiative added to the MOU to help bring industry issues to the EPA.

A Nationwide Analysis of Septage and Portable Sanitation Disposal Challenges

Prepared By: National Septage Disposal Crisis Alliance Task Force

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- NOWRA (National Onsite Wastewater Recycling Association)
- PSAI (Portable Sanitation Association International)
- GOWA (Georgia Onsite Wastewater Association)
- OK DEQ (Oklahoma Department of Environmental Quality)

Summary

This document presents the findings of a collaborative national survey addressing the growing crisis in septage and portable sanitation waste disposal. It highlights infrastructure limitations, rising costs, and the urgent need for coordinated action among public and industry stakeholders.

Overview

There is a national disposal crisis that demands our attention and collective action. In an unprecedented effort, NAWT, NOWRA, PSAI, and Oklahoma DEQ, et el. have conducted a comprehensive nationwide analysis of septage and portable sanitation disposal, beginning in March 2024. The findings are detailed in the following document. Key

- highlights include:
- The infrastructure for managing on-site wastewater treatment systems and
- portable restroom waste has not kept pace with industry growth.
- Some treatment facilities restrict the daily volume of waste accepted from
- septage haulers—or refuse it entirely.
- Portable restroom haulers face significant challenges in locating treatment plants
- that accept their waste.
- Waste pumpers and haulers are traveling increasingly long distances to dispose
- of waste properly.
- Limited acceptance and increased disposal costs dissuade necessary service
- impacting system performance and negatively affecting cost of business,
- property values, public health, and the environment.
- While the problem is solvable, it requires immediate and coordinated action from
- waste haulers, portable restroom companies, supporting organizations, and the Public.

Please review this document to better understand the disposal crisis currently affecting many regions of the country and likely to impact others soon.

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Balancing Costs, Access, and Environmental Responsibility

While onsite wastewater treatment systems (OWTS) and portable restrooms are increasingly used for community development, construction, events, and disaster response, in many areas the infrastructure to manage their waste has not kept pace. This growing imbalance and the associated cost increase of disposal threatens public health, the environment, and the local economy due to improper operation and maintenance of these systems. These consequences stem from the lack of available disposal options, placing undue burdens on property owners, event sponsors, and independent maintenance providers, pumpers, and haulers.

Introduction: The Hidden Infrastructure Crisis

The use of decentralized OWTS and portable sanitation units are foundational to smart community growth, temporary sanitation, and promotion of special events, etc. Nearly 25% of U.S. homes are dependent on OWTS[1,6] , and portable restrooms are a staple at construction sites, parks, and public gatherings. Yet the infrastructure needed to responsibly process the resulting septage is fragmented and increasingly inaccessible[1] .

Septage on average has concentrations of wastewater constituents greater than those found in domestic household wasteflow[2] . Organic load, suspended solids, and ammonium concentrations are approximately 50 times greater in septage than domestic wastewater[5] . This has led to a concern of some facilities to accept this wastewater although proper pretreatment equipment is available and effective to bring the concentrations down considerably.

In Georgia, for instance, the 1.7 million onsite wastewater treatment systems are estimated to generate over 932,000 gallons per day (GPD) of septage requiring responsible disposal. However, disposal capacity is limited to 500,000–650,000 GPD, leaving a shortfall of nearly 300,000 GPD[3] . Nationwide, similar disparities exist. The consequences are rising disposal costs and consumers avoiding necessary service and maintenance.

The Good: Successful Strategies and Solutions

Some municipalities have modified wastewater treatment plants (WWTP) to accept septage and portable sanitation wastewater, creating cost-recovery mechanisms and integrating septage into existing sludge treatment flows[6] . Intentional design offers more efficient grease and grit separation, incorporate flow equalization, and vector and odor control. Several public WWTPs and private septage handling facilities or land application sites have leveraged regional partnerships for shared infrastructure. Intergovernmental agreements and the formation of wastewater authorities can be cost-effective for smaller jurisdictions. States incentivizing acceptance of septage through permit streamlining and funding support have seen improved compliance and reduced environmental risk. Digital manifest systems for pumpers and haulers, regional mapping of underserved areas, and data-driven fee structures are creating more transparent and efficient disposal systems[6].

The Bad: Current Challenges in Disposal

Disposal fees, reaching over $300 per 1000 gals in some areas, combined with long transport distances, make legal disposal financially unsustainable for many pumpers and haulers. Many smaller communities in rural areas lack sufficient facilities and capacity to accept septage due in part to capacity issues to meet discharge requirements and in part to unsubstantiated fears of questionable wastewater quality. WWTPs often restricts the acceptance of non-jurisdictional septage, shutting out regional pumpers and haulers. Even when WWTPs are willing, restrictive permits or local ordinances may block septage acceptance. Land application options are limited by soil and hydrological constraints, particularly in small watersheds, high-water-table, and environmentally sensitive areas. Pumpers and haulers often operate on razor-thin margins. Rising costs and shrinking options for disposal force haulers to travel farther, reducing service efficiency and availability.

The Ugly: When Costs and Restrictions Lead to Undermined Public Health and Environmental Goals

Disparities between the demand for OWTS and portable sanitation and limited disposal options appear to be becoming more commonplace throughout the country. When pumpers and haulers have to travel long distances to properly dispose of septage, not only increases costs, but also increases the chances of improper maintenance and in some unfortunate cases, illegal dumping[4,5]. Higher costs for service and pumping is a burden on property owners, event planners, and developers and erode public support of maintenance programs canceling out water quality benefits gained by sound state and local sanitation standards. Establishing maintenance programs and standards without accessible and affordable disposal infrastructure compromises well-intentioned regulations encouraging illegal activity and undermine environmental goals[8].

A Path Forward: Balancing Cost, Access, and Sustainability

Regulations and environmental health professionals must allow for the adoption of policies, and incentives that encourage WWTPs to accept septage, particularly in underserved areas. At the federal level, increases in grant funding, technical assistance, and reductions in permitting constraints are necessary. New technologies—such as modular treatment units or decentralized cluster systems—can be deployed in rural areas to reduce transportation and treatment costs. Policymakers must streamline permits for regional haulers, support the creation of stand-alone septage handling facilities, and allow regional sharing of treatment assets. Pumpers and haulers, manufacturers or relevant technologies, larger treatment facilities, and regulators must align through data sharing, working groups, and joint planning to build sustainable disposal Networks.

Conclusion and Call to Action

The septage disposal crisis is an urgent, yet solvable, challenge. Left unaddressed, it risks public health, environmental integrity, property values, and the viability of independent businesses. Solutions for this crisis exist, but they require political will, regulatory clarity, and Investment.

We call upon:

Manufacturers to develop cost-effective and innovative equipment to help with pretreatment and treatment of septage.

Policymakers to accept viable solutions, help fund infrastructure 7 , and enable treatment plant Participation.

Wastewater facilities to embrace innovation and collaboration and develop systems to help pay for the cost of disposal.

Haulers to advocate for fair access and support responsible practices; and

Communities to recognize that safe sanitation is a shared commitment for the public good and protects individual property values.

The time to act is now—before the hidden crisis becomes a public catastrophe.

Call To Action

How You Can Help Promote and Resolve This Crucial Issue:

WASTE HAULERS AND PORTABLE SANITATION COMPANIES (Nationwide):
Arrange a meeting with your local water and sewer authority. Specifically request to meet with the water authority director, wastewater treatment manager, or supervisor in each municipality where you currently dispose of septage or wish to do so. Present them with a copy of the official study report and highlight the key points listed on page 1 before sharing the full report.
Similarly, meet with local officials such as your local health department, board of health, city council, or county commission that has regulatory interest or oversees the local water and sewer authorities. Present the same information to them. Additionally:

- If your company provides services to properties within local city or county, emphasize that you are responsible for pumping and hauling this waste, and it should be disposed of locally.
- Explain that hauling waste over longer distances increases your operational costs, which in turn raises prices for constituents and local businesses.
- Reach out to contacts in local organizations such as the Chamber of Commerce and Homebuilders Associations.
- Engage with any local or state political contacts that you, your employees, or your company may have.
- Contact key customers who may be able to use their influence to help spread awareness of this issue.
- Take full advantage of resources provided by national and state associations in your industry. This includes maintaining active membership and participation, as these organizations are committed to your success.

ON-SITE WASTEWATER ASSOCIATIONS, STATE AFFILIATES (Representing 30 U.S. States and Ontario, Canada), AND INDUSTRY-RELATED CORPORATE ENTITIES:

Schedule a meeting with the appropriate state department of environmental health or environmental protection to present the official study report.

Use the highlights on page 1 to introduce the topic effectively.

- Discuss how state or local infrastructure funding, state revolving funds, or development grants can be allocated to support decentralized and onsite sewage management system septage disposal.
- As with waste haulers, meet with as many state and local officials as possible, including legislators, commissioners, and water/sewer directors.
- Connect with contacts in environmental organizations with whom you have existing relationships.
- Reach out to contacts in state and local organizations such as the Chamber of Commerce and Homebuilders Associations.

ADDITIONAL IDEAS FOR ANYONE AND EVERYONE:

INDUSTRY PUBLICATIONS – Promote this issue by publishing the official study report or participating in a feature story on the disposal crisis.

LOCAL NEWSPAPERS – Provide information for a story on this topic.

SOCIAL MEDIA – Share information to raise awareness about the disposal crisis and the actions that can help resolve it.

NAWT, NOWRA, PSAI, and Oklahoma DEQ – Distribute this information to all members.

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