



New Jersey Pinelands Commission **PRESS RELEASE**

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Pinelands Commission Approves Alternate Design Septic System Rules *Pilot program to require lower-polluting technologies will take effect in August*

NEW LISBON, NJ -The Pinelands Commission today passed a resolution to revise and adopt amendments to the Pinelands Comprehensive Management Plan to establish a Pilot Program for Alternative Design Wastewater Treatment Systems. The new rules, scheduled to take effect on August 5, 2002, will significantly reduce groundwater pollution from residential septic systems.

The Pilot Program is the culmination of a two-year effort which involved the formation of an Ad Hoc Committee on Alternative Septic Systems comprised of representatives from the Commission, the Pinelands Municipal Council, the New Jersey Builders Association and the Pinelands Preservation Alliance. The Ad Hoc Committee undertook extensive research to identify emerging onsite treatment technologies with the ability to remove nitrate-nitrogen from domestic wastewater prior to its release to groundwater aquifers. The Committee was assisted in these efforts by Commission staff, NJDEP, professional consultants and other state and national experts in the field of advanced onsite wastewater treatment technologies.

“These new rules for alternate septic systems will introduce to the Pinelands innovative technologies pioneered by other states, such as Massachusetts which has similar sensitive environments,” said Pinelands Commissioner S. Joseph Kowalski, who served as Chairman of the Ad Hoc committee that developed the new rules. “Commonly used pressure dosing has demonstrated, via testing, an inability to meet the two-milligrams-per-liter nitrogen requirement of the Pinelands Comprehensive Management Plan for lots less than 3.2 acres in size. The new rules will result in residential septic systems that are approximately three times more effective than conventional and pressure-dosing systems in reducing nitrate pollution.”

Kowalski added, “With the safeguards included in the rule, these innovative technologies, designed for residential on-site use, will properly treat domestic sewage and the resulting effluent will not contaminate the Pinelands groundwater.”

Five advanced treatment technologies were selected for participation in the Pilot Program based upon their demonstrated effectiveness at removing nitrates from domestic wastewater. The Commission will require the use of these technologies for all new residences on lots smaller than 3.2 acres to provide enhanced nitrate-nitrogen removal prior to discharge of treated wastewater to the high quality aquifers which underlie the Pinelands. Lots which are larger than 3.2 acres provide adequate dilution of wastewater prior to its release beyond property boundaries. The Commission will closely monitor the systems during the five-year pilot program to confirm satisfactory system performance.

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The technologies utilize innovative microbiological treatment processes to remove nitrates from wastewater without the addition of chemical additives. Removal of nitrate nitrogen is important, particularly in the Pinelands, for several reasons. Excess nitrates in shallow aquifers used for drinking water pose a public health concern and are responsible for causing methemoglobinemia or “Blue-Baby Disease.” Excess nitrates in drinking water have also been implicated in some forms of gastrointestinal cancer. Ecologically, nitrate-nitrogen contributes to eutrophication of surface water bodies resulting in poor water clarity, algal blooms and low dissolved oxygen levels. The invasion of non-native plant species in Pinelands aquatic and wetland habitats may also result from excess nitrate discharges to the Pinelands environment.

The five advanced onsite wastewater treatment technologies will replace pressure-dosed septic systems which have been shown by the Commission to be ineffective at removing nitrate nitrogen from wastewater. For additional information on the treatment technologies and the requirements of the pilot program, visit the Commission’s web site at www.state.nj.us/pinelands.

“A great deal of credit and gratitude goes to our partners on this project who devoted a lot of time and expertise to putting a program together that will further strengthen protection of Pinelands groundwater,” said Pinelands Commission Executive Director Annette Barbaccia. “I thank the DEP Division of Water Quality engineers and scientists who provided invaluable technical guidance. The contributions of the entire Ad Hoc Committee have yielded a program that is practical and will have positive environmental results. The Committee provided valuable guidance in all aspects of the program, from monitoring and compliance to evaluation and selection of technologies.”

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