



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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MEMORANDUM

DATE: March 24, 2025

TO: Environmental Health Directors, Supervisors, Coordinators, Specialists, and the Regulated Community

FROM: On-Site Water Protection Branch

RE: Procedures for Determining Design Daily Flow Without a Septic Permit

I. Background

This document is intended to assist in determining the design daily flow (DDF) for existing wastewater systems when permits cannot be found or lack sufficient information to determine the DDF. An application shall be submitted to the local health department (LHD) for an existing system approval/reconnection (ESA), expansion, or repair. **Please note:** These procedures shall only be used for issuing permits and approvals in response to an application (ESA, Improvement Permit (IP), Construction Authorization (CA), or IP/CA) for a wastewater system.

G.S. 130A-334(15) defines a wastewater system as follows: *"Wastewater system" means a system of wastewater collection, treatment, and disposal in single or multiple components, including a ground absorption system, privy, septic tank system, public or community wastewater system, wastewater reuse or recycle system, mechanical or biological wastewater treatment system, any other similar system, and any chemical toilet used only for human waste."*

The final DDF shall be determined on a case-by-case basis, considering all available evidence and documentation. These procedures do not preclude the use of the Affidavit of On-site Wastewater Existing System Inspection Exemption (Appendix H of G.S. 160D-1110(h1)) by the owner in pursuit of a building permit.

II. Design Daily Flow Considerations

- A. At the time of application, does the applicant/owner or LHD have documentation of the facility or previous use of the system?
 1. Documentation may include, but is not limited to:
 - a. Old septic permits;
 - b. FLI inspection forms/permits;
 - c. Building permits;

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- d. Floor plans;
 - e. Mobile home titles previously connected to the system;
 - f. Deeds;
 - g. Insurance records; or
 - h. Mortgage records.
 - 2. Tax records, occupancy numbers, and water use records shall only be used to supplement other documentation from the list above.
 - 3. Using information from the documentation and estimated installation year, determine the DDF based on applicable laws and rules at the time the system was estimated to be installed.
- B. Locate the existing components of the wastewater system in the field. If the LHD is unable to locate the wastewater system, the owner is responsible for doing so. The LHD or inspector shall document the following:
- 1. Location of all components, including applicable setbacks (facility, property lines, water supply(s), surface water, etc.);
 - 2. Tank size(s);
 - 3. Best estimate of wastewater system age;
 - 4. Dispersal trench/bed information (type, length, width, depth, etc.);
 - 5. Current use of the existing facility (ex.: bedrooms, restaurant seating);
 - 6. Proposed facility and appurtenances; and
 - 7. Confirmation that the wastewater system meets the statutory definition of a “wastewater system” included above.
- C. Is there a historical perspective?
- 1. This may include, but is not limited to, the following:
 - a. Information from senior health department or State staff;
 - b. Other Operation Permits (OP)/Certificate Of Completions from the same time period in the same area as the site in question; or LHD rules prior to State’s laws and rules.
 - 2. Determine if there is any information that provides evidence of historical DDF.
- D. Is there evidence the system was installed illegally?
- 1. Based on the estimated date of installation:
 - a. Wastewater systems installed prior to July 1, 1977, and existing wastewater systems for which a permit cannot be found are not considered to be illegally installed or expanded without a permit.
 - b. Wastewater systems with modern technology should have an IP/CA/OP. Consider the LHD history of lost, undocumented, or destroyed permits.
 - c. Installations including straight pipes, bottomless/leaking tanks, and buckets/barrels are not considered legal wastewater systems.
 - d. Other factors to consider: contour, depth of components, size of components, unapproved products, and setbacks.
 - 2. **If it is determined that the system was illegally installed, the owner must apply for a new IP/CA with the LHD.**

- E. Determine the DDF of a legally existing wastewater system:
1. Evaluate all available information provided to determine DDF.
 2. If no substantiating evidence is available, the following maximum DDF shall be applied to systems installed prior to January 1, 2024:
 - a. Single family dwelling – 240 gpd, two bedrooms, four occupants maximum.
 - b. Other facilities – 100 gpd, four occupants/employees maximum.
 3. Each case must be assessed individually. If further guidance is needed, please reach out to your Regional Soil Scientist for assistance.