Reprinted from the Summer 2015 issue

Septic system management: Is your town doing all it should?

By David Peifer, ANJEC Project Director

Like much of New Jersey, large portions of your municipality may be served by septic sewer disposal systems. Properly functioning septic systems provide cost effective wastewater treatment while recharging the local aquifer. Unlike central sewer systems, operating costs -- while generally quite low -- are the responsibility of the owner. But a septic failure can impose substantial financial burdens on the owner.

When septic systems fail, the public also pays a price in the form of polluted surface and groundwater, lost recreational opportunities and reduced property tax assessments. Routine maintenance of septic systems can reduce this risk, for both property owners and the municipality.

In the past, onsite sewer treatment was provided by other types of systems, such as cesspools, or septic systems that were to small for the current use. Even if operating properly, these older systems may contribute to water pollution and create health hazards. They are usually discovered at the time of sale, and can reduce the property value. When failures are common in a neighborhood, the perception of a "blighted area" can result, leading to lost property tax revenue for the town. A municipal septic management program can discover these systems and remove the risks they pose.

Advantages of septic systems

When properly sited, designed, installed, operated and maintained, septic systems may well be the best way to handle sewage disposal in less populated areas, where serving widely dispersed homes with sewers is not cost effective.

In rugged topography and places where hard bedrock is close to the surface, sewer construction may be very expensive. Municipalities with these conditions may have no other options for sewage disposal and should have programs in place to assure proper septic function.

Good governance requires some form of maintenance and oversight of septic systems. These programs should assure that septic systems not only be sited, designed, and installed properly but *operated and maintained* correctly. If not, some form of failure will occur, creating financial problems for the owner and a host of environmental, public health and fiscal problems for the municipality.

The New Jersey Department of Environmental Protection (NJDEP) septic rules (N.J.A.C. 7:9A available at www.state.nj.us/dep/dwq/pdf/njac79a.pdf) have eliminated many problems with onsite treatment systems in new construction. However, systems already in place often go without municipal oversight of operation and maintenance.

What municipalities must do – and how commissions can help

In addition to the generally well understood requirements for site evaluation, design and installation, municipalities have some required duties regarding operation and maintenance under sections 3.14 and 3.15 of the State's septic rules (N.J.A.C 7:9A). Environmental commissions (ECs) can check to see whether these minimum requirements are being met, and help with their implementation. For example:

Notice of operation and maintenance requirements

Under Section 3.14 municipalities must notify property owners with septic systems permitted after January 1, 1990, about the proper "operation and maintenance practices." That information should be reissued in writing every three years to the current owner. These notice requirements can be met by a mass mailing of NJDEP's "Homeowners Guide to Septic Systems," available at www.nj.gov/dep/dwq/pdf/septicmn.pdf. A very detailed "Technical Guidance for Inspections of Onsite Wastewater Treatment and Disposal Systems," designed for use by professionals, is also available at: www.state.nj.us/dep/dwq/pdf/inspection_quidance.pdf.

Educational materials are effective inly if they are routinely distributed to the owners of septic systems and posted on the municipal website. Commissions can help with this and can give workshops on septic operation and maintenance.

Record keeping and the annual report to the NJDEP

Section 3.15 requires that septic records be made available for inspection by the NJDEP and, importantly, that an *annual* report be submitted to the Department that includes:

- *the total number of known systems in each municipality;
- *the types of inspections conducted on systems and the number of each type conducted;
- *the types of permits issued by the administrative authority and the number of each type issued;
- *the number, type and apparent cause of verified non-compliant systems; and
- *a description of areas known to have higher than normal rates of non-compliance.

ECs should obtain copies of these reports and review them to assess the overall status of septic systems in the municipality. Doing so can provide a kind of early warning system to municipal government by identifying neighborhoods with evolving septic issues.

Going beyond the minimums

Reliance on education alone has its weaknesses. There is no way for the municipality to know if owners are following the recommendations. Both the US Environmental Protection Agency (EPA) and Rutgers University have created policy guidance on septic system management for municipalities by creating a model septic management ordinance. Municipal ordinances must satisfy the NJDEP requirements but may go beyond the minimums to provide greater protection as long as changes are approved by the NJDEP. The very comprehensive EPA guidance can be found at http://water.epa.gov/scitech/wastetech/upload/septic_guidelines.pdf and the briefer Rutgers Fact Sheet can be found at http://water.epa.gov/scitech/wastetech/upload/septic_guidelines.pdf.

5 levels of protection

Both guidance documents contain sections called "5 Levels of Protection" that outline policy options from the most simple (Level 1) to the most complex (Level 5). ANJEC feels that a Level 3 approach might be most appropriate to many municipalities in New Jersey, especially those in areas with high septic failure rates or sensitive ecosystems in need of protection. More complicated approaches (Levels 4 and 5) can also be considered given local conditions.

The NJDEP rule corresponds to "Level 1". Your town should already be at this level. Level 3 requires operating permits, usually of short duration (3 years) issued by the municipality. The permittee must demonstrate that the system has been inspected and has been periodically pumped out by a licensed septic pumper.

One town that has done it

Jefferson Township (Morris) has implemented a local ordinance along the lines of "Level 3" protection. Initially concerned with high nutrient loads entering Lake Hopatcong, an important recreational and economic resource, a septic management ordinance was developed and applied to the area of town draining to the lake. After several years, the ordinance was amended to extend to the entire municipality.

The Jefferson ordinance requires owners to have a license, which is free. It also requires septic pumpers to obtain an annual license to operate and pay a fee for each truck being used and for each tank pumped. Thus far, the ordinance has proven relatively noncontroversial. The Jefferson ordinance is available for review at http://ecode360.com/10284515. Please contact ANJEC for other examples.