

Memorandum



Date: April 10, 2026

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

Agenda Item No. 2(B)(5)
May 5, 2026

From: Daniella Levine Cava *Daniella Levine Cava*
Mayor

Subject: 2025 Annual Report for Onsite Sewage Treatment and Disposal Systems (OSTDS)
- Directive No. 231348

Executive Summary

On September 6, 2023, the Board of County Commissioners (Board) adopted Resolution No. R-787-23 sponsored by Commissioner Raquel A. Regalado, directing the County Mayor or County Mayor’s designee to prepare annual written reports for the Board with data and analysis regarding the number of onsite sewage treatment and disposal systems (OSTDSs) in the County by type, Types 1–4, and the number of OSTDSs that have been decommissioned since the submission of the prior year’s report. The first report, pursuant to R-787-23, was accepted by the Board on February 13, 2025, accessible via LEGISTAR No. 250277. This report was prepared by the Department of Regulatory and Economic Resources (RER).

In 2025, the RER OSTDS program approved a total of 531 new OSTDS systems. This includes 521 Type 3 systems, and 10 Type 4 systems. The OSTDSs that receive RER approval are registered through the building permit process. Owners of existing OSTDSs can also self-register online. Based on data provided by the Florida Department of Health (FDOH), in 2025 FDOH issued 833 OSTDS abandonment permits.

Environmental Plan Review

In 2025, RER conducted 9,577 OSTDS reviews. These review totals include multiple reviews of the same project and includes projects that were reviewed but determined to not need OSTDS approval. Overall, the OSTDS program approved a total of 531 new OSTDS systems in 2025. Table 1 below provides an overview of the number of OSTDSs approved by RER by type.

Table 1. RER OSTDS Reviews from 1/1/2025 to 12/31/2025

OSTDS Type	Number of Systems Approved
	2025
Type 2	0
Type 3	521
Type 4	10
TOTAL	531

“Type 2” refers to systems that comply with secondary treatment standards, “Type 3” refers to systems that comply with advanced secondary treatment standards, and “Type 4” refers to systems that comply with Florida Keys nutrient reduction standards. Types 2, 3, and 4 are referred to as performance-based treatment systems (PBTs). It is noted that as of January 1, 2023, “Type 1” systems, which refer to conventional or standard septic systems, are not allowed to be proposed for new or complete replacement systems, and none were approved for construction for the aforementioned time period. The treatment standards for each type of system were adopted from Chapter 62-6 of the Florida Administrative Code, which regulates OSTDSs for the entire State. A conventional septic system provides limited treatment of pollutants found in wastewater which can be problematic when released into the environment, especially waterways. A PBTs provides greater treatment of these pollutants by incorporating multiple treatment units and processes, including aeration, mixing, disinfection, and others to achieve a higher level of treatment prior to discharge into the environment. This also helps to mitigate the increase in development density, therefore, protecting our waters, aquifer, and ultimately Biscayne Bay.

State Permits

Based on the data provided by FDOH, in 2025 FDOH issued 833 OSTDS abandonment permits and 568 OSTDS permits for new systems, as shown in Table 2.

Table 2. FDOH OSTDS Data from 1/1/2025 to 12/31/2025

Application Type	Number of Permits Issued
	2025
Abandonment	833
Existing	149
New	568
Repair	382

The abandonment permits are issued mainly for the redevelopment of a property when the new project requires a new system, when the property needs to abandon the system to connect to the public sanitary sewer system, or for the discontinuance of use for a total demolition project. However, it is important to note that the abandonment permits are valid for 90 days from the date of issuance. This means that a property may have more than one abandonment permit if the project extends beyond the expiration date of the permit without the system being abandoned - adding to the discrepancy between the issuance of FDOH permits when compared to the RER OSTDS approvals and is not a definitive number for OSTDS that have been decommissioned.

RER continues to discuss with FDOH, methods to better capture the actual number of OSTDSs that have been decommissioned in the County each year. Currently, these permits are solely issued by FDOH and are not tracked through RER.

Just as in the previous report, the FDOH and RER OSTDS program data for PBTs is not equal and demonstrates a discrepancy of 37 new systems for 2025. The discrepancy is attributed to some of the projects approved by the RER OSTDS program in 2024 not being approved by FDOH until

2025 and/or projects that have multiple systems, known as split systems, being approved by RER OSTDS as a single system (since the approval corresponds to the building application process number), while FDOH permits each system individually.

Contaminant and Nutrient Reductions

The most significant contaminants and nutrients found in domestic sewage consist of Carbonaceous Biological Oxygen Demand (CBOD), Total Suspended Solids (TSS), Total Nitrogen (TN), and Total Phosphorus (TP). Although we cannot accurately calculate the reduction of these contaminants and nutrients by the use of the PBTSSs, we can estimate their reduction by making some conservative assumptions based on the typical removal rates of the selected technology and the local environmental conditions.

Of the total number of projects approved in 2025, over 95% were for single-family residences (SFR) with Type 3 systems. As such, it would be safe to assume a medium SFR with three bedrooms and no more than 3,000 sq ft, would generate a sewage flow of 300 gallons per day (gpd), as per the State calculations (Ch. 62-6 of the Florida Administrative Code), requiring a Type 3 system. Based on these assumptions we can estimate the contaminant and nutrient loadings in the effluent of the approved systems using Type 3 PBTSSs, and compare them with the loadings generated if conventional, Type 1, systems were used.

Table 3. Contaminant and Nutrient Reduction by the Use of PBTSS in 2025

	CONVENTIONAL (TYPE 1)			PBTSS (TYPE 3)			CONTAMINANT REDUCTION	
	mg/L	lb/d	lb/yr*	mg/L	lb/d	lb/yr*	lb/yr*	(%)
CBOD	240	0.601	116,457	10	0.025	4,852	111,605	96
TSS	100	0.250	48,524	10	0.025	4,852	43,671	90
TN	100	0.250	48,524	30	0.075	14,557	33,967	70
TP	18	0.045	8,734	10	0.025	4,852	3,882	44

* Loading per 531 systems per year

As shown in Table 3 above, there is a significant reduction of contaminants (96% reduction in CBOD and 90% reduction in TSS) and nutrients (70% reduction in TN and 44% in TP) by the use of PBTSSs. Quantitatively, this represents a reduction of approximately 111,605 pounds (lbs.) of CBOD, 43,671 lbs. of TSS, 33,967 lbs. of TN and 3,882 lbs. of TP in 2025.

In accordance with Ordinance No. 14-65, this report will be placed on the next available full Board meeting agenda, without committee review, as directed in Resolution No. R-787-23. If you have any questions or require additional information, please contact Lourdes M. Gomez, Director, Department of Regulatory and Economic Resources, at Lourdes.Gomez@miamidade.gov or at 786-229-1008.

c: Geri Bonzon-Keenan, County Attorney
Jess McCarty, First Assistant County Attorney

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