EPA Guidelines for Management of Onsite/Decentralized Wastewater Systems

Why are the Guidelines needed?

The performance of onsite and other decentralized wastewater systems is a national issue of great concern. Nationally, states have reported in their 1998 lists of polluted waters that designated uses are not being met for 5,281 waterbodies because of pathogens and that 4,773 waterbodies are impaired by nutrients. Onsite systems are often significant contributors of pathogens and nutrients. Onsite/decentralized wastewater treatment systems serve approximately 25 percent of the U.S. population and 40 percent of new development. The U.S. Bureau of the Census has indicated that at least 10 percent of onsite systems have stopped working, and some communities report failure rates as high as 70 percent. State agencies report that these failing systems are the third most common source of groundwater contamination.

In the 1997 *Response to Congress on Use of Decentralized Wastewater Treatment Systems*, EPA determined that with the technology now available, adequately managed decentralized systems can protect public health and the environment as well as provide long-term solutions for the nation's wastewater needs. The report also cited five major barriers to increasing the use of decentralized wastewater treatment systems, including the lack of adequate management (i.e., site selection, design, installation, and operation and maintenance).

What are onsite/decentralized systems?

Onsite/decentralized wastewater treatment systems, commonly called "septic systems," treat sewage from homes and businesses that are not connected to a centralized wastewater treatment plant. Decentralized treatment systems include individual onsite septic systems, cluster systems, and alternative wastewater treatment technologies like constructed wetlands, recirculating sand filters, mound systems, and ozone disinfection systems.

What are the Guidelines?

The *Guidelines for Management of Onsite/Decentralized Wastewater Systems* (Guidelines) are a set of recommended practices needed to raise the level of performance of onsite/decentralized wastewater systems through improved management programs. Five separate model programs are presented as a progressive series. Management requirements of wastewater systems become more rigorous as the system technologies become more complex or as the sensitivity of the environment increases. Each of the model programs share the common goal of protecting human health and the environment. Each model approach includes program elements and program activities needed to achieve the management objectives. The Guidelines address the sensitivity of the environment in the community and the complexity of the system used. The five model management programs are

1. System inventory and awareness of maintenance needs
2. Management through maintenance contracts
3. Management through operating permits
4. Utility operation and maintenance
5. Utility ownership and management

EPA developed the Guidelines to assist communities in establishing comprehensive management programs for onsite/decentralized wastewater systems to improve water quality and protect public health. The Guidelines also will help states, tribes, and communities develop, modify, and implement laws and regulations in areas of onsite/decentralized wastewater system management planning. Each model program includes a set of recommended approaches for planning, siting, design, performance, installation, operation, maintenance, and monitoring of wastewater systems.

Are the Guidelines mandatory?

No. The adoption of the Guidelines is voluntary. EPA recognizes that states, tribes, and local governments need a flexible framework to tailor their programs to the needs of the community. These Guidelines are not intended to supersede existing federal, state, tribal, and local laws and regulations. Due to public health and water quality concerns, EPA encourages communities to consider the Guidelines as a basis for their onsite/decentralized wastewater management programs.

Are the Guidelines only for new systems?

No. The Guidelines apply to both existing communities and new areas of development that use onsite/decentralized wastewater treatment systems. EPA also is updating the *Onsite Wastewater Treatment System Manual* to accompany the Guidelines. The manual will encourage communities to evaluate their current wastewater management programs to determine whether they are adequate to meet the established objectives. The Guidelines also can apply to septic systems of all sizes, including nonresidential, large-capacity systems.

How will the Guidelines support other EPA programs?

The Guidelines will support many EPA programs and initiatives, such as total maximum daily loads (TMDL), source water protection, underground injection control, watershed protection, and beach and shellfish protection programs, by providing a management tool to help communities implement adequate programs. In addition, the *Onsite Wastewater Treatment System Manual* is being updated to complement the Guidelines.

What are the next steps for EPA?

1. A "Notice of Availability" of the Guidelines in draft form has been submitted to the *Federal Register* on October, 10 2000. The draft Guidelines are available on the decentralized web site (www.epa.gov/owm/decent/decent.htm) for a 60-day comment period.
2. Conduct meetings on the Guidelines with stakeholders, including state, tribal, and local government agencies and national organizations.
3. Develop outreach materials to demonstrate not only the need for the Guidelines but also how to implement them.
4. Complete the *Onsite Wastewater Treatment System Manual*.
5. Finalize the Guidelines in the Spring of 2001.

You can obtain more information on the Guidelines for Management of Onsite/Decentralized Wastewater Systems by contacting Joyce Hudson (202-260-1290, hudson.joyce@epa.gov) or Steve Hogye (202-260-5841, hogye.stephen@epa.gov). Visit the decentralized web site at www.epa.gov/owm/decent/decent.htm.