



# Onsite Wastewater Treatment Systems: Operating Permits

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## Introduction

Mandatory septic system operating permits are gaining popularity in some New Jersey municipalities. Eight municipalities throughout the state have enacted ordinances that regulate the operation and maintenance of septic systems to preserve shared resources such as lakes and reservoirs, to protect human and ecological health, and to increase property values (Figure 1). The operating permit ensures a level of protection that cannot be achieved when septic maintenance is a voluntary activity. Onsite wastewater management exists in many forms with varying degrees of supervision. Accordingly, there are several important aspects to consider when designing an onsite wastewater treatment system management program. It is important to note, though, that all systems with a greater than 2,000 gallon per day design flow are required to obtain New Jersey Pollutant Discharge Elimination System (NJPDES) operating permits from the New Jersey Department of Environmental Protection (NJDEP).

### 1. Public Education

The root of any successful program is public education and community involvement. Local authorities must actively work toward educating people about how septic systems work and

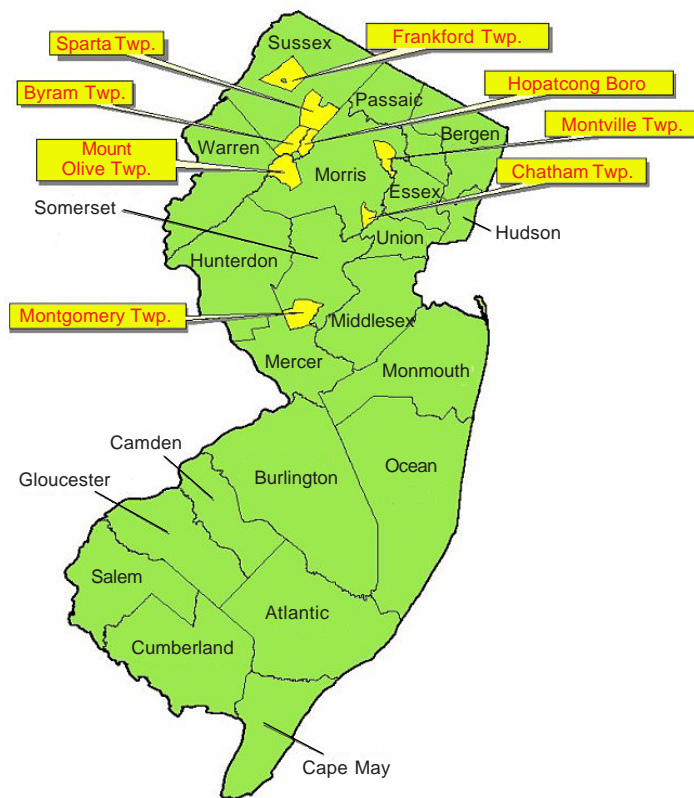


Figure 1: New Jersey Municipalities with OWTs Operating Permit Programs.



how to care for their systems. This process includes dissemination of septic care and maintenance literature to new homeowners and letters reminding homeowners to pump and inspect their septic tank regularly. These programs should also encourage public involvement in the review and advisory process of ordinances. Implementation of a new management program is much easier when there is public understanding, support, and involvement.

## **2. Site Specificity**

The operating permit ordinance should reflect the amount of protection that an area requires. Considerations include the density of development, soil permeability, and the proximity to sensitive water bodies such as lakes, reservoirs, and streams. Impermeable soils, a high water table, or high population density could create an unsafe level of pollution in ground and surface waters.

## **3. Performance Indicators**

Performance indicators must be established to ensure the proper functioning of systems. Some indicators include mandatory pump-outs at regular intervals by a certified waste hauler and inspection of the system by a local Board of Health official. Septic systems must be shown to be in compliance with these indicators at regular time intervals, such as every three years.

## **4. Certification**

When it is determined that a system is in compliance with established performance indicators, a limited-term license, giving the homeowner the right to use the septic system, must be requested from the local Board of Health. Before the license is renewed, the owner must demonstrate compliance with the ordinance regulations.

## **A Comparison of Operating Permit**

Operating Permit Programs are usually developed to either protect an environmentally sensitive area or address an existing problem. The Montgomery Township (Somerset County) Operating Permit Program provides an example of a program developed to address existing problems, whereas the Chatham Township (Morris County) Operating Permit Program is an example of a program developed to protect an environmentally sensitive area. Table 1 summarizes the similarities and differences between the two programs, as described in detail below.

## **Factors Leading to the Operating Permit Program**

Montgomery Township was experiencing rapid development and wanted to protect both groundwater and surface water quality.

Chatham Township is proximal to important natural resources such as the Passaic River and the Great Swamp National Wildlife Refuge. In most cases in New Jersey, septic management has been a result of public concern for shared water resources such as lakes, reservoirs, and rivers in concert with an increase in the density of land development.

## **Program Participation**

Chatham's operating permit program began in 1995 with an ordinance announcing that upon the start of its septic management program, "no owner or occupant of a property in the Township of Chatham upon which an individual subsurface sewage disposal system is located shall use or operate the system unless a currently valid license to operate the system has been issued by the Board of Health in accordance with the provisions of this Ordinance to the owner of the property on which the system is located" (Chatham, 1995). Every system within the geographical jurisdiction of the ordinance must fulfill the requirements and apply for an operating permit at the start of the program.

In contrast, Montgomery Township's operating permit program, begun in 1990, states that those legally obligated to comply include "all on-site subsurface waste water disposal systems that had been licensed by the Board of Health prior to the effective date of this chapter and all on-site subsurface waste water disposal systems which shall be installed, altered, or repaired subsequent to the effective date of this chapter" (Montgomery, 1999). Because licensing of septic systems had not been a routine practice, almost no systems were in the management program, nor were they obligated to join until the occurrence of a repair, alteration, or installation of a new system. Therefore, even with the sale of property, septic systems are not required to be licensed unless the system is repaired or replaced as a condition of the sale. After 15 years of management, over 1,400 septic systems are now under the management program.

The "grandfathering" clause has important implications in the successfulness of a septic management program. A management program cannot be effective if no, or very few, systems are compelled to join. The intention of

including a grandfather clause may be to give people an amount of time to adjust to the idea of operating permits. However, it may backfire by giving reluctant homeowners a reason to not fix their ailing septic systems. In Montgomery, after 15 years, the grandfathering clause is becoming less of a concern. Older systems are being brought into the management system at the time of resale, or if a system is visibly failing, it is brought into the management system with its repair. Conversely, Chatham’s mandatory participation ensures that almost all of the systems will be accounted for and thus management can be effective and successful.

**Operating License Fees**

The Board of Health processes applications and administers licenses to homeowners for both Chatham and Montgomery Townships. Chatham charges fifteen dollars, and Montgomery charges sixty dollars for an operating license that is good for three years. To qualify for a license renewal, Chatham requires that residents provide proof that their system has been pumped out within a year prior to the renewal application by a pumper registered with the

NJDEP. Montgomery requires proof that the system has been pumped out within the previous three year period.

Management programs need a mechanism to ensure that participation is occurring to the specifications of the plan. Non-compliance results in penalties in both townships. Chatham has a maximum penalty of \$200 with additional charges for each day following that the offense is not addressed. Chatham charges a late fee of ten dollars for failure to apply for a license on schedule.

Montgomery can issue fines between \$100 and \$500 for non-compliance, with pursuant charges for each day that the offense continues. Montgomery charges a late fee of \$15/month for failure to apply for a license on schedule.

**Program Staffing Requirements**

Montgomery Township has one part-time administrator to send notices, issue licenses, and maintain the database. A part-time inspector does the walk-over inspections when a permit has been renewed. Another full time inspector oversees repairs, replacements, and new construction.

Table 1. Comparison of two operating permit programs.

<b>Factors Leading to the Operating Permit Program</b>	<b>Montgomery Township’s Program</b>	<b>Chatham Township’s Program</b>
Why was the program created?	To protect groundwater and surface water quality in the face of rapid residential development.	To protect a common natural resource: The Great Swamp.
Who participates in the program?	New systems and repaired systems (approximately ½ the Township’s systems are in the program, approximately 1,400+ systems).	All systems are in the program (approximately 300 systems).
What is the cost of the program to the homeowner?	\$60 for a three year license.	\$15 for a three year license.
What services does the program provide the homeowner?	Township inspects the systems once every three years.	None
What are the staff requirements to run the program?	One health officer, two part-time administrators, one part-time inspector.	One health officer, one administrator and part-time clerk.
Does the program provide the homeowners with educational materials?	Yes	Yes

The health officer supervises the program overall for the 1,400+ systems under the growing management program.

Chatham Township has one administrator and a part-time clerk managing the 300 septic systems in the operating permit program. The administrator is responsible for handling permit applications, issuing operating permits, and sending notices and reminders. The administrator also maintains a septic tracking database and has GIS support. Chatham Township has no staff for onsite inspections.

### Homeowner Services

Montgomery Township makes several efforts to provide homeowners with information about septic system care and maintenance. Montgomery Township also provides a list of licensed pumpers and inspectors and conducts their own inspection. Upon issuance of the license they also send out a septic care and maintenance manual.

Chatham Township has a smaller program and a more modest staff, so services are limited. They do not have an inspector on staff, though they provide residents with a list of pumpers who are registered with the NJDEP. The township mails warnings and permit expiration notices to residents and issues permits upon proof of pumping. At the time of permit issuance or renewal, the township provides homeowners with a septic operation and maintenance guide.

### Conclusion

As population density increases and marginal lands are developed, septic system failure becomes a greater risk. Property values, human health, and shared natural resources can potentially be compromised by failing septic systems. Operating permits are a management technique that reduces, and in some cases virtually eliminates, failing septic systems. A well-functioning onsite wastewater system reduces the repair and replacement costs for the homeowner, increases neighborhood property values, and recharges groundwater while reducing pollution.

### For More Information

Rutgers Cooperative Research & Extension  
[www.rcre.rutgers.edu](http://www.rcre.rutgers.edu)

*U.S. Environmental Protection Agency for Onsite and Clustered (Decentralized) Wastewater Treatment Systems.* [www.epa.gov/owm/onsite](http://www.epa.gov/owm/onsite)

*A Guide to Public Management of Private Septic Systems.*  
[www.cardi.cornell.edu/clgp/septics\\_index.cfm](http://www.cardi.cornell.edu/clgp/septics_index.cfm)

Board of Health of the Township of Chatham (Chatham).  
*Ordinance BH-95-01.* 1995.

Montgomery Township Board of Health (Montgomery).  
*Ordinance No. 99-02.* 1999.

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